

**‘CORD’ ORNAMENTS ON POTTERY
IN THE VISTULA AND DNEIPER
INTERFLUVIAL REGION:
5TH – 4TH MILL. BC**

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Editor's Foreword

The issues outlined in the above volume of *Baltic-Pontic Studies* (BPS) presented here, can be said to generate several important and complex questions among which, one relating to the topogenesis of 'corded' ornamentation on the bio-cultural borderlands of east and west Europe, gave birth to an innovative research project. In this respect, specialist researchers of the Pontic-Baltic Eneolithic (from Middle and Late Neolithic contexts) chose 45 vessels (mostly fragments) originating from the Dnieper-Southern Bug drainage area and Vistula, dated to the 5th - 4th/3rd mill. BC for the purposes of microscopic analyses conducted with the aim of identifying 'corded' patterns of ornamentation. These laboratory tests were led by an archaeologist specialising in microscopic analysis to identify interdisciplinary, pre-historic and archaic techniques in the textile crafts.

The implications of the above tests would seem to warrant a manifold approach to possible conclusions on the basis of specialist (microscopic) criteria of differentiated - previously identified as macroscopic - in general terms as 'corded' motifs of ceramic ware ornamentation (part 1). This also concerns an outline of investigation drawn from hermeneutics, prompted by various contexts such as historical and cultural assessment of bio-cultural communities and related findings as well as attempts to generate a coherent framework of linguistic and cultural research for 'corded ornamentation on ceramic ware' (part 2).

In discussing further the 'main issues' presented in this publication of BPS 15 in respect to the hand manufacture of ceramic ware of the Vistula and Dnieper interfluvial region and its peoples, a modus operandi of investigation in the context of region has been proposed whereby researchers of this particular project have been given a free hand, as it were, in respect to the degree and forms of application in microscopic analyses and their findings. A series of commentaries has therefore arisen, from various points of view in so far as reflections on research conducted - possible future strategies for vital questions in this matter that are yet to be answered (part 3).

It is assumed therefore that this volume has in some measure initiated a process of the highest consequence, one introducing a new level of off-site investigation into the genesis of corded ornamentation development, which deserves to be supported in addition through a personal engagement in this research field.

Editorial comment

1. All dates in the B-PS are calibrated [BC; see: Radiocarbon vol. 28, 1986, and the next volumes]. Deviations from this rule will be point out in notes [bc].
2. The names of the archaeological cultures and sites are standarized to the English literature on the subject (e.g. M. Gimbutas, J.P. Mallory). In the case of a new term, the author's original name has been retained.
3. The spelling of names of localities having the rank of administrative centres follows official, state, English language cartographic publications (e.g. *Ukraine, scale 1 : 2 000 000*, Kiev: Mapa LTD, edition of 1996; *Rèspublika BELARUS', REVIEW-TOPOGRAPHIC MAP*, scale 1:1 000 000, Minsk: *BYELORUSSIAN CARTOGRAPHIC AN GEODETIC ENTERPISE*, edition 1993).

Aleksander Koško, Marzena Szmyt

‘CORDED’ ORNAMENTATION ON CLAY VESSELS IN THE VISTULA AND DNIEPER RIVER REGION: 5TH – 4TH MILL. BC. RESEARCH PROJECT AIMS

The ornamentation of clay vessels through a process of cord impression can be said to be a multi-cultural phenomenon, varied throughout time and wide-ranging in geographic extent. These so called cord-marks or cord ornaments can be found on ceramics from the Neolithic, Eneolithic (Chalcolithic) and the Bronze Age in Europe and Asia from the Alps to the islands of Japan [e.g. Buchvaldek, Strahm (Eds) 1992; Roman, Dodd-Oprîtescu, János 1992; Yasuda (Ed.) 2002; Furholt 2003; here older publications]. Moreover, there are times and places when such ornamentation was extremely frequent. This concerns above all central and eastern Europe from the 5th mill. BC to the 3rd mill. BC. Corded ornamentation in this context even became a type of distinguishing mark, allowing for the creation of a name for one of the important archaeological taxonomic cultures identified in the 3rd mill. BC, the Corded Ware culture (CWC)¹.

