

22nd Meeting of
“Archéologie et Gobelets”

The Bell Beaker Culture in All its Forms

Abstract Booklet

21-22 January 2021
Geneva, Switzerland

Scientific and Organizing Committee:

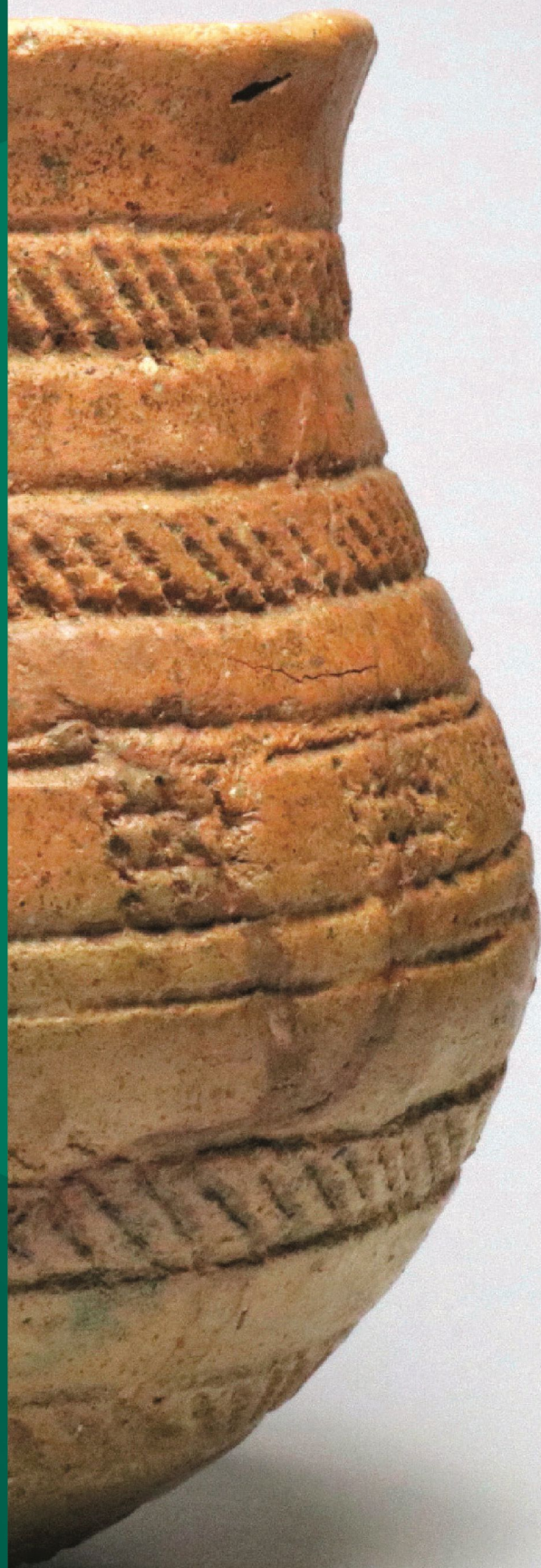
Claudine Abegg, Delia Carloni,
Florian Cousseau, Eve Derenne,
and Jessica Ryan-Despraz

~with the support of Prof. Marie Besse~

Faculté des sciences
Laboratoire d'archéologie
préhistorique et anthropologie



UNIVERSITÉ
DE GENÈVE



Contents

About	4
Timetable	5
Thursday, 21 January 2021: Morning Session	5
Thursday, 21 January 2021: Afternoon Session	6
Friday, 22 January 2021: Morning Session	7
Friday, 22 January 2021: Afternoon Session	8
Abstracts	9
Thursday Morning (21.01.2021): <i>Archaeological Material</i>	9
Thursday Afternoon (21.01.2021): <i>Archaeological Material</i>	17
Friday Morning (22.01.2021): <i>Funerary Archaeology and Anthropology</i>	26
Friday Afternoon (22.01.2021): <i>Reconstructing Bell Beaker Society</i>	34
List of Authors	41
Practical Information	42
Virtual Workshops	42
Publication	43

About

The first "Archéologie et Gobelets" conference, founded by Marie Besse, Maxence Bailly, Fabien Convertini, and Laure Salanova, took place in Geneva, Switzerland in 1996. For the past 25 years, the goal of this conference has been to bring together researchers of the Bell Beaker and Final Neolithic periods as well as the Early Bronze Age in order to encourage collaborations between institutions and to initiate contacts between junior and senior researchers.

