



Interweaving Bell Beaker decorative motifs and textile patterns: Exploring technical and symbolic approaches during the 3rd millennium BCE in Europe

Natural History Museum Vienna – March 21, 2023

ABSTRACTS

Eve Derenne (Vienna Institute for Archaeological Science, University of Vienna) – *The Bell Beaker Phenomenon: Timeless Questions, New Perspectives*

In this short introductory talk, I will propose a brief overview of the state of research on the Bell Beaker phenomenon, focusing on the main questions that have troubled archaeologists during the last 60 years. I will then turn to some of the most recent studies published on the topic and try to outline potential trends and perspectives for future investigations, emphasising the transformative power of collaborative, interdisciplinary work when approaching ‘cultural shapeshifters’ such as the Bell Beaker complex.

Franco Nicolis (Archaeological Heritage Office, Autonomous Province of Trento, Italy) – *Bell Beaker Pottery Decoration Between Technique, Appearance, Ideology, Culture and Social Identity*

What was the idea that a potter had in mind when she/he made a bell beaker? What did she/he want to represent? And in this idea, what was the role of decoration? What value, importance and meaning did the techniques used to create the decoration have? As a cultural component of the material world of past communities, technology is a key issue for Bell Beaker research. A brief overview of Bell Beaker pottery with a special interest in cord/textile decoration from Northern Italy will be presented. In one case we may ask ourselves whether we are dealing with a fake technique.

Marie Besse (Laboratory of Prehistoric archaeology and anthropology, University of Geneva) – *Triangles and Lozenges: Unmissable Motifs for the Stelae and Beakers of the Petit-Chasseur Site in Sion (Valais, Switzerland)?*

The Petit-Chasseur necropolis in Sion (Valais, Switzerland) yielded, in addition to human remains, more than 30 anthropomorphic stelae, decorated pottery, gold and silver jewelry, v-perforated bone buttons, small circular flint scrapers, flint arrowheads, etc. The twelve cists and dolmens were built during the Final Neolithic and Bell Beaker period (2800–2250 BC). In this presentation, I will focus on the geometric motifs adorning the pottery and stelae. Various triangles and lozenges are present on both and I will propose a reflection on the underlying links between them.

Quentin Favrel (Eveha, UMR 8215 Trajectoires) – *Exploring the Relationship Between Bell Beaker Decoratives Styles and Weaving Techniques on the Atlantic Shore*

The typology of Bell Beakers has been recently redefined in north-western France. The main distinction revolves around the difference between the technical style (shape, fabric, surface treatment, firing process) and the decorative style (structure, motive, and decoration technique). Recent papers also underpinned the possibility of skeuomorphism to explain the shape and

decoration of Bell Beakers (Guerra Doce 2016 and 2017). We would like to pursue this path, by discussing the relationship between some Bell Beaker decorative styles and the growing evidence of tablet weaving, especially in the rumored cradle of the maritime beakers in the southwestern Iberian Peninsula.

Jan Turek (Center for Theoretical Study, Charles University, Prague) — *Reading Bell Beaker Decoration Motifs*

While studying Bell Beaker pottery decoration we have to bear in mind some motifs should be interpreted as specific codes or pictograms. I have identified male and female gender decoration motifs on (Begleitkeramik) cups of the Bell Beaker Culture (Turek 2002; 2006). But also focussing on the interpretation of motives occurring in metopes and zones of bell beakers may bring striking links to symbols of much earlier (Neolithic) pedigree. Such motives representing the Sun, water, humans, and arable land occurred not only on pottery but most probably on clothing, gravestones, rock art, etc. Even bearing in mind possible alternative readings of such symbols, they should be perceived as part of a more complex and far-reaching communication system.

Michael Kunst (German Archaeological Institute in Madrid) — *Bell Beaker Decorations at Zambujal (Portugal): Possible Forerunners and Paradigms*

The classification of 502 Bell Beaker potsherds of the 1964–1973 excavations at Zambujal did show that there is a certain relationship between the pottery types and their decoration patterns. On the other hand, it seems that the so-called ‘copo canelado’ was the forerunner of the Bell Beakers, but with different decoration patterns, whereas a type of idols—small decorated schist plaques—, often part of grave inventories of megalithic tombs, have decorations which fit with decorations of Bell Beaker pottery, and at the same time could be decorations of clothes, such as on the steles of Petit-Chasseur (Sion, Switzerland). Since they were cult objects, an open question is, if they had a specific meaning. On the other hand, they show indigenous cultural connections to the past.

