Identities, Differentiation and Interactions on the Central European Plain in the 3rd millennium BC

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Introduction

This work continues deliberations concerning the cultural-social processes that occurred in the 3rd millennium BC in the east of the Central European Plain, between the Odra and Vistula rivers respectively (mainly two regions: Wielkopolska/Great Poland and Kuyavia) known as the Polish Lowlands (or Polish Plain; **Fig. 1**). In a series of earlier articles, based on the growth of data that has taken place in the last two decades, we have presented issues related to the transformation of the Lowlands in terms of its chronology and taxonomy[1], settlement changes[2] and related economies[3].

On this occasion, however, we wish to focus on cultural-social issues, in particular to present a picture pertaining to the social history of the peoples in the east of the Central European Plain in the first half of the 3rd millennium BC. In this period the area under discussion was inhabited by societies characterised by various forms of social and economic organization, in some cases similar, in others somewhat different.

In terms of social history it was a period of slow albeit far-reaching changes in social order, which meant a gradual shift from kinship structures with a low level of internal differentiation to that of clearly identifiable markers of social stratification that in addition to kinship placed emphasis on the status of the individual. An important aspect of this process, it can be argued, shall be presented in the case of communities functioning in the above period that are mutually contemporaneous, though consistently making use of differ-

[1] Czebreszuk/Szmyt 1998a; Czebreszuk/Szmyt 1998b; Czebreszuk/Szmyt 2000; Czebreszuk/Szmyt 2001.
[2] Szmyt 2002; Czebreszuk/Szmyt 2008a; Czebreszuk/Szmyt 2008b.
[3] Kośko/Szmyt 2004; Szmyt 2004a.

Fig. 1. Geographic and cultural regions on the Vistula and Odra rivers.

ent so called sets of material goods (material culture). These are identified by archaeologists as two disparate taxonomic units: Globular Amphora culture (GAC) and Corded Ware culture (CWC).

It shall be maintained that in relation to the above mentioned processes of social change, material culture played a diverse and important role. To name but one example, it proved to be a means by which differences in group relations or quite the opposite, their apparent similarities, came to be manifested. In this context such a role proved to be an extremely important social medium (one of social communication) that was continually renewed. It shall be argued that the above mentioned high status of material culture proved to be the genesis of its long-lasting differentiation in structure, which at present is identified as the aforementioned archaeological cultures – that of the GAC and CWC. It is therefore possible to use these acronyms in conjunction with terms such as peoples or societies, in order to define groups that resorted to particular material culture 'sets' (structures), which in addition were characterised by specific forms of social, economic and ritual organization.

This study therefore shall first (part 1) discuss current views in respect to the GAC and CWC cultures, then (part 2) examine the present store of data concerning the Polish Lowlands so as to in the subsequent two sections present arguments (focused on social issues) in respect to the peoples of the GAC (part 3) and CWC (part 4) and last (part 5), propose a model of possible interaction between them, from a sociological point of view.

1 Cultures with Globular Amphorae and with Corded Wares – Basic Assumptions

Many views of European prehistory treat the GAC and CWC cultures as similar phenomena that are described as 'grave cultures', known foremost from sepulchral findings. This definition it can be said covers both the truth and its opposite – perhaps to be precise, some half truths. Indeed, it can be seen that in some areas the data reveals a domination of very characteristic funeral objects from which derive well identified collections of material. It is also true that the settlements and encampments of both cultures in many areas are difficult to establish from an archaeological point of view.

In reality, in both cases, the store of data from the professional literature is to a large extent the effect of the history of archaeological research (clearly a truism), though primarily it is the consequence of real difficulties in investigating (even identifying) the scant remains of settlement sites pertaining to the two cultures in question. These are quite humble, most often take the form of rather small concentrations of moveable goods (mainly ceramics) with a small number of graves, and rarely constitute the remains of domestic construction. This applies to both the above cultures, though it should be pointed out that domestic sites of the GAC are somewhat easier to identify than that of the CWC, which in many regions is one of the most difficult to establish across the pantheon of prehistory per se[4].

Such a picture of settlements in both the above cultures can be said to be misleading, for it covers over what in fact is very characteristic for them, namely a high degree of regional changeability in many respects, including those concerning the domestic sites themselves. In both cases it is possible to find regions (mezzo, even macro) where there is no domination of burial objects or indeed, a paucity of settlements and camps. For the GAC these can be said to be for example, the regions of Kuyavia, Silesia and Moravia – while in the case of the CWC, Switzerland and the south Baltic region. On the one hand therefore, there is a general similarity of material culture (especially ceramics) over the vast territories belonging to the GAC and CWC, taking into account the differentiation of settlement patterns and undoubtedly their economies and communities. It is possible that the above mentioned parallels for both cultures in fact camouflage vital differences in social functions, an issue to be discussed in subsequent parts of the study.

It ought to be added that this regional differentiation concerns not only so called indigenous aspects (inter-regional) for the GAC and CWC populations but also their mutual (in particular, chronological) relations. The cohabitation in this period for regional groups on the Polish Lowlands (especially in Kuyavia, **Fig. 2**) is not at all representative of the situation in general. Though such cohabitation has been documented also in the basin of the upper Vistula (Little Poland/Małopolska: 2800–2600/2500 BC)[5], but for example in the region between Elbe and Saale (*Mittelelbe-Saale-Gebiet*), the emergence of the CWC around 2800–2700 BC can be said to be the end of the GAC in that area[6]. Thus, chronological relations, as well as all other (neighbourly, economic, political etc.) between their respective peoples could in fact vary and differ from region to region.

It can be seen that this regional variation in the case of both the GAC and CWC cultures has its own dynamics across time. On the one hand, on the basis of material evidence, both the GAC and

[4] This view arises from 25 years of our research covering GAC and CWC sites on the Lowlands.
[5] Włodarczak 2006.
[6] Müller 2001.

the CWC can be described as supra-regional structures of certain mutual elements of material culture and social behaviour (especially ritual and economic). Thus, it is the framework of common traits that defines both the GAC and the CWC on a general level, but on the other hand, their wide dissemination resulted in their multi-regional character. From the latter point of view, it is possible to explore not only various regional backgrounds of the origins of the GAC or the CWC, but also their different historical role and directions of changes in each region.

2 Globular Amphora and Corded Ware Cultures on the Polish Plain – Current Data Base

The previously emphasised[7] significant growth in information on the GAC and CWC in these territories is related to a series of large archaeological programmes such as the comprehensive research of chosen mezzoregions (Kuyavia) and microregions. Furthermore, there is a long-term programme of archaeological prospection over the entire territory of Poland (Archaeological Record of Poland), as well as (especially the past 15 years) rescue excavations on a large scale in respect to infrastructural investments (gas pipeline, motorways etc.).

The results of these works have been published in part, incorporated and synthesised into the present picture of research. In respect to the cultures under discussion (GAC and CWC) this primarily concerns the Kuyavia region[8] and to a much lesser extent, the entire Wielkopolska-Kuyavia Plain[9] or its other parts[10]. It ought to be added that the greatest amount of work yet to be completed in respect to research publications concerns the above mentioned rescue excavations. The studies completed in respect to the above for the most part remain in manuscript form, exceptions being Kośko[11] and Bednarczyk/Kośko[12], for example, with only the most important such finding placed in published report summaries[13] or popular science articles in the lay press[14]. As the present authors have at their disposal a considerable corpus of unpublished studies in respect to the GAC and CWC of the Wielkopolska-Kuyavia Plain, this contribution shall make use of this data for the purposes of archaeological research[15].

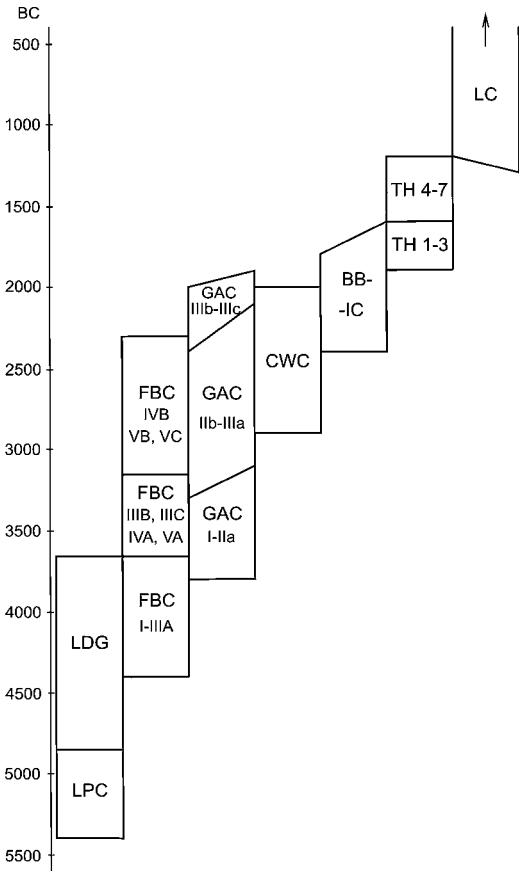

Fig. 2. Sequence of archaeological units (cultures or groups) in Kuyavia between 5th and 1st millennia BC. LPC = Linear Pottery culture; LDG = Late Danubian Groups; FBC = Funnel Beaker culture; GAC = Globular Amphora culture; CWC = Corded Ware culture; BB = Bell Beakers; IC = Iwno culture; TH = Trzciniec Horizon; LC = Lusatian culture.

As a consequence therefore, in relating the results of data for the above, particular attention shall be brought to bear on: (2.1) the growth in number of sites, (2.2) the forms of newly discovered settlement sites, (2.3) the forms of graves, (2.4) the range of similarity/difference of collections of finds for both cultures and finally, (2.5) the issue of their synchronisation throughout this period.

2.1 Increase in the number of GAC and CWC sites

In the context of the clear growth of archaeological sites in the GAC and CWC it should be noted[16] that it is particularly high in the case of the latter, which is not reflected by the deeply seated view in the older literature that this Plain was only to some extent populated by the CWC[17].