Corded markings take on various forms and nomenclature (see terms such as double-band/twofold cord, triple-band/threefold cord, twine cord etc.), being also an element used to create a variety of ornamental patterns and their designs. A common trait of these ornaments is their means of production, which according to archaeologists, was based on making an impression with a ‘cord’ on the surface of the vessel, before it was fired. In the main, this is a conclusion based on macroscopic observations complemented by laboratory experiments. Rarely, however, were attempts made of further analyses based for example on microscopic analysis [Michałowski, Sikorski 2005]. The results of the latter became an appropriate starting point for the research project devoted to the application of ‘cord’ designs in ceramic ware ornamentation, whose initial fruits are presented in this publication. Moreover, this research project constitutes a component of

¹ In this context it is a paradox that the oldest CWC ceramic was not ornamented with cord impressions but horizontal bands that were engraved (see beaker type A).

a wider programme of studies on bio-cultural systems of the eastern and western borderlands of Europe from the Eneolithic to the beginnings of the Iron Age.²

1. CORDED ORNAMENTATION IN THE VISTULA AND DNIEPER INTERFLUVIAL REGION IN THE 5TH TO 4TH MILL. BC: RESEARCH PROJECT AIMS

The project in question, initiated in 2006, is devoted to the issue of ‘corded’ markings recorded in the above region – that is, in the borderlands of western and eastern Europe from the second half of the 5th mill. BC up to the second half of the 2nd mill. BC. The main focus of interest here lies mainly in the oldest findings, dated to the 5th and 4th mill. BC, a phase when these ornaments were used, a forerunner of the beginnings of the CWC circle.³ In respect to the taxonomy [see the articles by Koško, Sikorski and Szmyt..., in this volume] this meant initiating research into the ‘corded’ ornamentation present in ‘pre-Yamnaya’ cultures (Sredniy Stog culture – SSC; Lower Mikhailovka culture – LMC; Rogachyk culture – RC); early Yamnaya culture (YC); Tripolye culture (TC) and Funnel Beaker culture (FBC).

The main aim of the project was the creation of an integrated research platform on ‘corded’ ornamentation not only in terms of taxonomic traits but foremost as the result of known work on the part of artisans in whom knowledge and skills from several walks of life in prehistoric communities was encoded, in particular production of ceramic ware and textiles, the use of animal and plant fibres as well as the use of a system of signs. In this context, plans were laid for a complex analysis covering the fields of production itself, macroscopy, microscopy, chronometrics, topogenetics and semiotics.

The term ‘corded ornamentation’ is used in a general sense. The main issue is based therefore on the identification of what the general usage of ‘cord’ constitutes. In formalising the aims of the project it was assumed that several versions of what this term denotes shall be covered in this context. The above qualification can already be observed at the stage of macroscopic observation, which was pointed to in the first half of the 20th century. At that time Konrad Jażdżewski played an important role, identifying in the eastern FBC group ceramic ware the impressions of two distinct ‘cord’ negatives – that of the double-band and triple-band. The identification of the latter (as an ornament made ‘by impressing plaited cord from smaller strings’) was based on the experiment conducted by Władysław Maciejewski [see Jażdżewski 1936:250].

² Programme completed 2006-2010 in the form of grant N10901431/0900.

³ To be precise before 2850 BC; see [Włodarczak 2007], for previous literature.

Regardless of the innovative nature of the above observation it is nevertheless necessary to underscore their initial, experimental macroscopic character. Moreover, the professional literature in East Europe has also for a long time been using the term ‘twine cord’, which has also found currency in other languages (e.g. German *Wickelschnur*). At this stage of research, before the available results, it is possible to assert that in essence the variation of materials and techniques applied in the crafting of ‘corded’ ornaments on clay vessels is greater than anticipated upon undertaking this project. Bearing this in mind it perhaps would be more accurate to use a more careful description such as ‘cord’ and ‘cord-like’ description.