Lea Frank (Vienna Institute for Archaeological Science, University of Vienna) — *An Archaeological Network Analysis of Decorated Bell Beaker Pottery in the Western and Central Mediterranean*

The ‘Bell Beaker phenomenon’ and its spread in Europe and the Mediterranean during the 3rd millennium BC is a much-disputed topic. Although paleogenetic studies have recently provided considerable insight into prehistoric mobility, there is a lack of combining the archaeological Bell Beaker record with the archaeogenetic evidence. This talk presents an archaeological network analysis of Bell Beaker motifs of 2282 pottery sherds and vessels from 98 coastal sites across the western Mediterranean (2700–1700 BC). The generated network models give an insight into the intensity of exchange between certain areas, including unexpected lack of connection, and provide a basis to discuss maritime interconnectivity in light of the archaeogenetic evidence.

Rodrigo Paulos-Bravo & Gabriel Cifuentes-Alcobendas (Complutense University of Madrid, University of Alcalá) — *Experimental Archaeology and Artificial Intelligence Applied to the Bell Beaker Decoration: Methodological Proposal and Future Prospects*

Recently, Artificial Intelligence methods based on Deep Learning and Computer Vision algorithms have been used to successfully differentiate and classify very distinct types of taphonomic marks. These methods' success in correctly classifying structurally similar marks leads us to believe that they can also be applied to Bell Beaker decorations, probably yielding more accurate and replicable results than those obtained up until now. By applying these methods to an experimentally generated reference collection, we aim to open a new way in the research of Bell Beaker pottery decoration. With this approach, we hope to identify different decorative techniques and, why not, the work of different artisans.

Elisa Guerra-Doce (Universidad de Valladolid), F. Javier Abarquero Moras (UNED), Anna Homs (Independent researcher), Raquel Piqué (Universitat Autònoma de Barcelona), Maria Herrero-Otal (Universitat Autònoma de Barcelona), Susagna Romero-Brugués (Universitat Autònoma de Barcelona), Germán Delibes de Castro (Universidad de Valladolid) — *Bell Beakers and Baskets: Evidence from the Salt Factory of Molino Sanchón II, in Northwestern Spain*

Molino Sanchón II is a Beaker salt factory located in north-western Spain, which has provided solid archaeological evidence for the production of salt by boiling natural brine during the Late Chalcolithic and the Early Bronze Age. Surprisingly, hardly any small ceramic pots serving as moulds where the salt paste turned into salt cakes, have been recovered. In view of the existence of some sherds displaying basketry impressions, it is possible that actual baskets were employed to obtain the salt cakes. By using 3D scanning and experimentation we have studied the basketry, both the technique and the raw material used, and tested the function of those baskets in the production of salt. In this paper we present the results of these analyses. Moreover, we discuss the idea of Beakers pots as skeuomorphic copies of basket work, as put forward by Louis Siret over a century ago.

Karina Grömer (Natural History Museum Vienna) — *Woven Textiles of the 3rd and 2nd Millennium BCE in Central Europe, Innovations and Developments*

The 3rd and 2nd millennium BCE in Central Europe saw a variety of different techniques to make and decorate textiles. In this contribution the focus is on woven items as comparison for the design-principles also found on Bell Beaker decoration. For a diachronic approach, by studying assemblages from Stone Age to Bronze Age in Europe, tendencies and developments in the use of specific techniques can be observed.

As textile technology in Central Europe before 2000 BC is mainly based on plant fibres, the introduction of wool textiles about 2600 BC and its dominance from the mid of 2nd millennium BC changes the way textiles were made and decorated. Along with different steps of the textile production process, innovations and developments in certain weaving and patterning techniques have to be discussed.

Susanna Harris (University of Glasgow) — *Cloth Culture and Bell Beakers*

The patterns found on Bell Beaker ceramics and the mid-third millennium BCE statue menhirs of Sion and Aosta have influenced the way people of this era are depicted and understood across the European continent. This presentation explores the scarce archaeological evidence for cloth cultures of this period. It considers the evidence for patterned textiles, leather and basketry, illustrations of dress, and the current state of research, gaps and potential.