In **Table 1** all available (published and unpublished) information pertaining to research on the

[7] Czebreszuk/Szmyt 2008a.
[8] Czebreszuk 1996; 2000a; Kośko/Szmyt 2006; Kośko/Szmyt 2007a; Kośko/Szmyt 2007b; Makarowicz 2004; Szmyt 1996; Szmyt 2000; Szmyt 2004b.
[9] Czebreszuk 2001; Kurzawa 2001; Pospieszny 2009.
[10] Mazurowski 1998; Prinke/Przybył 2005; Rola 2009.
[11] Kośko 2000.
[12] Bednarczyk/Kośko 2004.
[13] Bukowski 2001; Bukowski 2003; Bukowski 2004; Bukowski/Gierlach 2006.
[14] Chłodnicki/Krzyżaniak 1998.
[15] We have made use of results of our studies on GAC and CWC sites from Kuyavia and Wielkopolska. Excavations were conducted by the Institute of Archaeology and Ethnology at the Polish Academy of Sciences (Poznań Section), Institute of Prehistory at Adam Mickiewicz University, 'Patrimonium' Foundation and the Adam Mickiewicz University Foundation.
[16] Czebreszuk/Szmyt 2008a, 221–224.
[17] *e. g.* Wiślański 1969, 87; Machnik 1979, 408.

Stanowisko	Excavated area (m^2)	GAC		CWC		Remarks
		Pottery fragments	Pits and postholes	Pottery fragments	Pits and postholes	
A. Rescue excavations on the trans-European gas pipeline route (Kuyavia section); see Czebreszuk 2000a; Szmyt 2000						
Bożejewice 15 (GAZ 383)	–	19	–	–	–	–
Bożejewice 22 (GAZ 381)	–	901	15	53	1	two CWC phases
Bożejewice 28 (GAZ 382)	–	1480	6	7	–*	* + a CWC grave
Chabsko 24 (GAZ 334)	–	4	–	–	–	–
Chabsko 41 (GAZ 339)	–	20	–	63	1	–
Ciechrz 2 (GAZ 375)	–	58	5	3	–	–
Ciechrz 25 (GAZ 373)	–	4236	21	5	–*	* + 2 CWC graves; three GAC phases
Ciechrz 32 (GAZ 372)	–	2	–	–	–	–
Dziewa 14 (GAZ 413)	–	6	–	5	–	–
Karczyn 23 (GAZ 397)	–	326	1*	–	–	* + 2 GAC (?) graves
Karczyn 32 (GAZ 393)	–	3	–	–	–	–
Kuczkowo 1 (GAZ 108)	–	6094	18	10	–	four GAC phases
Kuczkowo 5 (GAZ 109)	–	1379	27*	3	1**	* + a GAC? grave; ** + 2 CWC graves; two GAC phases
Łąkocin 1 (GAZ 402)	–	292	5	2	–	two GAC phases
Radojewice 29 (GAZ 403)	–	81	3*	–	–	* + a GAC? grave
Radojewice 30 (GAZ 404)	–	1	–	–	–	–
Rożniaty 2 (GAZ 388)	–	2	1	–	–	–
Rzadkwin 22 (GAZ 365)	–	49	1	–	–	two GAC phases
Siniarzewo 1 (GAZ 79–80)	–	1032	23*	57	3**	* + a GAC? grave; ** + a CWC grave; four GAC phases; two CWC phases
Sławsko Wielkie 12 (GAZ 384)	–	138	2*	2	–	* + a GAC? grave
Strzelce-Krzyzanna 40 (GAZ 364)	–	104	3	–	–	–
Żabno 31 (GAZ 341)	–	287	4	651*	5	* FBC/CWC
Żegotki 2 (GAZ 378)	–	2577	23	10	1	three GAC phases; two CWC phases
Żegotki 3 (GAZ 377)	–	349	2	2	–	two GAC phases
Żegotki 4 (GAZ 376A)	–	432	3	–	–	–
Żegotki 5 (GAZ 376)	–	534	11	2	–	two GAC phases
Żegotki 16 (GAZ 379)	–	43	–	2	–	–
Żegotki 18 (GAZ 380)	–	273	4	24	–	–
B. Rescue excavations on the local gas pipelines (Kuyavia section); see Szmyt 2004b; Makarowicz 2004						
Baba 12 (GMW 13)	290	66	5	–	–	–
Bachorce 4 (GMW 34)	874	179	4	–	–	–
Bachorce 9 (GMW 35)	275	1	–	–	–	–
Chabsko 33 (GMW 45)	1090	11	–	–	–	–
Huta Padniewska 6 (GMW 40)	510	5	–	5	–	–
Huta Padniewska 7 (GMW 41)	420	116	3	6	–	–
Izdby 1 (GMW 44)	200	1	–	–	–	–
Izdby 2 (GMW 43)	350	10	5	3	–	–
Mogilno 11 (GMW 14)	650	141	–	–	–	–
Padniewko 41 (GMW 9)	162	8	–	–	–	–
Padniewo 31 (GMW 6)	485	6	1	–	–	–
Palędzie Dolne 15 (GMW 2)	530	2	–	–	–	–
Piecki 1 (GMW 31)	2100	148	2	–	–	–
Piecki 8 (GMW 32)	1174	307	2	–	–	–
Rzadkwin 21 (GMW 22)	360	252	3	–	–	–
Sławsko Dolne 38 (GMW 26)	295	66	2	–	–	–
Strzelce 38 (GMW 21)	510	17	1	–	–	–
C. Rescue excavations on the motorways A2 and S11 (Great Poland)						
Białężyce 1 (AUT 309)	–	7	≤3	–	–	–
Białężyce 9 (AUT 313)	–	21	1	28	4	two CWC phases
Bieganowo 12 (AUT 325)	–	12	–	60	–	two CWC phases
Chełmno 4 (AUT 434)	–	42	–	94	2	two CWC phases
Cieśle 19 (AUT 102)	–	4	–	–	–	–
Cichmiana 2 (AUT 441)	–	1	–	7	–	two CWC phases
Cichmiana 5 (AUT 439)	–	6	–	2	–	–
Głuchowo 1 (AUT 145)	–	49	3	≤100	2*	* and 2 CWC graves; two CWC phases
Głuchowo 24 (AUT 148)	–	–	–	2	–	–

Tab 1. List of new sites with relicts of Globular Amphora culture and Corded Ware culture in the area under discussion.

Stanowisko	Excavated area (m^2)	GAC		CWC		Remarks
		Pottery fragments	Pits and postholes	Pottery fragments	Pits and postholes	
Kozanki Podleśne 2 (AUT 458)	–	–	–	1	–	–
Krągola 5 (AUT 373)	–	–	–	114	–	CWC/FBC
Krągola 6 (AUT 378)	–	–	–	152	17	three CWC phases
Lubrza 11 (AUT 42)	–	1	–	16	–	–
Lubrza 42 (AUT 33)	–	2	–	51	–	–
Lutol 36 (AUT 54)	–	41	–	86	1	two CWC phases
Młodziejewice 21 (AUT 327)	–	–	–	20	1*	* pit or grave
Poznań-Wilda 62 (AUT 164)	–	19	–	1	–	–
Poznań-Wilda 249 (AUT 163)	–	10	–	–	–	–
Rożniatów Kolonia 5 (AUT 450)	–	6	–	7	–	–
Rożniatów Kolonia 10 (AUT 453)	–	5	–	2	–	–
Jastrzębiec 2 (S 117)	–	207	1	76	1	–
D. Stationary Programme in Opatowice (Prokopiak's Mount, Kuyavia; only published data); see KOSKO/SZMYT 2006; 2007a; 2007b						
Opatowice 1	302.5	386*	1	45	–	* + 1 vessel two GAC phases
Opatowice 33	285.5	672	3	46	–	two GAC phases?
Opatowice 42	570.5	938	–	144	–	two GAC phases?; two CWC phases

Tab 1. (continued) List of new sites with relicts of Globular Amphora culture and Corded Ware culture in the area under discussion.

settlements of the GAC and CWC has been collected in the framework of three rescue projects (on the trans-European gas pipeline route, local gas pipelines and the A1 motorway) as well as for comparison, one so called stationary programme (Opatowice – Prokopiak's Mount). The data collected here derives from various parts of the Lowlands: Kuyavia, the middle Warta and the middle Odra basins. Thanks to rescue excavation the so called observation line crossing this area from west to east has been recovered. Taking into account its direction, entirely independent of archaeologists, a random series of sites were investigated. A programme of stationary research is designed as a control factor, one that focuses on a chosen fragment of Kuyavia, to be precise, the Prokopiak's Mount in Opatowice[18]. In addition, in spite of differing excavation work (rescue versus stationary), analysis of sources was based on analogous methodological assumptions and conducted in the same way, which in the field under discussion can be said to guarantee relatively comparable results.

2.2 Forms of settlement sites

Table 1 presents data in respect to 64 GAC domestic sites and 41 of CWC[19], which were found in various environments. As far as the former is concerned, there would appear to be a clear relationship between differentiating the natural environment of the Lowlands and that of its respective cultures[20]. For example, the largest GAC sites (with over a 1,000 ceramic fragments) are to be mainly found in Kuyavia and in their surrounds, on the Kuyavia Plateau. The same cannot be said of the CWC – such a strong link to the one region is not discernable.

An overview of collected data allows for the following conclusions:

- the sites investigated, regardless of culture, share several common traits (especially the number of artefacts);
- a marker of quality is the presence or lack of discernable (to a greater or lesser extent reliable) remains of housing or other domestic constructions (such as huts), where only GAC sites have been documented;
- a summary analysis (**Fig. 3–4**) shows that the variability of GAC settlement sites is significantly greater than that of the CWC, which are usually smaller, bear smaller concentrations of ceramics with fewer elements making use of earthen constructions (pits, hearths or postholes);
- GAC complexes have a large range of changeability as far as the amount of ceramic ware in a given site (1–6,000) as well as the presence of above mentioned ground features (1–27);
- for the CWC changeability is much lesser for concentration of ceramics (1–150), and for settlement objects (1–9);
- quite often, and always in relation to larger collections (over 1,000 GAC ceramic fragments and over 70 of CWC), at the site there have been identified the remains of at least two settlement phases.

Views put forward elsewhere[21] that the most difficult (enigmatic) remains of domestic sites under

[18] Kośko/Szmyt 2006; Kośko/Szmyt 2007a; Kośko/Szmyt 2007b.

[19] These sites have not revealed any traces of sepulchral objects, while the nature of ceramic ware (highly detailed) precludes burial use.

[20] Czebreszuk/Szmyt 2008a, 219.

[21] Czebreszuk/Szmyt 2008a, 237–238.