"Archéologie et Gobelets" 2021 at the University of Geneva

The Laboratory of prehistoric archaeology and anthropology at the University of Geneva is happy to host the next "Archéologie et Gobelets" conference in Geneva, Switzerland. This year will involve the conference's first sessions in a **virtual format**, with all presentations and discussions passing through a virtual platform. For this reason, we have waived all conference fees.

The goal of this year's theme, "**The Bell Beaker Culture in All its Forms**", is to bring together the various fields working to better understand the Bell Beaker culture. During these two days of presentations, we look forward to hearing about recent and ongoing work from both junior and senior researchers. The presentations on Thursday will follow the general theme of "**Archaeological Material**" and conclude with a virtual workshop. On Friday, the morning session will include communications concerning "**Funerary Archaeology and Anthropology**" and the afternoon session will follow the theme "**Reconstructing Bell Beaker Society**". **Each presentation will last 15 minutes** followed by 5 minutes for questions and comments. Throughout the conference, we encourage discussions in all aspects of archaeology, anthropology, paleoenvironmental research, etc. The coffee breaks will additionally involve **breakout rooms** for participants to discuss in smaller groups. For those interested, we will also organize a publication of the conference proceedings with **Archaeopress Archaeology** that will be available in 2022.

Scientific and Organizing Committee ~ with the support of Prof. Marie Besse ~

Dr. Claudine Abegg Delia Carloni Dr. Florian Cousseau Eve Derenne Jessica Ryan-Despraz

Please feel free to contact us at: archeologiegobelets2021@gmail.com

You can also find additional information on our [website](#)

Thursday, 21 January 2021: Morning Session

Theme 1: Archaeological Material

[Click here](#) for the Zoom link for the virtual conference (Thursday)

8:45–9:00		
Opening Remarks from Prof. Marie Besse		
Part 1 led by Dr. Florian Cousseau		
9:00–9:20	E. Derenne D. Carloni M. Besse	<i>Revealing the Chaines Opératoires of the Bell Beaker Pottery of the Petit-Chasseur Necropolis (Sion, Valais – Switzerland): Ceramic Paste Characterization and Technology</i>
9:20–9:40	Q. Favrel	<i>Degrees of Investment in Bell Beaker Ceramics from Northwestern France</i>
9:40–10:00	P.-J. Rey J.-M. Treffort	<i>The Bell Beaker and Early Bronze Age Ceramic Set from the Preventive Excavations of the Auguste Isaac Street (Lyon 9e, Rhône, France)</i>
10:00–10:20	A. Pérez Romero M. Francés Negro J.M. Carretero	<i>Chalcolithic Bell Beaker Pottery in the El Portalón de Cueva Mayor Site (Sierra de Atapuerca, Spain)</i>
Virtual Discussion / Coffee Break		
Part 2 led by Eve Derenne		
10:50–11:10	E. Leghissa A. De Min Z. Kasztovszky V. Szilágyi M. Montagnari Kokelj F. Bernardini	<i>Non-Destructive Analysis of a Beaker from Central Slovenia: Imported or Locally Produced Artefact?</i>
11:10–11:30	L. Sarti N. Volante G. Giachi P. Pallecchi C. De Marco	<i>Bell Beaker and Epi-Bell Beaker in the Florentine Area: Update on Pottery and Metal Production</i>
11:30–11:50	I. Matera F. Martini L. Sarti	<i>Bell Beaker Lithic Assemblages in the Florentine Area: Revisions, New Studies, and Updates</i>
Lunch		

Thursday, 21 January 2021: Afternoon Session

Theme 1: Archaeological Material

[Click here](#) for the Zoom link for the virtual conference (Thursday)