2. CORDED ORNAMENTATION IN THE VISTULA AND DNIEPER INTERFLUVIAL REGION IN THE 5TH TO 4TH MILL. BC – CHRONOLOGICAL AND TOPOGENETIC VIEWS TO DATE

Up to the 80’s of the 20th c. in European studies of the beginnings of corded ornamentation there was a lack of comprehensive research on findings from the interfluvial region of the Vistula and Dnieper. Two separate topogenetic views at that time can be noted – the north in the case of cultures in the Odra and Vistula basins and the east, in respect to cultures of the Dnieper drainage area. The former took in the FBC where the above ornamentation was documented from the Wiórek phase, to be precise, from the Cuiavian IIIB and IIIB-C phase. In this context [see Chmielewski 1952:22-23; Rybicka 1991:72-73] there was an attempt to link this with the North-Elbe-Jutland-Scandinavian circle (north FBC group and the communities of the later Rössen and Tiefstichkeramik cultures from the first half of the 4th mill. BC). Ceramic ware ornamented by means of cord impressions was admittedly recorded very early in the piece, namely from the end of the 5th mill. BC – already in Subneolithic communities [see Wyszomirska 1990:109ff], though to date there are no signs of its continued growth in later times. There is also a lack of evidence pointing to an expansion of territory in this regard for the production of ceramic ware in the direction of the Odra and Vistula basin [Wierzbicki 1999:170]. An illustration of this conclusion might be the earliest FBC findings in the basin of the Lower Odra and Warta, which do not boast corded ornamentation [see Wiślański, Czarnecki 1973; Krzyszowski 1997; Galiński 2005; Wierzbicki 2008:37-39].

In the case of the eastern context, the genetic phase of Dereivka (‘corded’) from the late SSC stage [Telegin 1986] is relevant here. Apart from pre-Yamnaya culture circles (steppe Eneolithic), the ‘Dereivka’ roots were seen also in Tripolye topogenetic analyses of corded ornamentation, either dated from the BIII phase or from the CI phase [see Kotova. . . , in this volume for the current view]. General

pre-Yamnaya links were also seen in Late Eneolithic Balkan cultures [see Roman, Dodd-Opriteșcu, János 1992].

The turning point in an integrated view of the genesis of corded ornamentation on the scale of the bio-cultural borderland of the east and west of Europe can be said to be studies that point out the Tripolye domination of the FBC. In the so called set of its traits, understood in the broader sense as Pontic (Małty cultural component), among others, there were distinguished 'ornamental elements made with the use of a two-strand cord' [Koško 1981:99-101; 1988:94-114]. The record of materials focused attention on the problems concerning the formation of a taxonomy for hypothetical (a) 'steppe prototypes', (b) Tripolye applications and their (c) hypothetical 'beaker replicas', to a negligible extent, however, in their comparative analysis.

It has been established that the process of accepting the 'cord' between links 'a' and 'b' took place at the turn of stages B and C of the TC (see the concept of phase BIII), ca. 3900-3700 BC and was not dynamic at the start [Passek 1949:144, Fig. 77:5; Videiko 2002:37]. From the 'steppe' view it is a period synchronic with the earlier phase (Dereivka) of the SSC culture. At that time the processes of the TC peoples migration were identified [Dergachev 1999; Kruts, Ryzhov 2000; Telegin *et al.* 2001; Kotova 2008]. The so called eruption of Tripolye 'cord' applications occurs in the CII phase, around 3400 BC and the marker of this phenomenon in the TC is the 'system' of stamp-and-cord designs [Passek 1949:163, Fig. 82; Movsha 1971:33ff; Jastrzębski 1985:79, Fig. 5; further: Kotova, Videiko... , in this volume].

The hypothetical 'replicas' of Pontic traditions in the use of the 'cord' in ceramic ornamentation in the Baltic basin are dated at the earliest to 3500-3200 BC (FBC, IIIB/IIIB-C and IIIC phase; for previous views see Koško 2007). In respect to the TC this relates to the aforementioned period of boom in the application of 'stamp-and-cord' designs in the CII phase. The same traits can be observed in the oldest of the 'cord' FBC communities radiocarbon dated: Radziejów 1, pit A – 4710±40 BP, ca. 3500 BC [Rybicka 1991; 1995:63ff].

