

Time versus Ritual – Typological Structures and Mortuary Practices in Late Bronze/Early Iron Age Cemeteries of North-East Caucasia ('Koban Culture')

1 Introduction

In North Caucasian archaeology the Late Bronze Age and Early Iron Age, covering the period of the 14th to 4th century BC is one of the most prominent periods of archaeological research. The cultures of this era are predominantly known for their outstanding metallurgy which is shown in the quantity of weapons and adornment of the burials. As early as the 19th century AD the enormous wealth of these burials led to 'archaeological' activities, looting rather than excavating being the predominant method of this time. This resulted in the huge collections of Caucasian bronzes in European museums (Virchow 1881). Only in the 30s of the present century did real scientific research begin with excavations and chronological studies (Kozenkova 1990; Krupnov 1960).

Despite the exceptional number of graves and the long-lasting tradition of Soviet and foreign research, some problems remain regarding the historical interpretation of this material. Archaeological research has particularly been dominated by chronological and spatial discussions (Kossack 1983; Kozenkova 1990; Krupnov 1960, 1962). Differences in spatial distribution of items and in burial customs have been used for marking different 'cultures' or subgroups within such 'cultures' (Krupnov 1962). Interpreted against the historical background (Herodotus, Book IV), they have been seen in the light of ethnic movements such as the Scythic expansion during the 8th century. Other questions, e.g. on social organisation and the mode of production and exchange have never been the focus of research although they have been discussed before (Iessen 1941; Černych 1992: 275-295).

Reconstructing the way of social communication of the Late Bronze Age/Early Iron Age tribes, as expressed in the wealth of the burial goods, the mode of building such tombs and the exchange of prestige items, may be one way of answering such questions. Spatial distribution of graves, different degrees of wealth and energy expenditure for the funeral of the individual person as well as differences in grave good types, quality and number usually constitute the set of criteria which is used by archaeologists to examine the way of social communication during the funeral act,

reflecting the main principles of social structuration of the burying community (Bietti-Sestrieri 1992; Saxe 1970; for critique of such analogies see Härke 1993; Pader 1982; Steuer 1982). The Seržen'-Jurt cemetery which is one of the largest and best published graveyards of the north Caucasian Koban culture forms an excellent case to study such patterns. Statistical methods can be used to identify structures as statistical patterns in the archaeological record. Multivariate analyses could be an instrument giving multicausal explanation for such patterns (Bietti-Sestrieri 1992; Müller 1994).

2 The cemetery of Seržen'-Jurt (Čečeno-Ingušetia) as an example for analysing ritual behaviour in the late Bronze/Early Iron Age of NE-Caucasia

The cemetery of Seržen'-Jurt is situated at the edge of the northeastern Caucasian mountains where a small river leaves the hilly zones of these mountains (fig. 1). It is closely connected with a nearby settlement which covers about 0.5 ha. The settlement with approximately 10 houses could have existed for 550 years — as indicated by several radiocarbon dates covering the period from 1350 to 800 BC (Kozenkova 1992: 67). The graveyard can be dated to the Late Bronze Age, the end of its use to the beginning of the Early Iron Age. This is some time before the end of the 9th century BC. Obviously burials had taken place for about 300 years (Kozenkova 1992: 73).

The cemetery extends over an area of 2000 sq m. It was excavated during the late sixties and early seventies and published by V. Kozenkova (1992). It contains about 100 graves, inhumations in rectangular tombs with flexed bodies, orientated mostly towards the NE. The burial equipment is quite large and usually consists of bronze or iron items — adornment, weapons, a few tools — and large quantities of ceramic vessels. Eleven graves are additionally equipped with horse offerings, similar to those which have been reported from antiquity (Herodotus, Book IV: 70) to the beginning of the 20th century by ethnographic researchers (Nioradze 1931). Spatial structurations of the cemetery can be assumed to be in six separate groups of graves, two of which are quite large (fig. 2).