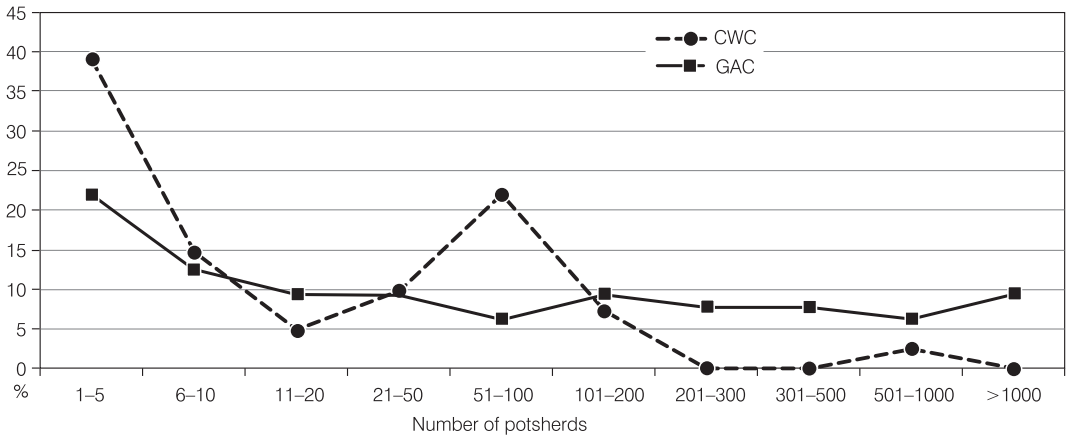

Fig. 3. Number of potsherds on GAC and CWC sites in the area under discussion.

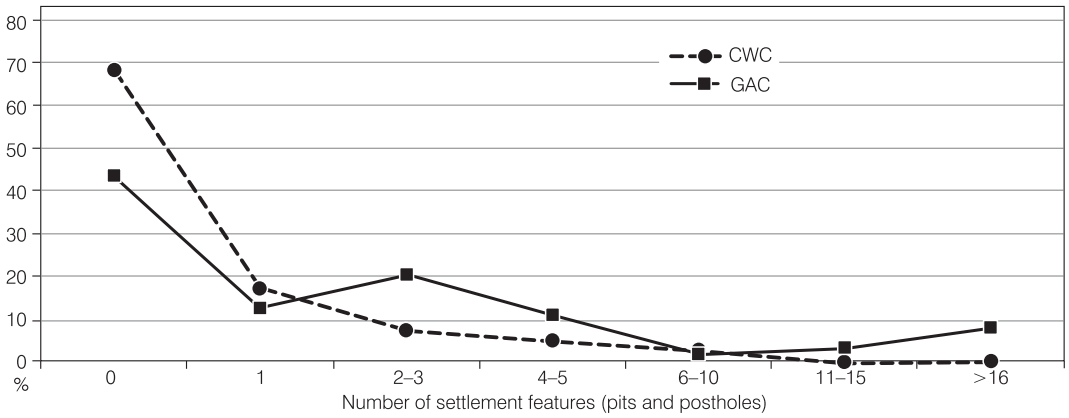

Fig. 4. Number of settlement features (pits and postholes) on GAC and CWC sites in the area under discussion.

investigation are those of the CWC therefore ought to be affirmed. It should, however, be noted that the data presented here covers the largest series of settlement sites of this culture on the Central European Plain.

2.3 Types of GAC and CWC graves

Among GAC and CWC graves on the Lowlands it is possible to put forward several types and subtypes that were detailed in various monographs[22].

A. GAC graves

In the taxonomy of GAC graves[23] three major oppositions are taken into account:

- graves with stone constructions as against those without;
- stone cist graves as against those with other stone constructions (pseudo-megalithic [submegalithic], passage graves, graves with stone barriers or with single stones in the fill [cobble stones]);
- graves with individual burials, double burials or with collective burials.

On the area under investigation (especially in Kuyavia), graves with a stone construction clearly dominate and the most typical ones are shaped similar to cist graves, though not always in a regular rectangle. The Lowlands GAC graves therefore vary from containing the remains of one person to those of up to 30 people (**Fig. 5**). Thus the data show that individual burials account for 33.3 % of burials, double – 19.1 %, and three or more for 47.6 % of graves[24].

The majority of stone construction graves bear the remains of adults. Nonetheless, in some collective burials, children constitute 35 % (Kierzkowo, site 1)[25] or even over 40 % of individuals found (Strzelce, site 2, tomb II)[26]. In individual graves, objects of so called rich furnishing were found such as several vessels, flint objects (foremost axes), bone artefacts, amber and metal (*i. e.* Stary Brześć Kolonia, site 1)[27]. There are also graves with only one vessel and sometimes a flint axe accompanied the skeleton (*i. e.* Wieniec, site 1)[28]. In double or collective graves, however, the mix of grave goods

[22] *e. g.* Wiślański 1966; Pospieszny 2009.
[23] Wiślański 1966; Szmyt 1996.
[24] For comparison, single burials made up 40 % of graves in the east GAC group and 75 % in the west (*Mittelelbe-Saale-Gebiet*); see Szmyt 2002, 223.
[25] Budnik/Wrzesiński 2002.
[26] Wokroj 1959.
[27] Wiślański 1966, 230.
[28] Wiślański 1966, 232–234.

was different. Foremost, in respect to the often emphasised destruction of bone remains – in some cases intentional perhaps because of repeated burial rites[29] – it is not possible to relate the elements found among the grave goods with that of human remains (*e. g.* Kierzkowo, site 1; Skoczka, site 1; Strzelce, site 2 and 3). The example of one grave where a detailed chronology of subsequent burials is possible (Nakonowo, site 17), demonstrates that their considerable range through time (at least 125 years, at most 215) is not reflected in the variation of how a grave is furnished[30]. It is possible to conclude therefore that for collective graves there are unidentifiable pointers to a so called individualisation in the case of grave goods.

In the main, Kuyavian tombs were covered by mounds[31], which are well documented as well as the fact that these were also found in older mounds (*i. e.* Janiszewek and Zberzyn, site 3)[32]. In this context, GAC tumuli were usually round or oval in shape where the latter sometimes housed two tombs (Strzelce, site 2 and 3[33]; Kierzkowo, site 1[34]).

On the basis of simulation[35] using data from settlements and graves it is possible to maintain that as far as the Kuyavian region is concerned, only a negligible number of dead were interred in stone tombs. The remains of others were sometimes buried in non-stone graves (not many such found), situated – unlike those of stone – both outside domestic sites and within. On account of the lack of grave goods or humbleness of the burials, it is not possible to provide a definitive diachronic interpretation of these objects as far as their material culture is concerned. In four such graves for which anthropological data is available, there have been identified a female adult (Kołuda Wielka, site 13[36]), a youth (Piecki, site 8, Sławsk Wielki, site 12[37]) and a child (Siniarzewo, site 1[38]). Only in Kołuda Wielka was there a vessel while in the others no artefacts have been found apart from a small number of ceramic ware fragments[39]. If the above is to be seen as a small sample, it could possibly point to a more frequent burial in non-stone graves of children and women.

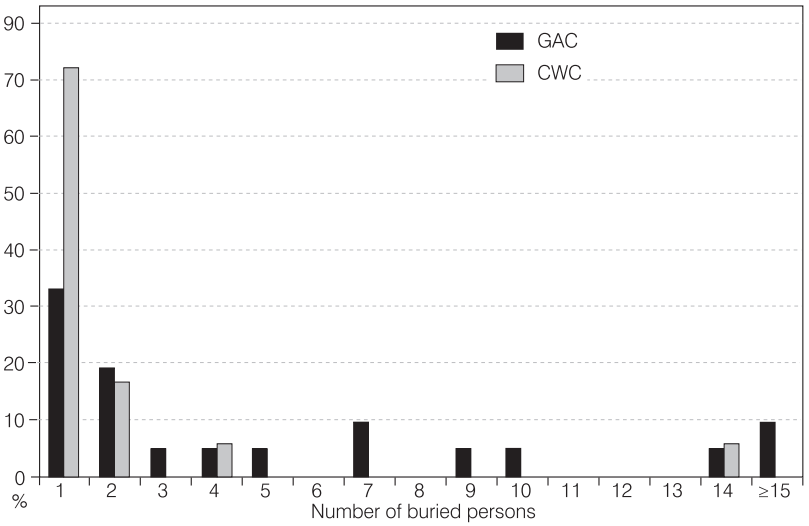

Fig. 5. Number of buried persons in graves of the GAC and CWC in the area under discussion.

In the Kuyavian region therefore there is a well established tendency for finding sepulchral objects (especially with stone construction) in relation to older tombs. It is in this manner that cemetery complexes were established with a dozen or so graves (*e. g.* Pikutkowo, site 5)[40] and clusters of tombs (*casus* Strzelce)[41]. In this context, graves made out of stone were rarely to be found in the earliest domestic sites.

B. CWC graves

In the taxonomy of CWC graves on the Lowlands[42], differentiation between objects is based on:

- stone constructions as against those that are not;
- flat burials as against those with kurgans (covered with a mound);
- individual barrows or those with a greater number of burials.

On the Lowlands, 14 graves had a stone construction, a trait specific to this region. This could derive from two sources; local traditions (tied to the FBC and GAC) and/or influences from the Single Grave culture[43]. These constructions had various forms such as a more or less compact build (support), loose cobble or even single stones placed in the grave pit. Some graves were located on the place of older CWC encampments (*e. g.* Głuchowo, site 1)[44]. Signs relating to these tumuli were documented in the case of seven objects, which had a

[29] See for example references to mixing of bones from various individuals partly burnt etc. (Kostrzewski 1930; Wiślański 1966, 165; 169; 194; Budnik/Wrzesiński 2002, 129–132).
[30] Szmyt et al. in print.
[31] In the Kuyavian region in the case of some barrows the lack of a mound is well documented. In respect to several other objects the lack of documentation (missing description) makes it impossible to establish the possible existence or not of a mound (see for an alternative view: Wiślański 1966, 55).
[32] Chmielewski 1952, 28–30; Wiślański 1966, 56–57.
[33] Wiślański 1966, 165–169.
[34] Budnik/Wrzesiński 2001, 129–130.
[35] Szmyt 1996, 214.
[36] Andrałojć et al. 1988.
[37] Krenz-Niedbała 2000; Krenz-Niedbała 2004.
[38] Krenz-Niedbała 2000.
[39] The cultural reference is, of course, in these cases uncertain (Szmyt 2000, 173–174; 2004b, 320).
[40] Wiślański 1966.
[41] Wiślański 1959.
[42] Pospieszny 2009.
[43] Pospieszny 2009, 40–54.
[44] J. Czebreszuk and M. Szmyt, in preparation.

circular base surrounded by a ditch with a diameter most often around 5 m (in Modliborzyce even 8.5–9 m)[45]. Here the remains both of one-off as well as multi-stage burial ceremonies has been documented and it ought to be noted that the latter also related to objects with a single burial.