Part 1 led by Delia Carloni		
13:30–13:50	I. Matera R. Furestier D. Lo Vetro	<i>Bell Beaker Lithic Industry Between France and Italy: New Insights from Lombardy and Languedoc</i>
13:50–14:10	J. Vitani M. Bailly	<i>Stone Bracers in Western Europe: New Perspectives from Bell Beaker and Early Bronze Age Contexts</i>
14:10–14:30	P. Aurino M. De Falco	<i>Mind the Gap: Bell Beaker Presence in Copper Age Campania, Southern Italy</i>
Virtual Discussion / Coffee Break		
Part 2 led by Delia Carloni		
15:00–15:20	P. Miranda G. Carboni V. D'Ercole M. Pacciarelli M. Pennacchioni	<i>Torre Crognola (Northern Latium, Italy): A Large Settlement with Bell Beaker Finds</i>
15:20–15:40	G. Boenzi V.G. Mancusi	<i>On the Edge of the Swamp. Absorption and Transformation of the Bell Beaker Phenomenon in the Later Copper Age Settlement of Poggioreale (Naples)</i>
15:40–16:00	A. Pedrotti I. Angelini G. Artioli C. Canovaro U. Tecchiati H. Oberrauch	<i>The Bell Beaker Rock Sanctuary Piglone Kopf (South Tyrol, Italy)</i>

Virtual Workshops starting at 16:30

Option 1: Archaeological Material Led by: Delia Carloni and Eve Derenne	Option 2: Funerary Archaeology and Anthropology Led by: Dr. Claudine Abegg and Jessica Ryan-Despraz
Zoom link: Click here	Zoom link: Click here

Friday, 22 January 2021: Morning Session

Theme 2: Funerary Archaeology and Anthropology

[Click here](#) for the Zoom link for the virtual conference (Friday)

Part 1 led by Jessica Ryan-Despraz		
9:00–9:20	C. Abegg	<i>Life in Death – Stories of Health, Diseases, and Care told by Bell Beaker Bones of the Petit-Chasseur Necropolis, Sion, Canton of Valais, Switzerland</i>
9:20–9:40	K. Puster	<i>The Bell Beaker Phenomenon in the Southern Part of the Upper Rhine Valley</i>
9:40–10:00	P. Curdy A.M. Ferroni G. Pizziolo R. Poggiani Keller L. Sarti M. Baioni D. Lo Vetro S. Marongiu	<i>New Perspectives from Saint-Martin-de-Corléans: Bell Beaker Funerary Rituals within the Chrono-Cultural Sequence of the Megalithic Area</i>
Virtual Discussion / Coffee Break		
Part 2 led by Dr. Claudine Abegg		
10:30–10:50	J. Ryan-Despraz C. Nicolas	<i>Great Warriors? Great Hunters? Something Else? Biographies of the Bell Beaker Archers and their Equipment from the Czech Republic</i>
10:50–11:10	A. Caraglio P. Ríos C. Liesau	<i>A Bipartite Network Analysis of Bell Beaker Decoration Diversity in Camino de Las Yeseras (Madrid, Spain)</i>
11:10–11:30	J. Turek P. Krištuf	<i>Beakers, Death and Monuments in Landscape</i>
Lunch		

Friday, 22 January 2021: Afternoon Session

Theme 3: Reconstructing Bell Beaker Society

[Click here](#) for the Zoom link for the virtual conference (Friday)

Part 1 led by Prof. Marie Besse		
13:30–13:50	M. Penco L. Sarti	<i>Environmental and Economic Assets of Bell Beakers in the Florentine Plain (Italy). New Data from Fosso di Lumino</i>
13:50–14:10	A.C. Valera A.C. Basílio	<i>The Plurality of Beaker Social Roles: The Depositions in the Centre of Perdigões Ditched Enclosure (South Portugal)</i>
14:10–14:30	J. Ripoche T. Nicolas	<i>Commensality through a Solar Cult. Ceramic, Social Practices and Symbolism along the Atlantic Coast (2500-1650 BC)</i>
Virtual Discussion / Coffee Break		
Part 2 led by Dr. Florian Cousseau		
15:00–15:20	A.C. Basílio A.C. Valera	<i>The Duality of Beakers: Possible Social Roles of Oddly Decorated S-Shaped Vessels from SW Iberia</i>
15:20–15:40	O. Lemerrier	<i>Phenomenon, Culture and Traditions: 24 Years Later</i>
Closing Remarks from Prof. Marie Besse		