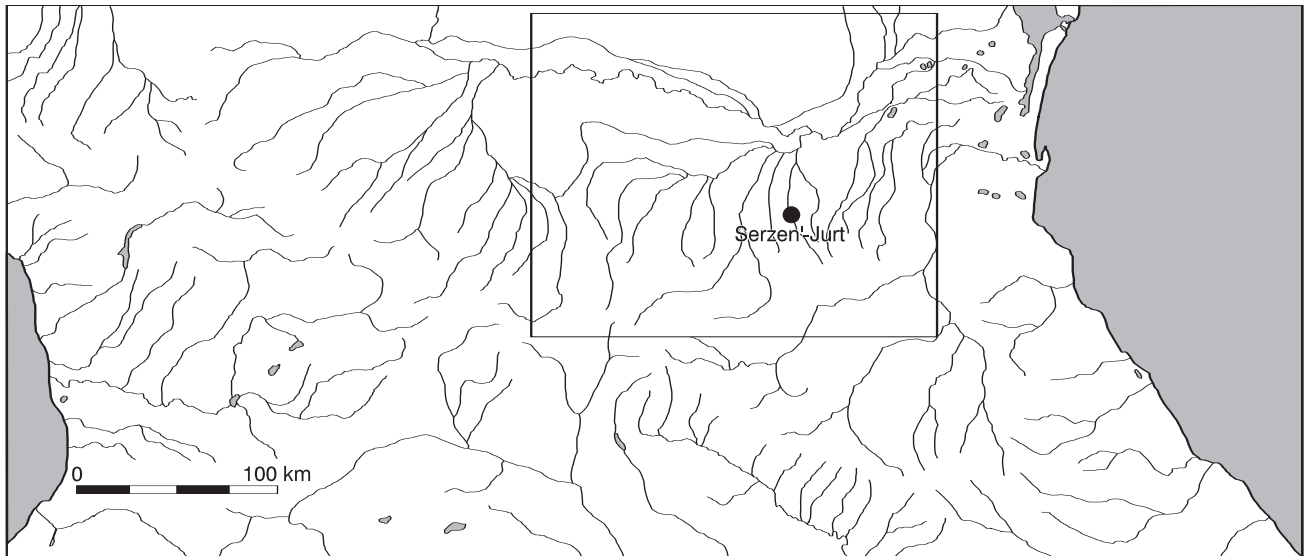


Figure 1. Location of Seržen'-Jurt.

Although no anthropological investigation of the skeletal remains has been carried out, the difference of gender seems quite clear from the material equipment of the inhumations. From the size of the skeletal remains it also has been possible to determine several burials of children or juveniles (Kozenkova 1992: 11-14). Following this distinction a representative part of the Seržen'-Jurt population is supposed to be buried here. However, attention must be drawn to the relations of the settlement and graveyard. If the assumption is correct that 10 households, i.e. families, had occupied the settlement for over 500 years, the 100 graves of the cemetery could not represent the whole of the ancient population. As there are no other burial places known from the surrounding area with the exception of some burials in pits within the settlement itself, it can be supposed that special criteria, e.g. social status or religious motives, are responsible for the deposition of only some individuals in the burial ground.

2.1 SERIATION AND CORRESPONDENCE ANALYSIS OF STYLISTIC TYPES AS A PROPOSED CHRONOLOGICAL BACKGROUND

The deposited objects in the graves can be divided into three functional classes. These classes concern the personal adornment in its function as funerary costume, weapons and tools as technical equipment, ceramic sets and jewellery as goods from 'everyday life' (Reinhold 1995).

The statistical basis for analysing the grave goods from the Seržen'-Jurt cemetery are 1280 objects which can be

assigned to 140 stylistic types. The classification of the objects follows the method described by Hodson (1990) for the classification of the Hallstatt cemetery. For seriation and correspondence analysis the Bonn Archaeological Statistic Program (BASP) has been used (Herzog/Scollar 1987). In addition, the significance of the results has been checked by using the statistical tests of the SPSS package.