As far as the application of 'corded' ornamentation on the Polish Lowland is concerned at present it is possible to propose two horizons in which the culmination of 'Baroque ornamentation' was recorded in respect to these cultures (select sites no doubt linked to ceremonial acts such as perhaps locations for rites?): Late Radziejów/Epi-Wiórek (3500-3200 BC; investigation point Radziejów 1) and Late Radziejów (3100-2900 BC; investigation point Łojewo 4) [Koško 1984; Rybicka 1991; Przybył 2008: Tab. 2] (Fig. 1). At present it is difficult to attempt putting forward corresponding observations in respect to early upland settlements such as the south-east FBC groups. Of key importance for an assessment of Małopolska strategies of reception for 'ornamental Baroque' with the participation of 'cord' designs are the latest research findings in respect to FBC settlements in the Ożarów region [see Kadrow, Olejarczyk... , in this volume].

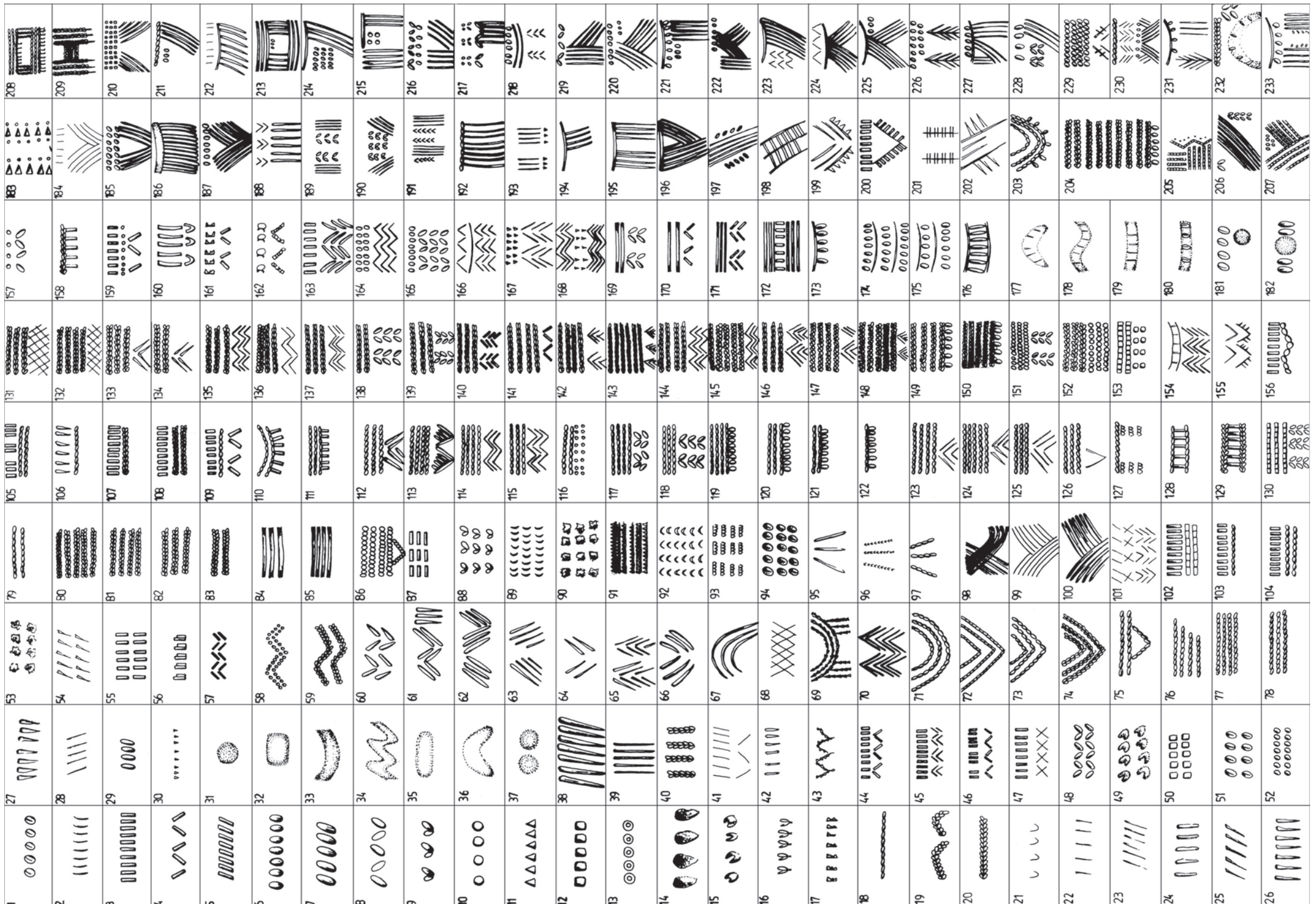


Fig. 1. Outline of FBC ornamental features in the Radziejów Hills – among others that of ‘cord impressions’(two and three-strand), phases IIIB – V. After Rybicka 1995