Thursday Morning (21.01.2021): Archaeological Material

- **Page 10:** Derenne et al., *Revealing the Chaines Opératoires of the Bell Beaker Pottery of the Petit-Chasseur Necropolis (Sion, Valais – Switzerland): Ceramic Paste Characterization and Technology*
- **Page 11:** Favrel, *Degrees of Investment in Bell Beaker Ceramics from Northwestern France*
- **Page 12:** Rey and Treffort, *The Bell Beaker and Early Bronze Age Ceramic Set from the Preventive Excavations of the Auguste Isaac Street (Lyon 9e, Rhône, France)*
- **Page 13:** Pérez Romero et al., *Chalcolithic Bell Beaker Pottery in the El Portalón de Cueva Mayor Site (Sierra de Atapuerca, Spain)*
- **Page 14:** Leghissa et al., *Non-Destructive Analysis of a Beaker from Central Slovenia: Imported or Locally Produced Artefact?*
- **Page 15:** Sarti et al., *Bell Beaker and Epi-Bell Beaker in the Florentine Area: Update on Pottery and Metal Production*
- **Page 16:** Matera et al., *Bell Beaker Lithic Assemblages in the Florentine Area: Revisions, New Studies, and Updates*

Revealing the Chaines Opératoires of the Bell Beaker Pottery of the Petit-Chasseur Necropolis (Sion, Valais – Switzerland): Ceramic Paste Characterization and Technology

*Eve Derenne¹, Delia Carloni¹, and Marie Besse¹

¹*University of Geneva, Laboratory of Prehistoric Archaeology and Anthropology, Department F.-A. Forel for Environmental and Aquatic Sciences, Geneva (Switzerland)*

This presentation will be based on the results from two ongoing PhD's at the University of Geneva. Both are part of a larger SNF project entitled "*Prehistoric Pottery: Social Organization in the Upper Rhone valley during the Final Neolithic, the Bell Beaker Culture and the Early Bronze Age*" (PI M. Besse, Laboratory of prehistoric archaeology and anthropology). This project is centered on the study of pottery traditions in this alpine valley located in Southwest Switzerland, between 3100 and 1600 BCE. The corpus of sites includes the megalithic necropolis of Sion 'Petit-Chasseur', discovered in 1961 and extensively studied ever since, which yielded the largest Bell Beaker ceramic assemblage of the region.

Our aim is to combine the new data collected on ceramic pastes on the one hand, and on pottery technology on the other hand, in order to reconstruct the Bell Beaker chaines opératoires for this major Swiss archaeological site. The ceramic paste analysis was carried out by a range of spectroscopic and microscopic analytical techniques: optical microscopy (OM), crystallography (XRD), phase chemistry (QEMSCAN[®] and SEM-EDS), and whole-rock geochemistry (LA-ICP-MS). These techniques provided valuable information allowing to discuss the raw material selection, procurement, and use. The foundation of the technology analysis revolved around macroscopic observations with low-angled light to detect diagnostic traces of techniques on surfaces and sections, and through the orientation of fracture networks.

The observations made on surface treatments were then verified with an optical microscope. Finally, two complementary analyses were led: the examination of petrographic maps of thin sections analyzed with QEMSCAN[®], and the scanning of two sherds using micro-computed tomography. This data collection made possible the identification of fashioning, finishing, and decoration techniques.

When combined, these approaches bring new insights into the Bell Beaker material culture of Switzerland, helping us examine its relationship with local preceding pottery traditions, and on a larger scale, discuss the insertion of the Bell Beaker Culture into the context of the Upper Rhône valley, where the Petit-Chasseur necropolis is located.

KEYWORDS: Petit-Chasseur, Pottery, Technology, Archaeometry, Chaîne opératoire

*Corresponding author: eve.derenne@unige.ch

Degrees of Investment in Bell Beaker Ceramics from Northwestern France

*Quentin Favrel¹

¹UMR 8215 Trajectoires, Maison de l'Archéologie et de l'Ethnologie (France)

Recent research on Bell Beaker ceramics from northwestern France has allowed us to define several ceramic styles, to build a chronology based on local data and to highlight spatial differences (Blanchet et al. 2019 ; Nicolas et al. 2019).