Following the model described by Djinjan (1985) the parabolic structure of the correspondence analysis has been used to suppose normally distributed data which could be correlated with a continuous process of production and/or deposition of items (Bakker 1994). Non-parabolic geometric structures could point to non-linear processes of production/deposition (Djinjan 1985), e.g. special ritual needs for a proper burial which corresponds to the culturally determined ideology of the burying community.

Non-linear structures as mentioned above are the visible results of typological seriation of the funeral goods. The correspondence analysis shows the typological proximity of the inventories (fig. 3). It is dominated by two types of ceramic vessels which occur in large quantities in 62% of the graves in combination and in another 12% of the burials as single pottery forms. Excluding these types the structure is dominated by the distance of the few Early Iron Age inventories and the fission of the armed and non-armed Late Bronze Age burials (fig. 4). The distinction of gender represented in armed males and non-armed females and males is obviously shown at this level, apart from the general differentiation of the Late Bronze and Early Iron Age.

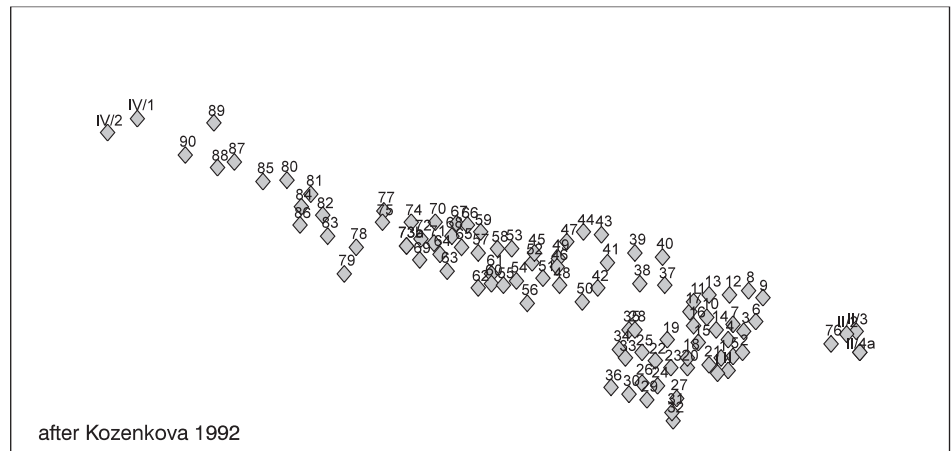


Figure 2. Spatial distribution of the Seržen'-Jurt cemetery.

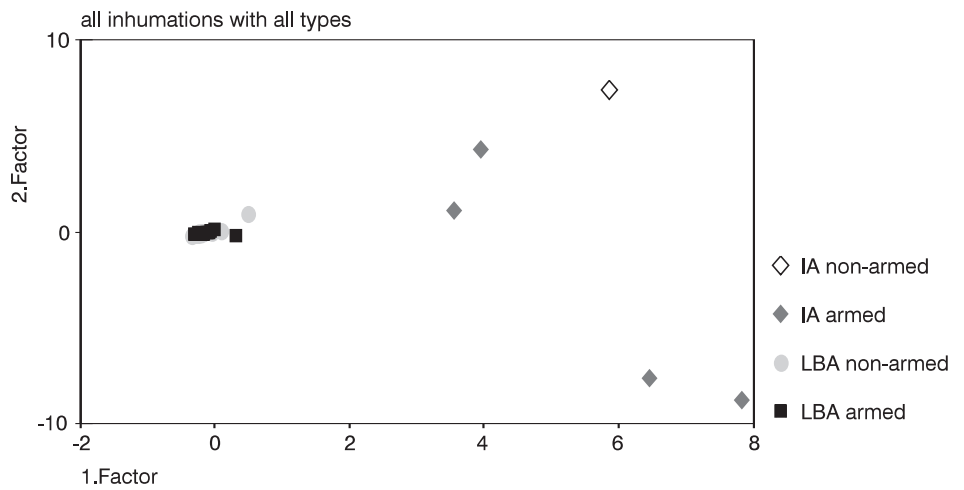


Figure 3. Correspondence analysis Seržen'-Jurt. All inhumations with all types.