The number of burials interred in the grave (**Fig. 5**) is most often one, more rarely two and only occasionally three, four or even 14. Among 17 anthropological data reports[46], six relate to men, six to women and five to children. In individual graves[47], remains have been found of adult males (three graves and four with lesser credibility), females (two graves) and children (three graves). Where double burials occur there have been found the remains of two adults (gender unknown – one grave), two adult females (one grave) and adult females with a child (one grave). In Obłaczkowo[48] in turn, the remains of men, women and children were found, whereas in Bożejewice, site 28, two adult males (18–22 and 50–70 years old respectively) in a non-anatomical position and two children (12–16 and 4–5 years respectively) in an anatomical position[49].

In the grave no. 5 from Pikutkowo, site 6 for which only a general date can be estimated[50], the remains of nine children and five adults have been found. All the individuals were laid to rest at the same time, in an anatomical position on the left or right side (lack of data regarding gender means this observation cannot be detailed further). There, a clear hierarchy was enforced in which the main place was taken by an adult male laid on his back. The elements of grave goods found in this grave had either a general significance (two beakers that cannot be linked with a particular burial) or were specifically tied to one of the deceased (amber and copper ornaments).

The above mentioned grave goods entailed clay vessels, weapons (such as stone axes, flint arrowheads, bow), flint and bone tools as well as portions of animal carcass (pigs and cattle). In this regard it is characteristic that objects made out of metal and amber occurred both in the graves of men, women and children[51].

C. Comparison of GAC and CWC graves

Information concerning all known GAC and CWC graves from the Kuyavia-Great Poland Plain has been collected by Wiślański, Czebreszuk, Szmyt and Pospieszny[52]. In this context several issues come to light:

1. The extent that GAC tombs change is significantly greater than that of the CWC, in particular, graves of various stone construction;
2. the majority of graves without any stone construction that are related to the GAC contain a single burial and are deemed to have a doubtful affiliation to that culture (four objects);
3. for 25 graves of the GAC and for 19 graves of the CWC a number of deceased is known; in both of the above mentioned cultures appear single and double burials (sometimes one complete and the other partial); 52.4 % in respect to the GAC that are confirmed and detailed in anthropological terms (33.3 % single and 19.1 % double burials respectively) whilst for the CWC the corresponding number is 84.2 % (68.4 % single and 15.8 % double burials respectively);
4. GAC graves with many burials (3–30) account for 47.6 % of the series, where there are only three CWC graves (15.8 % in total) that contained a greater number of deceased (2, 4 or 14);
5. both of the above cultures have documented mounds (*kurgans*) over graves with GAC tumuli being usually larger and more complex in construction[53], whereas mounds over CWC graves were surrounded by a small ditch with a palisade built, which was not noted in the GAC;
6. a significant part of GAC graves and a minority of CWC, contain traces of multi-stage funerary ceremonies[54].

2.4 Extent of differences and similarities in respect to GAC and CWC finds

Collections of GAC and CWC moveable material can be viewed in terms of their respective similarities, which are mainly connected with their functional context (see part 2.2). At the same time, there are several differences in various respects such as pottery – foremost its technology, morphology and ornamentation. In respect to the last, a common trait exists whereby the impressions of a 'double' ('twofold') cord were used. This applies in particular to so called repeated perpendicular cord imprints that formed a circle around the upper part of the vessel, which found their application in both of the above cultures. Other de-

[45] Wiślański 1978.
[46] Pospieszny 2009, 100 and new data.
[47] Pospieszny 2009, tab. 3.
[48] We would like to express our gratitude to Mr. Henryk Klunder for information concerning a grave from Obłaczkowo site.
[49] Czebreszuk 2000a, 432.
[50] Niesiołowska 1967.
[51] A good structural analogy to the CWC collective grave in Pikutkowo is the GAC tomb from Kolodiazhnoye in Volhynia (eastern GAC group, see Szmyt 1999, pl. 19), with an analogical hierarchical system, as shown by the placing of those interred.
[52] Wiślański 1969; Czebreszuk 1996; Szmyt 1996; Szmyt 2000; Szmyt 2004a; Pospieszny 2009.
[53] Szmyt in print.
[54] See Czebreszuk/Szmyt in print a; in print b; Szmyt in print.

signs created through cord imprints, however, refer to other forms of ornamentation found in the GAC and CWC.

Several other differences can be found in respect to products from flint, stone, bone and etc., which apply also to the collection of objects made (tools, weapons) and their means of production. It should be noted, however, the most recent research data on dissemination and use of flint axes[55] also points in this context to many mutual traits between the two cultures. This notwithstanding, the fundamental difference here can be said to be that of weaponry and tools placed in the grave where, for the GAC, this constituted one flint axe (sometimes several), whereas in the CWC a stone axe-hammer, flint knife and archery accessories.

2.5 Basis of GAC and CWC synchronisation

The synchronisation of GAC and CWC cultures in the area under research can be based on radiocarbon dating, which is differentiated in respect to the respective cultures and regions of the Lowlands. The largest collection of data is held for Kuyavia, while the remaining territories of the Lowlands bear significantly less information[56]. In general it can be said that the above data shows both cultures functioned in a mutual period, in the 3rd millennium BC; the CWC is marked by peoples from the earliest stage of this culture on the Lowlands around 2900 BC[57]. The end phase of the above pre-historical mutuality ought to be reflected by the decline of the GAC, for which alas, to date no radiocarbon dating is available. Taking into account the latest chronological dating extent for the GAC it is possible to argue that at least in the case of Kuyavia, both cultures functioned side by side until around 2300/2200 BC.

3 Globular Amphora Culture: Collective and Individual Identities

3.1 Differentiation of material culture

Observations relating to material culture confirm that the collection of moveable finds found in graves and domestic sites, where pottery always dominates, have several regional versions (standards). It is possible to differentiate permanent and changeable components in this respect whereby the latter can be said to represent a communication-symbol sphere that is encoded in the form of ornamentation applied to clay vessels. This relates to the set of ornamental elements used, how they linked to one another and relation to the vessel shape – the design in question. An evaluation of data arising from taxonomic studies can posit, however, a certain geographic differentiation in ornamentation (especially between territorial groups), which is more marked than its diachronic changeability in particular regions. One consequence of this is the difficulty with which respective regions of the GAC can be dated. This is best illustrated for example by the long chronology of such phases in Kuyavia, a region where paradoxically the largest base of radiocarbon dating is available.

Observations in respect to producing and using flint tools can indicate another piece in the jigsaw in researching inter-regional changeability in the GAC. First, there is quantitative and qualitative differentiation in the use of flint axes, and in some areas partial replacement of these (one of the most characteristic macrolithic tools that the GAC peoples equipped themselves with) and that of axe-hammers (e. g. *Nackenkammäxte*).

Further, no doubt the variation of bone products found most often in funerary contexts has a symbolic meaning. On the Lowlands these are for example, plates in the shape of the letter T whilst in the eastern group so called buckles. A similar assessment is possible of the variability of amber artefacts amongst which circular pendants (discs) play a particular role as well as necklaces made out of beads (in form of pipe or circular with an opening in the shape of the letter V).

Of no lesser consequence are the above mentioned permanent components, to which belong certain aspects of ceramic ware and flint products. For the former, it is possible to identify the technology of ceramics and long-lasting application of several specific forms of vessels and for the latter, a lack of distinguishing features in the production of flint objects. In the near term this question should find support in archaeometry (framework of ceramic ware analysis in respect to the various areas of the GAC population).

3.2 Economy and ritual: social and symbolic importance of domestic animals

There is no doubt that the economic basis of the GAC social framework was agriculture, to be precise – breeding domestic animals[58]. Such an opin-

[55] Libera 2009.

[56] Czebreszuk/Szmyt 2001; Pospieszny 2009.

[57] The beginnings of the GAC are much earlier than this date, falling around 3600–3400 BC.

[58] In contrast to bone remains, paleobotanic evidence of cultivated plant use markers can be said to be poor, limited to a small number of prints from grains (wheat: *Triticum dicoccum* and *Triticum pelta*, barley: *Hordeum vulgare*) as well as vegetables (peas: *Pisum sativum* and broadbeans: *Vicia fabia*) on pottery and daub (Szmyt 1996, 166–167; Strzelczyk 2000, 345–346; Koszalka 2006; 2007a; 2007b). A similar situation exists in other regions settled by the GAC (Wiślański 1969, 172; Beier 1988, 47), providing direct clues therefore to the use by these peoples of wheat and certain vegetables. An analysis of palynological data indicates in turn the high probability of cultivation of plants by this community (Szmyt

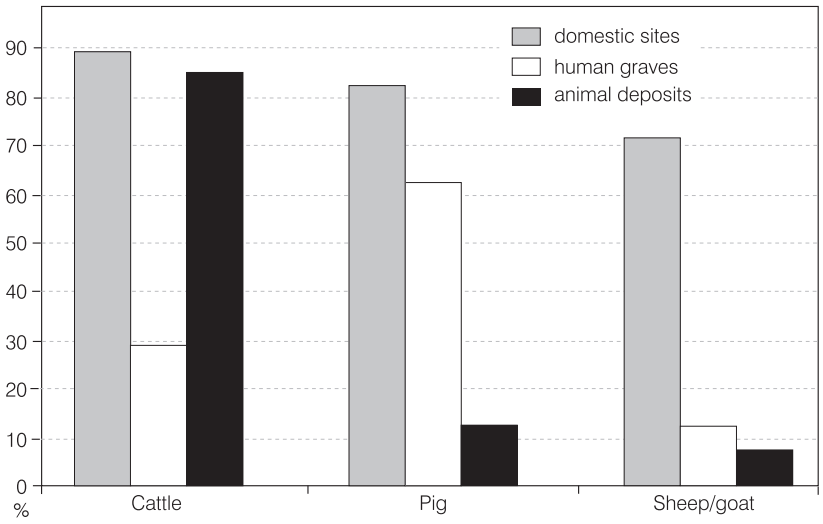

Fig. 6. Animal bones of the GAC in Kuyavia. Incidence of remains of domesticated animals in three functional contexts.

ion corresponds to the context identified in all regional groups, from the Elbe to the Dnieper. This is based on the results of investigations of increasingly numerous collections of animal bones from domestic sites as well as graves. Their analysis shows that (a) patterns of using domestic animals[59], especially the patterns of consumption, demonstrate differentiation depending on the social and symbolic context and (b) a permanent feature of culture was the demonstration of a particular status pertaining to domestic animals, making them an important element of community life. This particular concept materialised in the form of animal deposits ('animal burials') and both of the above were more closely identified in the example of the Kuyavian region.