As far as the genesis of ‘corded’ ornaments known from GAC ceramic ware, phase IIa [Szmyt 1996:34ff], ca. 3500 BC is concerned, no vast territorial models of explanation have thus far been proposed. This particular issue therefore, has been put to one side, with the intention of returning to it at the next planned stage of research.

3. PROJECT REALISATION: SOURCES AND RESEARCH PROCEDURES

In undertaking the aims of the research programme it was decided to conduct a manifold comparative analysis of ceramic ware from the ‘corded’ ornamentation in Poland and Ukraine. To this end, thanks to the international group of researchers including Barbara Bargieł, Olgierd Felczak, Sławomir Kadrow, Aleksander Koško, Nadezhda Kotova, Jolanta Nogaj-Chachaj, Maciej Reszel and Mykhailo Videiko, a set of 45 ceramic samples was collected.

The vast majority of these were single vessel fragments and only rarely, entire objects embellished with ‘corded’ ornaments. Research of samples initially concerned the actual production, macro and microscopic analysis, chronology and the topogenesis of ‘corded’ ornamentation in regional or local contexts. Moreover, the entire series became the subject of a study of the semantics of this context [see Kowalski. . . , in this volume].

Every sample was fully recorded according to the relevant check sheet. The following information was given: region and site of the sample in question, context of the ceramic find (object and layer), research mode, taxonomic framework (culture and phase), absolute chronology, results of technological and stylistic analysis and finally, macroscopic record of ornamentation. In respect to absolute chronology, a definitive dating was gained for the site or object and in particular circumstances, 14C markings were made for the ceramic sample in question. Every sample was furnished with the relevant documentation with the aid of drawings and photographs. The complete documentation and attendant information can be found in articles of parts 2 and 3 of this volume [see the introduction to this in Koško, Sikorski, Szmyt. . . – part 1, in this volume].

The 45 samples were subject to microscopic analysis by Andrzej Sikorski in regard to identification of differences in the construction of the ‘cord’ plait and the techniques of impressing the ‘cord’ on the surface of vessels [see Sikorski. . . , in this volume]. The research methods for microscopic investigation and its recording of results has been discussed in detail in the subsequent article [Koško, Sikorski, Szmyt. . . – part 1, in this volume].

4. FURTHER RESEARCH

The fields of repeated analysis of the above findings as well as new directions of post-taxonomic studies in archaeological cultures relating to the significance of 'corded' applications and their meaning in ceramic ware, are at the heart of new research methods, namely microscopic identification of the features of the spinning and weaving crafts [see the initial presentation of its extent in Michałowski, Sikorski 2005, for other literature] as well as diagnoses in respect to the store of syntactical linguistics and ideo-semantics [see Kowalski 1998, for other literature].

The monographs in this volume can be seen to fit therefore into both aforementioned cognitive trends, though not in equal proportion. It is our hope that they come to constitute a catalyst for further discussion on the phenomenon of both 'corded' and 'cord-like' ornaments and their manifold significance.

Translated by Ryszard J. Reisner

ABBREVIATIONS

- AP URSS – Arkheologiczni pamiatky Ukrainskoyi Radianskoyi Sotsialisticheskoi Respubliki. Kiev.
- BPS – Baltic-Pontic Studies. Poznań.
- KSIA – Kratkiye Soobshcheniya Instituta Arkheologii. Moskva.
- KSIA AN USSR – Kratkiye Soobshcheniya Instituta Arkheologii Akademiyi Nauk Ukrainskoy Sovetskoy Sotsialisticheskoy Respubliki. Kiev.
- MIA – Materialy i Issledovaniya po Arkheologii USSR. Moskva. Leningrad.
- SA – Sovetskaya Arkheologiya. Moskva.

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