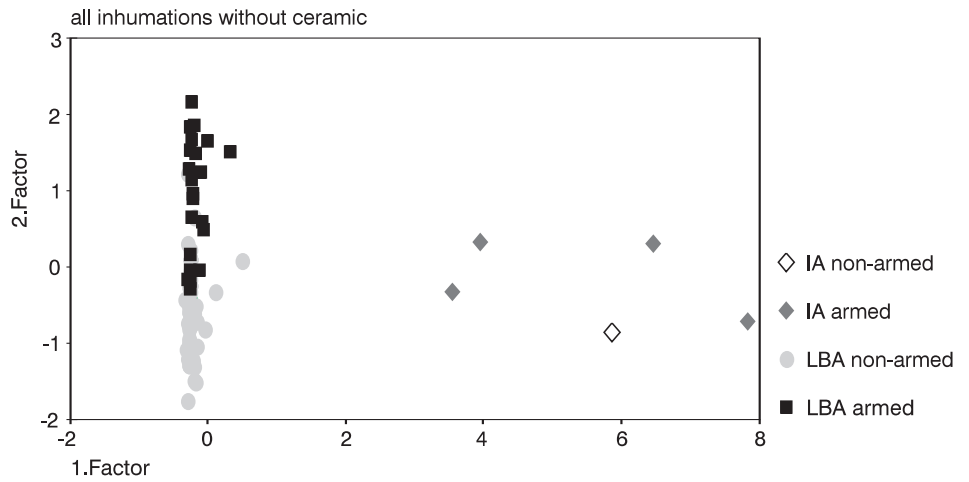


Figure 4. Correspondence analysis Seržen'-Jurt. All inhumations without ceramics.

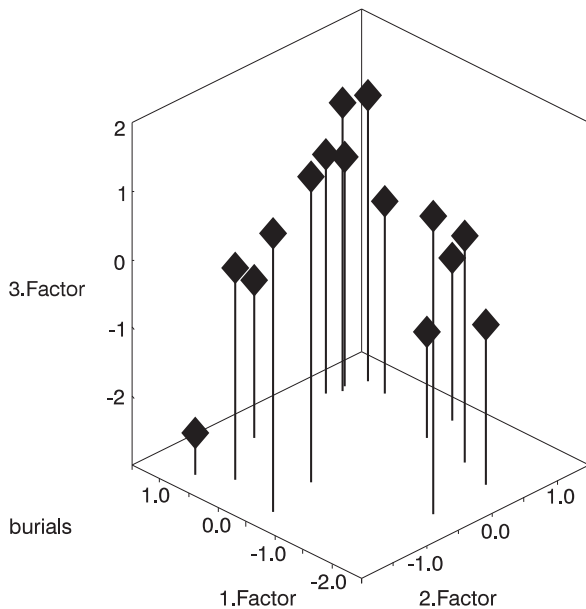


Figure 5. Seržen'-Jurt. LBA armed inhumations without common types.

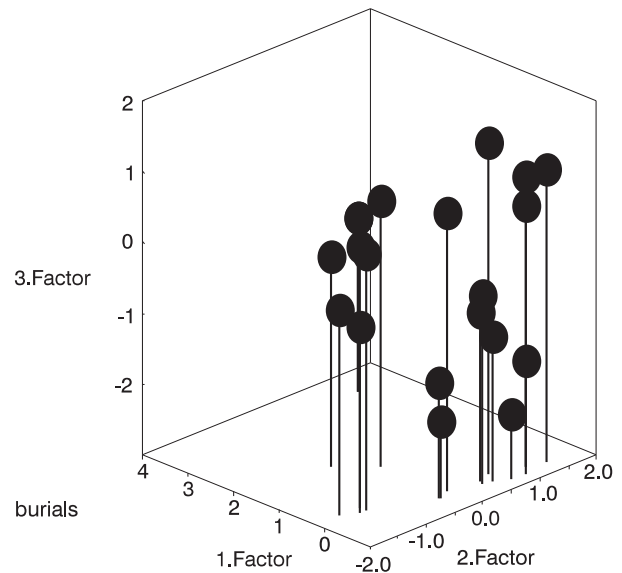


Figure 6. Seržen'-Jurt. LBA non-armed inhumations without common types.