a) There are three types of animal remains collections from Kuyavian GAC sites: (A) bones with post-consumption traces from domestic sites (*i. e.* remains of 'everyday' consumption), (B) bones with post-consumption traces, from human graves (interpreted as remains of ritual consumption – funerary feasting) and (C) bones without any traces of consumption (animal deposits). The diagram shows considerable differences in the share of the animals in individual collection types (**Fig. 6**). It can be even claimed that the collection types give three different pictures of the use made of particular animal species. As it was, pig was mainly used and eaten during funerary rituals. Sheep and goat were utility animals of little value in the sphere of the sacred. Only in the case of cattle, were their roles in the spheres of the sacred and the profane. This species was most often used in 'everyday' consumption (although its predominance over the pig and sheep/goat was all in this respect) and absolutely dominated in animal depositions. To conclude, one can state preferences in selection of animals for use in such spheres of human activity as funerary feasting, ritual deposits (selection for 'animal burials') and 'everyday' consumption in domestic sites.

b) Animal depositions ('animal burials') in the Kuyavian GAC included not only cattle, but also other kinds of domestic mammals[60]. A speciality of this region is a tendency to place deposits in pits within the settlement or camp. A smaller group is made up of deposits in direct or indirect connection with human graves. In this way dead (intentionally killed?) and buried animals became part of the space used by the living members of the human community. In some cases there is data indicating a purposeful placing of deposits along the limits of a settlement, where they could have marked its bounds. Animal depositions should be equivocally referred to as the 'sphere of sacrum' in the GAC communities. This kind of ritual in question was recurrent mostly in the GAC milieu and was practiced only rarely in other synchronous groups in the Lowlands. All of the observations suggest that rituals associated with animal depositions were very important for the cultural identity of GAC societies. One can say that they became one of the main self-identity markers for the communities and were used to consolidate their members and separate them from other societies related to a different cultural tradition.

3.3 Settlement organization and social identity

The results of detailed geographic analysis presented in other studies[61] provide the basis for the hypothesis that for the GAC in Kuyavia the principal of organization was the division of territory between kindred groups (**Fig. 7**). This functioned according to laws of ritual that gave particular significance to places that were 'sacred' – funerary, marked by the presence of stone tombs housing the burials of forebears (**Fig. 8**). The above fulfilled – apart from other functions – the role of territorial markers for their peoples. As a result of this symbolic division, the kinship group made up of at least several families, who could lead a partially settled existence, for its extent of migration was limited geographically. The relations of such a group with its social milieu is best

1996, 167–175; Makohonienko 2008). The latest palynological data from the Kuyavian region confirm among others the continuous nature of cultivating plants in the Late Neolithic, though it is not possible to relate this solely to the GAC. The rather spectacular proof, both of using and cultivating grains comes from the heart of the forest zone, namely from the cemetery complex in Turinshchina, near Smolensk (Shmidt/Szmyt 1996, 80 fig. 4).

[59] The extent of using wild animals by the societies under discussion oscillated and was characterised by regional and even local differentiation.

[60] Szmyt 2006; 2008.

[61] Szmyt 1996.

reflected in the 'peer polity interactions' model[62]. This group, however, was not a stable community in its choice of abode (living in common) and in fact, the form and the extent of housing changed depending on specific circumstance (most likely seasonal, economic or ritual). Such housing could be that of one family (relicts being a single house settlement) or indeed several families (in the one settlement of several homes). Therefore the organization of community settlement had a cyclical aspect that depended on periodical, repeated dispersal and concentration of relation groups. In such circumstances the integrative role of 'sacred' places (forebear graves) would have been extremely important.

This type of community model of settlement had several specific features and therefore cannot be viewed as universal in terms of the GAC population. It should be noted, however, it does describe an important, perhaps even key trait of the so called settlement system of these peoples, namely the linking of tendencies for a territorial stabilisation that was empowered (even regulated) by means of symbolic rules (ritualistic) with a certain flexibility of using the immediate environs. This was true for the majority of forms of settlements that arose in response to specific conditions (regional and perhaps even local).

The principles of GAC social organization, however, allowing for a semi-settled existence, a result of movements in a defined territory and its marking of boundaries through repeated rituals, became adapted to a large scale beyond the boundaries of the Lowlands. In this respect the most spectacular examples derive from eastern Europe in the forest zone and forest steppe[63].

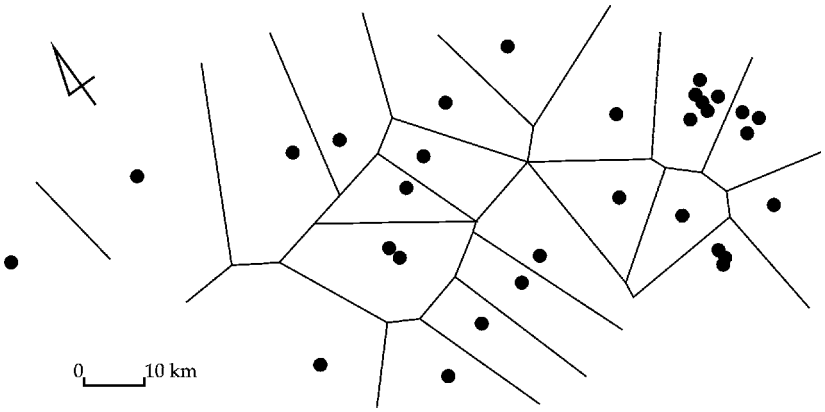

Fig. 7. Thiessen's polygons made for set of GAC stone graves in Kuyavia (after Szmyt 1996). ● Grave with stone construction.

3.4 Collective and individual identity in funerals

Among the many aspects of social differentiation, it is possible to analyse the community principles regulating the right to burial. The data from the Polish Plain (Kuyavia) shows that only a part of the population was interred in graves with a stone construction[64]. No doubt this related to some adults (male and female) as well as children. In

[62] Renfrew/Cherry 1986.

[63] *e. g.* Szmyt 1999.

[64] Szmyt 1996, 214.

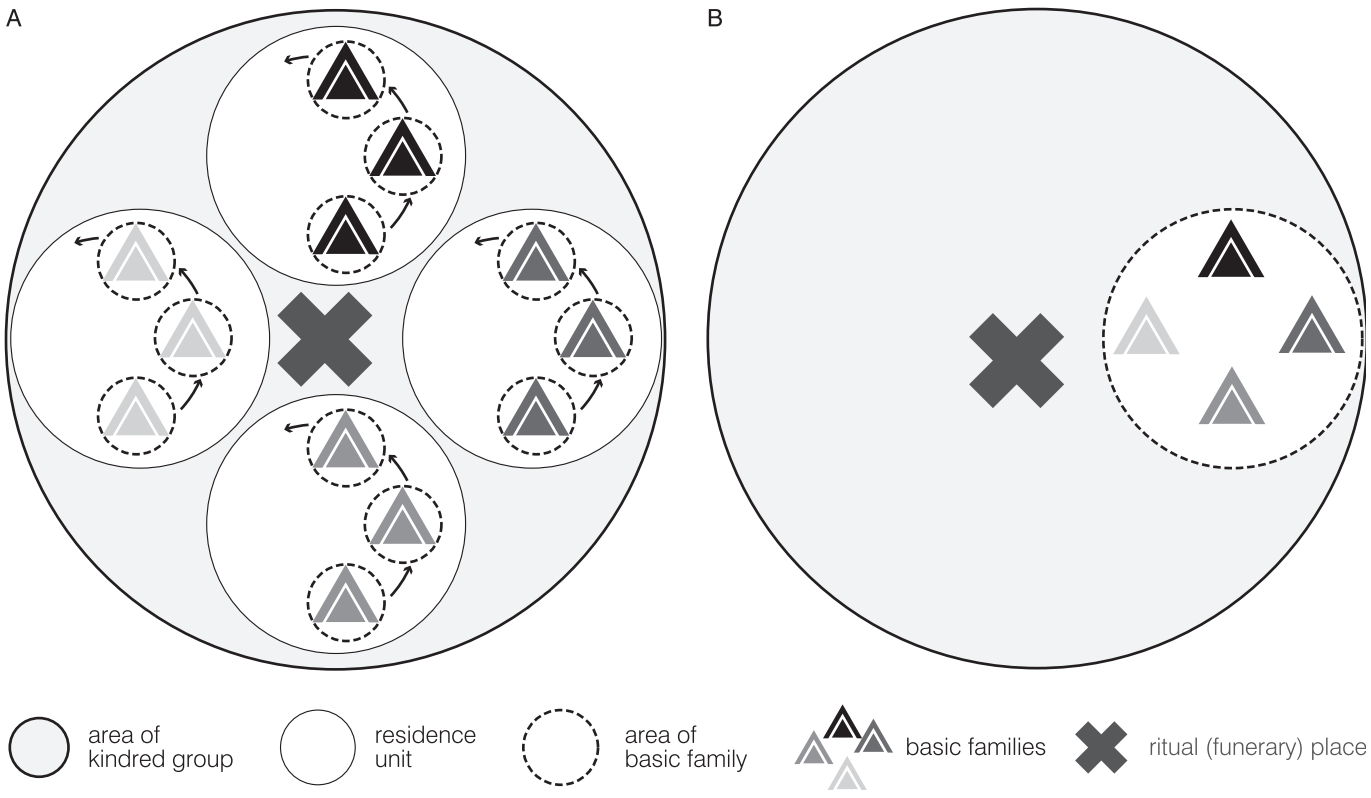

Fig. 8. Model of settlement organization of the GAC communities in Kuyavia (after Szmyt 1996). A Maximal dispersion. B Minimal dispersion.

turn, in non-stone graves, mostly women, the young and children were buried.

In addition to these, further principles applied to regulating the right to interring the deceased in collective, double and single graves. These last were dominated by males. In double graves quite often age differentiation takes place (senilis/adultus *versus* juvenis/infans) and in addition, that of gender (a male adultus/senilis, a female juvenis/adultus)[65]. Further, it is noted that in collective graves men, women as well as the young and children have been recorded – all ages being represented.

Based on the analyses of *Mittelelbe-Saale-Gebiet*[66], it is possible to differentiate two types of stone graves with single burials in relation to local geographic traits and 'richness' in their grave goods (based on the number of objects placed in the grave). In this region the tombs in dominant places in the surrounding area had in the main the remains of male adults and in this context, the graves also had a 'richer' combination of grave goods. It is necessary to note, however, the limited data (insufficient anthropological records) does not allow for the above conclusions to be fully considered in respect to the Polish Lowland.

The next qualification stems from the different structure of funerary objects on the Lowlands, where around 48 % of graves bore the remains of three or more deceased. In addition, if part of the single graves were situated within the complex of cemeteries containing at least a few burials, it is possible to argue that in this area starts the tendency for collective burials, beyond the pale of domestic sites. This could also apply to stone tombs with several to many burials as well as cemeteries bearing several individual graves[67].

In tombs with more than two burials as a matter of rule it is not possible to link specific grave goods with a particular deceased, for in the main their original location, extant elements of the burial and human remains do not lend themselves to a clear reading[68]. Thus, it is possible to posit an alternative view, one namely that these burial sites featured a collective (communal) nature of grave materials, including clay vessels in which liquids were stored or food was kept.

One may ask what indeed did the graves with more than a single burial represent: a place for simultaneous or serial interments? For the former there is scarce evidence on the Lowlands. More often, markers of a chronological sequence may be observed in this respect – to be precise, evidence of their repeated burial in the tomb. This observation is based on stratigraphic data or radiocarbon dating. Further, it is not possible as yet to define what manner of relations linked people buried in collective graves[69].

In summary, the rules regulating the right of burial were dependent on gender and age, taken though in the context of kinship. Above all, it can be said therefore that there existed a demonstration of collective identity by means of long-term use of burial places (cemetery complexes).

3.5 Ritualisation as a medium of social memory

The stability and endurance of cemeteries on the Lowlands (especially in the Kuyavian region) can be seen in the wider perspective in relation to the issue of so called collective (social) memory. This, realised through inter-generational transmission of knowledge, had a fundamental significance for maintaining cultural traditions. In the case of the GAC, in this context, there are many examples of ritual knowledge, which apply not only to aspects of life generally related to the sphere of the *sacrum* (*i. e.* funerary customs), but also those usually identified by researchers in the sphere of the *profanum* (economy, settlement organization or production)[70].

As noted previously, ritualisation is expressed by means of the basic fields of the community economy, especially the food production, which animal deposits clearly show[71]. In this context the considerable longevity of such ritual practices needs to be emphasised – concerning GAC having a long history and wide geographical spread. It is possible they were an expression of a regulating mechanism (at the same time legitimising) the economic functions of the community in question by means of their application to societal norms sanctioned through a codex of symbols. This might explain the lasting nature of specific as-

[65] Wiślański 1969, 283–285.
[66] Müller 2001.
[67] Wiślański 1969, 317–318.
[68] This assertion weakens the fact that the majority of such graves at the time of exploration were already damaged and as a result the supposed intentions of such activity are not completely certain (this situation could be the result of the grave being destroyed when it was plundered).
[69] For the time being it is possible to assume they were related, but to date DNA analysis has not produced any results that could provide an answer to this issue.
[70] This remains in agreement with the concept of a syncretic archaic culture, according to which differentiation corresponds to the sacrum and profanum – to put it more comprehensively, the process of cultural spheres becoming autonomic (division into values and utilitarian behaviour, communicative and open to the world) – is a marked characteristic of modern European culture and should not be related to the realities of prehistoric times (Kowalski 1999, 12–25).
[71] An extreme example is the Krasnaselskoje cemetery complex, where next to human graves, burial places for animals have been found with 13 remains: seven entire cows, some 714 to 3500 kg of meat (according to various cattle measures; see Szmyt 2004a).

pects of the food economy in respect to the peoples of the GAC, not only in terms of the Lowlands, but also further afield.

In addition, forms of settlement organization were legitimised through periodic renewals of rituals. Here, the symbolic division of territory on the part of its inhabitants was of fundamental significance in the relation to burial sites of its interred members. As a consequence of this 'dialogue' between the living and the dead there was formed a basic network of enduring communities that with relatively no conflict, delineated their respective range of neighbouring societies.

It is commonly accepted that the products of material culture are the media of a society's so called collective memory. The active role of artefacts in the above context ought to be emphasised in respect to both a demonstration of similarities and differences in the communities of the GAC. Thus, one may view the longevity of many elements in the material culture and at the same time, differentiation in territory (geographic variability). Looking further afield, it is possible to opine that amongst the peoples linked to the GAC a similar material culture (though not analogous!) serves to legitimise the different forms of social organization based on the identity of the group and the individual. This phenomenon is particularly visible in comparing the main territorial groups of the GAC (*e. g.* the western group and the middle group[72]).

4 Corded Ware Culture: Individual and Collective Identities

4.1 Differentiation of material culture

The basic differentiation in material grave goods in respect to the CWC on the Lowlands can be said to have a diachronic dimension. An effective outline of this takes into account the concept of a 'cultural package', in two versions, namely a 'Corded Ware package' and a 'Bell Beaker' one. The former is known mainly from CWC graves though some sporadic elements are known from encampments. The package contains artefacts such as clay vessels (beakers or similar vessel), stone axe-hammer, flint knife, flint archery accessories (arrowheads). These can be said to be therefore objects used for consumption of drinks (beakers) or equipment needed for battle or hunting (axe-hammer, knife, bow). It should be noted that not all burials boasted a complete set of artefacts. On occasion, part-collections have been encountered with only vessels and axe-hammer or vessels and knife or vessels and archery accessories.

In turn, elements of the Beaker package are recorded mainly in materials from settlements and encampments, less often in funeral complexes. Foremost, these are ceramic vessels similar in form to ornamentation of Bell Beaker patterns. Of fundamental significance is the bell beaker with the characteristic zone and metopic-zone ornamentation, made with a knurl technique or engraved. Less often, other products are found such as stone archer's wrist guards[73] as well as flint daggers[74]. In the south-west Baltic zone these objects, in particular, are related to the Bell Beaker tradition.

In chronological terms, the 'Corded Ware package' was older, for it appeared around 2900 BC[75]. In this respect it is characteristic for the Polish Lowlands that it endured for a long time here, until the beginnings of the last quarter of the 3rd millennium BC[76]. The very beginnings of the 'Beaker package', however, in the area under discussion, can be dated to 2500–2400 BC and its close to 1800 BC[77]. The former date is marked by the late complexes of the so called Iwno culture, in respect of which Bell Beaker traits become increasingly transformed in relation to the originals. In this context it is significant that a process of supplementation can be observed for both packages: Bell Beaker traits do not replace older elements but in fact, appear superimposed[78].

4.2 Gender – age differentiation and identity in funerals

The clearest marker of CWC funeral rituals is the domination of graves with a single burial[79]. Such burials account for two thirds of all CWC graves, all well identified graves covered with a kurgan. This signifies that a larger number of people had the right to an independent burial than those in respect to double or collective graves – the former in the main, adults and most often males (eight objects). In two graves in this context, female adults were found in single burials and in three graves, children. The deceased were laid to rest in a foetal position on their side with men usually on their right (though in Ciechrz, site 25 on the left), whereas women always on the left[80].

[72] Szmyt 2008a.

[73] Czebreszuk 2000b.

[74] Czebreszuk/Kozlowska-Skoczka 2008.

[75] Czebreszuk 2001, 112.

[76] Czebreszuk 2001, 113.

[77] Czebreszuk 2001, fig. 9.

[78] Czebreszuk 2003.

[79] For a different opinion see Pospieszny (2009, 56), from where we drew all quantitative information concerning CWC graves. His opinions are drawn from defining collective graves (all graves with relicts of more then one individual).

[80] A similarly rigorous application of this principle can be seen in relation to women identified in CWC single barrows from the river basin of the upper Vistula (Włodarczak 2006, 59).

The dead were usually buried along with objects associated with the 'Corded Ware package' (vessels and weapons) and on the odd occasion, others such as ornaments made out of bone, copper and amber as well as tools from bone or flint. The right to such a 'grave goods set', including vessels and weapons was granted only to men and children (male), though in this context other grave goods often were placed. Interred female adults, however, had only some of the so called suite of artefacts such as vessels or a bow – though other more exotic objects were possible (*e. g.* a copper diadem in Bożejewice, site 8[81]). In this situation the grave goods could constitute the day to day personal chattels of the deceased (adults) or earmarked for their future use (children). This is an important distinction, for this particular suite from the 'Corded ware package' chronicles as it were, the activities of hunting and war as well as ritual consumption. The last, no doubt was related to imbibing liquids, perhaps intoxicating ones (alcohol), which the form of the vessel indicates[82].

Graves with double burials were designated for women or women with a child. The dead were in this instance most often laid on their left, though arrangements on the right also took place. The grave goods usually consisted of clay vessels (beaker, two artefacts) and in one case also copper ornaments as well as in one instance just an ornamental bone tile. None of these graves recorded weapons. The right to collective grave concerned children, women and men (in relation to their number). In sum, there were recorded eleven children, four women, three men as well as nine adults of undetermined gender. Moreover, in collective graves no weapons were found.

Therefore it can be said that a clear differentiation of rules regulating the right to individual, double and collective burial took place. The first of these usually was reserved for men, less often women and children. The dead in this context were given objects from the 'Corded Ware package', though it ought to be noted that the basic set (vessel and weapon) was only given to male adults and some children – though other configurations were also present. Females were interred with only single objects from the package, such as a bow, though other exotic goods were observed (metal or amber).

On the other hand, graves containing two or more burials were designated foremost for children and women, rarely for men. Funerary rites were based on other principles than in respect to individual graves. Here, the deceased was laid in an anatomical position and during one ceremony (which could be stretched over time), though there are instances known where exceptions in favour of subsequent funeral ceremonies taking place, as in Bożejewice, site 28[83].

In collective graves a hierarchical positioning of bodies can be observed, where the remains of the male adult took central place (*e. g.* Pikutkowo, site 6[84]). To date no collective grave on the Lowland has been found where each buried person has their own set of grave goods. The artefacts concerned in these graves could in fact have no connection with any of the burials (vessels) or may have been indeed the grave goods of one of the deceased (in respect to ornamentation).

The domination of individual burials points to the fact that these were the main form of interring people in the CWC on the Lowland. Therefore it is possible to classify such graves as the 'ideal type' in the CWC in this region, as well as in others. In this context the rites and rules were common to the culture of the CWC and were connected to subsequent stages of funerary ceremonies, in particular those where the preparation and deposition of the dead and accompanying artefacts (mainly from the 'Corded Ware package') such as affirmation of battle, hunting and feasting, as well as libations. As mentioned above, individual graves were usually the preserve of male adults, though women and children sometimes featured. As far as children were concerned, it is possible to presume this might represent a certain inheritance of warrior status[85], whilst individual graves containing female adults would have had to have particular significance and could have concerned those given an analogical status to men, as might possibly be the case in Bożejewice, site 8[86].