In separate seriations both armed and non-armed Late Bronze Age data are still dominated by types occurring in more than 25% of the inventories. Just by reducing the database once more a parabolic structure is obtained which can be interpreted as a sign of continuous, normally distributed production/deposition (figs 5, 6).

Summarising this evidence it can be pointed out that the complete database of the Late Bronze Age burials is dominated by very frequent types occurring in nearly all graves which compel to reduce the database by 95% of the ceramic vessels and by 53% of the metal items to receive a statistical result which can be interpreted in terms of a chronological order. However 21% of the grave goods are single types and therefore excluded. At this point of the analyses it becomes clear that several components underlie the assemblages of the inventories of which chronology is just one.

2.2 FUNCTIONAL CLASSES AS STRUCTURATION CRITERIA

The second level of classification focuses on the functional classes. By using hierarchical cluster analysis, the differentiation between armed and non-armed males again becomes quite clear. In addition several other significant correlations are visible which can be identified by using a simple table of clusters of different costume groups or clusters of weapons. Six main costume groups can be identified, composed of bracelets and head-dresses (fig. 7).

Five of these are correlated with the non-armed, obviously female group of inventories and one group is correlated with armed individuals but occurs also without arms. They are supposed to represent male individuals. Compared with the typological database the main components of these costume groups are identical to the excluded types in the seriation set.

In addition to the costume groups seven combinations of arms can be identified. They consist of different types of weapons — lance, axe or daggers — in combinations of three, two or one types. The complete set of arms correlates also with the horse burials and marks the outstanding male burials. When these groups are mapped into the typological correspondence analysis the sets with two or more arms cluster in one part. The less wealthy sets, i.e. the ones with just one weapon cluster in another (fig. 8). An explanation of this division is provided by chronology but also by social differences in the status of the buried men.

2.3 SOCIAL DIFFERENTIATION BY WEALTH

Classification of wealth is generally influenced by subjective criteria such as the number of items, presence of exotic goods, gold or other (for a critique see Eggert 1991). To get a more objective indication of the individual wealth of the single burials compared with the other graves, it will be necessary to construct an independent value by statistical means (Jorgenson 1990; Müller 1994). As basic data for this calculation were used the number of items, the plurality