In respect to other types of graves (double and collective), funerary rites in part respected the same rules (in principle an anatomical position, though not always, and differentiation of the 'female' position on the left side) and in part, made exceptions (break from the principle of individual grave goods or lack of weapons in such). Generally speaking, these graves expressed a somewhat different system of approach than individual graves.

4.3 Settlement organization, economy and changes of social identities

The findings discussed above (see part 2) that indicate the short-lived nature of CWC domestic sites are the basis of a hypothesis of the basically migratory nature of life in these communities. The

[81] Kośko/Kločko 1991.
[82] In respect to the Polish Lowlands to date there is a lack of data for the contents of vessels found in CWC graves.
[83] Czebreszuk 2000a, 432.
[84] Niesiolowska 1967; Pospieszny 2009, 54–55.
[85] Vandkilde 2007, 85.
[86] Kośko/Kločko 1991.

main unit in the social organization would have been small kinship groups that moved along the Lowlands. During their migrations, with relatively short breaks, these communities built small encampments of a temporary nature whose relicts are at present extremely difficult to identify. This scenario by no means is restricted to the Lowlands, for a similar situation can be said to be the case in the basin of the upper Vistula[87]. Enduring markers, however, of such migrations were graves that at first were isolated – at a marked distance from one another – and which did not form cemetery complexes.

The results of territorial analyses allow for discerning geographic preferences accompanying the location of CWC graves and encampments. These, it would seem, were most readily formed at the periphery of large valleys. It is there that at times graves came to be on the site of earlier encampments[88]. The latter were established often in the hinterlands of large valleys, where small water basins and waterways could be found such as small lakes and streams.

This situation slowly began to change around 2400 BC with the appearance of the first influences of the Bell Beakers on the Lowlands. It is at this time that domestic sites begin to show signs of stabilisation towards a network of permanent territorial communities, which no doubt is the result of fresh approaches leading to a new system of social organization. This in turn was the creation of larger encampments which change into settlements. It is there that signs of buildings for economic and sometimes domestic purposes can be found[89]. Next to isolated graves there are found such graves in clusters, which in time take on the form of cemeteries. This process is particularly well identified in the Kuyavian region, culminating in the Early Bronze Age[90].

The above changes in settlement patterns would have had to be correlated with social and economic transformations. The exact nature of these cannot be described easily for there are insufficient findings in this context. It is only possible therefore to assume that the basic system was one of an economy based on migration (or semi-migration) with the husbandry of animals. The changes that were slowly taking place meant the decrease or change in the role of husbandry of animals (from migratory to semi-migratory, then stationary) as well as the shift to (in various degrees) dependence on the 'politics' and local natural environment in respect to farming plants. The processes of these changes could have taken their course in varying degrees and at a varying pace, even when it comes to neighbouring territories.

The reconstruction of societal forms of organization, one that takes into account the above considerations in their entirety, is based on the assumption that at the beginning of the 3rd millennium BC the CWC communities on the Lowlands were divided into small kinship groups that led a migratory form of life. The presence of only isolated graves (not in cemeteries) and temporary encampments would seem to indicate that such groups travelled larger distances, doing so in a different way to the peoples of the GAC culture, where the cemetery complex played a stabilising role as well as a clear marker of communal rights to a particular territory (see part 3). No doubt in this context the CWC at that time did not possess a stable settlement network – though it is possible to contend that an enduring territorial 'map' of migrations across far territories was in place, one that perhaps extended beyond the Lowlands itself[91]. It was only the changes initiated by the Bell Beaker patterns, which finally came to put an end to the migratory patterns of communities and initiated a stabilisation of settlement patterns in a given territory[92].

A more detailed support of the above argument is based on the earlier proposed model of social organization (**Fig. 9**) where the status of men was dominant[93]. As 'heads of the family' – on the basis of family as a nuclear unit – they represented to the outside. In turn, relations between families were mediated by these men, who at the same time created decision-making councils at a higher level (exclusive groups, *e. g.* secret societies) along regional lines, making contact with other such bodies in other parts of the CWC population. Both the authority inside the family and all its external relations regarding neighbours (regional) and visitors from far-away lands (supra-regional), were therefore the sole preserve of groups of adult men. Some passed on their high social status to their children (boys?), though this was not commonplace.

In the CWC communities therefore, a double cultural-social principle of the individual's identity existed; the traditional, characterised by kinship relations (status gained at birth) and the new, social identity gained through the individual's identity. The latter was the preserve of adult men who monopolised the field of rites and social activity, creating exclusive groups. These could be based on a process of selective cooption, which means that not every adult male became a member – for

[87] Czekaj-Zastawny et al. 2002; Włodarczak 2006, 7; Witkowska 2006.
[88] See analogical observations from Malopolska: Witkowska 2006, 91–92.
[89] Czebreszuk/Szmyt 2008b.
[90] Czebreszuk 2001.
[91] Machnik 2009.
[92] Czebreszuk/Szmyt 2008b.
[93] Czebreszuk 2001, 182–204; 2002; 2003.

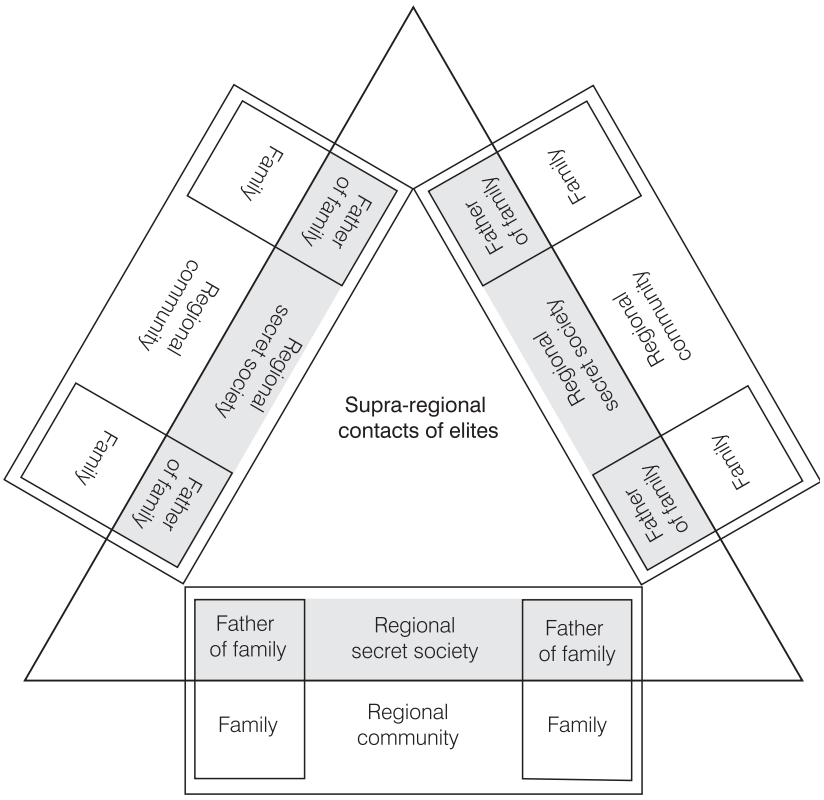

Fig. 9. Model of supra-regional and regional organization of CWC societies on the North European Plain.

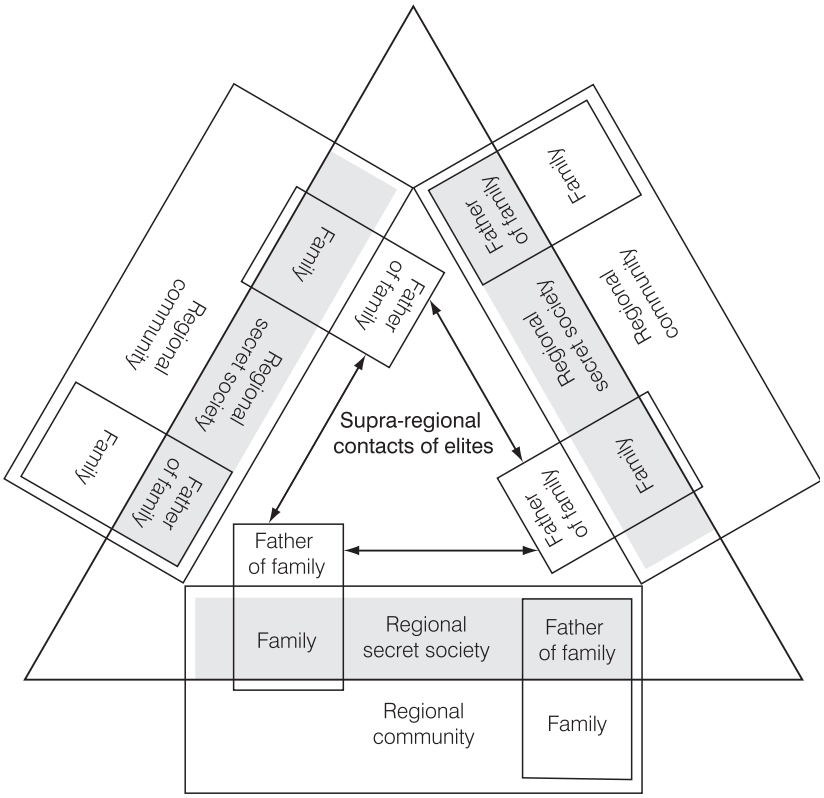

Fig. 10. Model of supra-regional and regional organization of Bell Beaker and Early Bronze Age societies on the North European Plain.

this involved an initiation to specific rituals. Those men that were not part of such a process had a separate position in the group, a status close to that of women (though not analogical). A further process of change (**Fig. 10**) led to the differentiation of status for the members of associations. In this respect individual objects were the basis of an increasing importance of certain individuals and the loss of status on the part of others. The special position of certain males increased the significance of their families, in particular sons, as they were potential heirs.

Finally, after 2400 BC there occurred a slow return to stable, farming communities. Their internal structure were already characterised by a different social system, with clear markers of social differentiation. It is therefore in this form that the cultures of the Lowlands became an important element that participated in the shaping of civilisation of the Early Bronze Age.

5 Interactions through Conflicts as Background for Differentiation of Identities on the Lowlands in the 3rd millennium BC?

Discussion up to now has taken into consideration the particular circumstances arising out of the assumption that material culture was an important social medium in respect to the above discussed processes of social change in the 3rd millennium BC on the Lowlands. This medium was constantly being initiated, undergoing revitalisation and was evidently being exploited by specific groups of people. In the opinion of the authors, it is in fact the high social valorisation of material culture (in its various fields) that proved to be fundamental for its long enduring and rather marked differentiation that is now discernable in the cultures of the GAC and CWC. In other words, these two structures of material traits reveal a part of the real differences between respective societies that left them for posterity. In this respect, it is possible to search for a reason that would explain this differentiation at the level of theoretical considerations, applying a cognitive social sciences model to the period of prehistory. In this regard a theoretical model has been chosen, one in relation to Simmel's concept[94] of functionality in social conflict, modified by Coser[95], which allows for identification of causes for long enduring differences between social groups.

The work of the above mentioned scholars led to among others, diagnosis of the positive (mainly integrational) functions of social conflict that have importance both for the interaction in groups as well as between them. The most important aspect

[94] Simmel (1955.
[95] Coser 1956.

in this light[96] was the demonstration that social conflict always denotes social interaction (intra and inter), with its positive elements. Thus it could be said that these are the consequence of conflict playing an integrational role inside each of the groups involved, which is made possible through a mutual interaction of opposition that helps such groups maintain their identity.

Thus, conflict with other groups lends itself to establishing and affirming group identity as well as maintaining its boundaries in respect to the surrounding communities and their world. Moreover, it can be said to bond the group concerned through a strengthening of how it perceives its difference, as well as the collective awareness of the community. Therefore conflict with a group outside increases its internal cohesion and at the same time defines the structure of the group. In this context therefore, it is possible that stable relations (interaction) between groups were characterised by mutual opposition. The consequences of this for external social relations of the community can be said to be very symptomatic. Thus as a result, regular mutual enmity is responsible for the strengthening of boundaries between groups, and at the same time their internal structures are preserved. Furthermore, inter-group boundaries are continually maintained when communities engaged in long-term battles with their neighbours do not show tolerance for their own members. Significant exceptions from group unity are therefore not accepted, for the community's internal coherence is dependent on a total acceptance on the part of its collective, of all aspects of group life.

In applying the above concepts to the example of the two prehistoric societies under discussion it is necessary to take into consideration the arguments previously put forward in parts 2–4. The most important propositions are:

1. the long-enduring synchronicity of these communities;
2. their functioning in the same area (Polish Lowlands);
3. their respectively different systems of domestic economy and social organization;
4. their manifestation of differences in various fields of material culture.

The consequences of these conclusions on the basis of the theory drawn is the recognition that forms of interaction had to take place between both societies, ones that could have taken the form of permanent conflict[97], which demanded from both sides an enduring affirmation and renewal of their respective mutual boundaries – not so much geographic (those on the Lowlands cannot be identified) as symbolic, embracing all aspects of life. Such boundaries were demonstrated in particularly strong fashion and revitalised through the consistent production and use of another collection of material products (housing, tools, weapons, receptacles for food as well as clothing etc.), the application of different semantic structures (maintained in the form of ornaments on vessels and clothing or tattoos) as well as other forms of communal rites.

The endurance of the above described interaction in the form of conflict enforced on both communities their respective strengthening of internal cohesion and continual reference to traditional models of community life[98]. Thus the communities of the GAC all along after 3000–2900 BC maintained their internal organization and traditions, which is revealed by the long-enduring nature of communal rites tied to the 'graves of forebears' as well as in regard to animal sacrifice[99]. Among the CWC communities there can be observed an equally active cultivation of traditions up to 2400 BC when models of Bell Beakers reach them and thereafter a slow change in social and economic systems starts to take place. It is possible therefore to posit that in fact the permanent state of conflict, one enforcing a continual preservation and demonstration of community identity, was in fact the reason for the longevity of relatively little change for both the cultures concerned.

6 Conclusion

The interpretation of data put forward in this study can be said to gain significance in the context of knowledge in respect to significant social changes that arose in the 3rd millennium BC in Central Europe[100]. The following elements could be said to be decisive on the beginnings of the period (**Fig. 11**):

1. Kinship structures were the base of social organization, expressed through 'ancestral cult' rites;
2. group identity was decisive, affecting the extent of changeability in intra-group differentiation;
3. ritualisation of community life (funerary rites and deposition of animals) was a means of

[96] Coser 2009, 25.

[97] In this particular context it is not our intention to forejudge the consequences of conflict nor is there a suggestion of a permanent state of conflict between both societies. Moreover, so called conflict does not preclude the possibility of cooperation (*i. e.* enforced).

[98] In this respect it should also be noted that the long chronology of traits linked to the so called CWC horizon A and the very slow changes in the structure of ceramic vessels during the 'classical' horizon of the GAC.

[99] *E.g.* see long chronology of animal deposits (Szmyt 2006).

[100] Czebreszuk 2001; Kadrow 2001; Müller 2002.

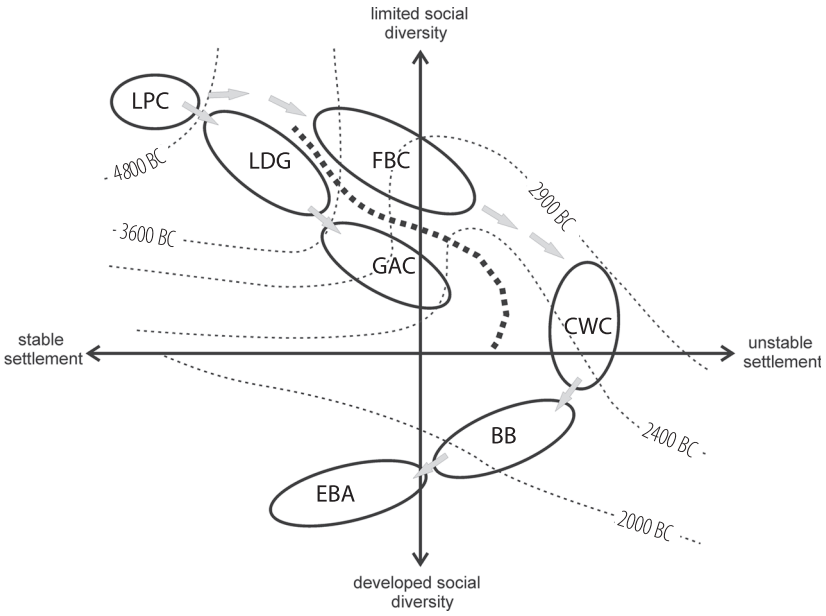

Fig. 11. Main trends of development (cultural and social-economic) on the Polish Lowlands between 5th and 2nd millennia BC. LPC = Linear Pottery culture; LDG = Late Danubian Groups; FBC = Funnel Beaker culture; GAC = Globular Amphora culture; CWC = Corded Ware culture; BB = Bell Beakers; EBA = Early Bronze Age. Thick dotted line marks period of stabile conflict.

strengthening the identity of the entire kinship group.

On the other hand new social models during this period entailed:

4. appearance of individualisation amidst kinship structures among community members;
5. a tendency to stronger demonstration of intra-group differentiation as witnessed also in funerary rites;
6. ritualisation of community life as a medium strengthening divisions internal to the group (see the role of integration rites for only some group members such as warriors).

In looking at the general picture it is possible to argue that the communities under discussion in this study, represented oppositional models of old (GAC) and new (CWC). Further, it may be ascertained that the apparent similarities between these cultures mark important differences in their respective social and economic systems. This in turn raises the question of the longevity of this situation and its causes in respect to two synchronous though dissimilar cultural structures in the same area (first half of the 3rd millennium BC). It can be argued therefore that one interpretation of this, based on the concept of the positive (mainly integrational) functions of social conflict, sheds new light on the specific nature of interaction between the above communities, whose effect was a continual building of their self-identity.

The above proposition is not one that necessarily should stand as a generalisation in this overall context. Indeed, the authors would like to point out that of most consequence can be said to be the issue of social relations between the GAC and CWC in the regional context. In this light therefore, it ought to be noted that for example in *Mittelelbe-Saale-Gebiet*, in Małopolska, in Bohemia as well as in Moravia, the nature of interaction between the GAC and CWC communities could take on a different form to that of the Polish Lowlands.

Abstract

The interpretation of data put forward in this study gains significance in the context of knowledge in respect to significant social changes that arose in the 3rd millennium BC in central Europe. The following elements might be decisive at the beginnings of the period: (1) kinship structures were the base of social organization, expressed through 'ancestral cult' rites; (2) group identity was decisive, affecting the extent of changeability in intra-group differentiation; (3) ritualisation of community life (funerary rites and deposition of animals) was a means of strengthening the identity of the entire kinship group.

On the other hand new social models during this period entailed: (1) appearance of individualisation amidst kinship structures among community members; (2) a tendency to stronger demonstration of intra-group differentiation as witnessed also in funerary rites; (3) ritualisation of community life as a medium strengthening divisions internal to the group (see the role of integration rites for only some group members such as warriors).

In looking at the general picture it is possible to argue that the communities under discussion in this study, represented oppositional models of old (Globular Amphorae) and new (Corded Ware).

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Zusammenfassung

Die hier vorgelegte Interpretation von Daten ist für unsere Kenntnis der im 3. Jt. v. Chr. sich in Mitteleuropa entwickelnden deutlichen sozialen Veränderungen von großer Bedeutung. Folgende Punkte könnten am Beginn dieser Phase ausschlaggebend gewesen sein: (1) Verwandtschaft war die Basis sozialer Organisation, dies zeigte sich im Ahnenkult; (2) Gruppenidentität war maßgeblich und beeinflusste die Veränderungen der inneren Differenzierung; (3) durch die Ritualisierung des Gemeinschaftslebens (Bestattungsbräuche und Tierbestattungen) wurde die Identität der gesamten Verwandtschaftsgruppe gestärkt.

Andererseits brachten neue Sozialmodelle in dieser Phase mit sich: (1) Individualisierung inmitten der Verwandtschaftsstrukturen; (2) eine Tendenz, die innere Differenzierung der Gruppe stärker zu betonen, was auch in Bestattungsbräuchen zu beobachten ist; (3) Ritualisierung des Gemeinschaftslebens als Mittel, die interne Gliederung der Gruppe zu verstärken (man beachte die Rolle der Integrationsriten für nur einige Gruppenmitglieder wie z. B. Krieger).

Allgemein lässt sich über die hier besprochenen Gemeinschaften sagen, dass sie gegensätzliche Modelle von alt (Kugelamphoren) und neu (Schnurkeramik) repräsentieren.

Резюме

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