bibliography

- Černych, E.N. 1992 *Ancient metallurgy in the USSR*. Cambridge: Cambridge University Press.
- Bakker, J.A. 1994 Bemerkungen zu Datierungsmethoden: 14C-Methode, Dendrochronologie, Seriation und Typologie. In: *Beiträge zur frühneolithischen Trichterbecherkultur im westlichen Ostseegebiet*. 1. Internat. Trichterbeckersymposium in Schleswig, Marz 1985. 1. Untersuchungen und Materialien zur Steinzeit in Schleswig-Holstein, 51-69.
- Bietti-Sestrieri, A.M. 1992 *The Iron Age community of Osteria dell'Osa. A study of socio-political development in central Tyrrhenian Italy*. Cambridge: Cambridge University Press.
- Bourdieu, P. 1976 *Entwurf einer Theorie der Praxis*. Frankfurt a. Main: Suhrkamp.
- Djinjan, F. 1985 Seriation and toposeriation by correspondence analysis. In: A. Voorrips/S.H. Loving (eds), *To Pattern the Past*, *PACT* 11, 119-135.
- Eggert, M.K.H. 1991 Prestigegüter und Sozialstruktur in der Späthallstattzeit: Eine kulturanthropologische Perspektive, *Saeculum* 42, 1-28.
- Elias, N. 1976 Über den Prozeß der Zivilisation. Soziogenetische und psychogenetische Untersuchungen. Bd. I, *Wandlung des Verhaltens in den weltlichen Oberschichten des Abendlandes*. Bd.II. 18. Aufl. (1. Aufl 1976), Frankfurt a. Main: Suhrkamp.
- Härke, H. 1993 Intentionale und Funktionale Daten. Ein Beitrag zur Theorie und Methodik der Gröberarchäologie, *Arch. Korrbbl.* 23 (3), 141-146.
- Herzog, I.
I. Scollar 1987 Ein 'Werkzeugkasten' für Seriation und Clusteranalyse, *Arch. Korrbbl.* 17, 273-279.
- Hirschberg, W. (ed.) 1988 *Neues Wörterbuch der Völkerkunde*. Berlin: D. Reimer Verlag.
- Hodson, F. 1990 *Hallstatt. The Ramsauer graves. Quantification and analysis*. Bonn: Habelt.
- Iessen, A.A. 1951 Prikubanskij očag metallurgii i metalloobrabotki v konece medno-bronzogo veka. In: E.I. Krupnov (ed.), *Materialyi i issledovanija po archeologii Severnogo Kavkaza*. MIA 23. Moskau, Leningrad: Izdatel'stvo Akademii Nauk.
- Ihm, P. 1983 Korrespondenzanalyse und Seriation, *Arch. Inform.* 6 (1), 8-21.
- Jorgenson, L. 1990 *Baekegard and Glasergard. Two cemeteries from the Late Iron Age on Bornholm*. Kopenhagen: Akademisk Forlag Universitetsforlag i Kopenhagen.
- Kossack, G. 1983 Tli 85. Bemerkungen zum Beginn des skythenzeitlichen Formenkreises im Kaukasus, *Beitr. Allg. Vergl. Arch.* 5, 89-186.
- Kozenkova, V.I. 1977 Kobanskaja kul'tura. Vostočnyi variant, *Arch. SSSR. Svod V 2*, 5. Moskau: Izdatel'stvo Nauk.
- 1990 Chronologija Kobanskoj kul'turoj: dostiženja, opyt utočeniija, nerešennye problemy, *Sov. Arch.* 1990 (3), 64-92.
- 1992 *Seržen'-Jurt. Ein Friedhof der späten Bronze- und frühen Eisenzeit im Nordostkaukasus*. Mat. zur Allg. Vergl. Arch. Bd. 48. Mainz: Phillip von Zabern.

- Krupnov, E.I. 1960 *Drevnjaja istorija Severnogo Kavkaz*. Moskau: Izdatel'stvo Akademii Nauk.
- 1962 *A propos de la chronologie de l'age du fer au Caucase*. VI Congr. Int. Science. Préhistoriques et Protohistoriques, Moskau. Sek. Va, 3-13. Moskau: Izdatel'stvo Akademii Nauk.
- Müller, J. 1991 Arbeitsleistung und gesellschaftliche Leistung bei Megalithgräbern. Das Fallbeispiel Orkney. *Acta Prähist. et Arch.* 22, 9-35.
- 1994 Zur sozialen Gliederung der Nachbestattungs-gemeinschaft vom Magdalenenberg bei Villingen. *Prähist. Zeitschr.* 2, 175-221.
- Nioradze, G. 1931 *Begräbnis und Totenkultus bei den Chewssuren*. Stuttgart: Strecker und Schröder.
- Pader, E.J. 1982 *Symbolism, social relations and the interpretation of mortuary remains*. BAR International Series 130. Oxford: British Archaeological Reports.
- Reinhold, S. 1995 *Chronologische und sozialgeschichtliche Untersuchungen an ausgewählten Gräberfeldern der späten Bronze- und frühen Eisenzeit im Nordostkaukasus ('Koban-Kultur')*. MA thesis FU Berlin.
- Saxe, A.A. 1970 *Social Dimensions of Mortuary Practices*. PhD dissertation. University of Michigan.
- Steuer, H. 1982 *Frühgeschichtliche Sozialstrukturen in Mitteleuropa. Eine Analyse der Auswertungsmethoden des archäologischen Quellenmaterials*. Göttingen: Vandenhoeck and Ruprecht.
- Virchow, R. 1881 *Das Gräberfeld von Koban im Lande der Osseten, Kaukasus. Eine vergleichend-archäologische Studie*. Berlin: Asher and Co.

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