However, some aspects of ceramic production, such as the potter's investment in the making of vases are still neglected, even though they put the traditional typological frames and the work resulting from them to the test. Thus, we often see vessels of the same shape, technically belonging to the same style, but with sharp differences in colour, firing technology, surface treatment, type of fabric or even building technique. Conversely, some vases diverge only on the basis of the decorative motif, all other criteria for comparison being absolutely identical. On one hand the existence of copies, or vases made by apprentices, for example, helps to explain these differences, but on the other hand it questions the validity of traditional typological frames: can one put a « standard » Bell Beaker and its copy(s) in the same group just because the shape or decoration is similar? It seems necessary to reconcile the typological and technological aspects, as they each provide different information that increases our knowledge of ceramics and our overall understanding of the Bell Beaker phenomenon. However, we must determine how to process. Should several separate framework (typological and technological) be used or should they be merged?

We propose a protocol comprising a traditional technological approach coupled with a study of the degree of investment observed in the realization of the ceramic. This work is inspired by similar research undertaken on the degree of skill involved in metalworking of the Early Bronze age (Kjuipers 2017 and 2018). It aims to deepen and broaden the framework of existing research, in particular on the notion of « quality » in ceramic production (Salanova 2012).

This protocol enables us to justify the way in which a vase is interpreted, whether it belong to the « standard » (Salanova 2000), a more or less successful copy of it or the work of an apprentice. It also grants some remarks on the development of ceramics in time and space, or according to the context. It allows one to see further, and to engage in in-depth reflection in the choice of the most appropriate grouping techniques for ceramic production. The final objective is the construction of an equivocal typo-technological model that is ever closer to archaeological reality.

KEYWORDS: Bell Beaker phenomenon, Ceramic technology, Typology, Firing technology, Decoration techniques, Building techniques, Surface treatment

*Corresponding author: quentin.favrel@gmail.com

The Bell Beaker and Early Bronze Age Ceramic Set from the Preventive Excavations of the Auguste Isaac Street (Lyon 9e, Rhône, France)

*Pierre-Jérôme Rey¹ and Jean-Michel Treffort²

¹*Umr 5204 Edytem (France)*

²*Inrap / Umr 5138 Arar (France)*

Carried out between August 20, 2012 and May 24, 2013, the preventive archaeological excavation of 35 Auguste Isaac street followed a first phase of investigation, conducted in 2010 to the north of the same plot, and some reconnaissance surveys previously carried out by the Service archéologique de la ville de Lyon. Located at the foot of the slope, an area of 3,660 m² was stripped and excavated, allowing the study of a very dilated stratigraphy that shows an impressive succession of archaeological layers, often well preserved, ranging from the Epipaleolithic to the High Middle Ages. The aim of our paper will be to present the ceramic furnishings related to the occupations of the mid-3rd to early 2nd millennium BCE.

With 110 elements, the corpus of decorated Bell Beaker vessels of the Auguste Isaac street constitutes the second most important ensemble in number in the entire Auvergne-Rhône-Alpes region, after the site of Géovreissiat Derrière-le-Château with a maximum of 292 vases, probably very overestimated. The analysis of the decoration shows that the majority of the decorated sherds belong to the recent Bell Beaker phase and belong to the southern Rhodano-Provençal group. Some very rare comb-decorated elements could either belong to an older phase (stylistic groups 1 or 2), or more probably belong to an influence of the Burgundian-Jurassic group. The marked contrast with the whole of the Isaac street and that of Géovreissiat shows the proximity of a cultural boundary. Finally, a small group of elements belongs to the local Late Bell Beaker culture: the Vaise style defined by Joël Vital in 2007 and still very little documented. An occupation of the Early Bronze Age should probably be dated from the end of the 21st and/or 20th c. BC (it is therefore older than that of the site of the boulevard périphérique nord de Lyon).

The ceramic furniture, relatively abundant, presents a diversity that goes well with a habitat. The typology of the undecorated forms is in conformity with the regional facies of the Early Bronze Age. As for the frequent barbed and incised decorations (28 individuals), with southern affinities, they confirm the Lyon region's belonging to their area of distribution, while enriching the repertoire of decorated regional Early Bronze Age ceramic productions. The stratigraphic data do not allow us to discuss the links between the Vaise style Bell Beaker vessels and the barbed or incised vases, but the distribution of the 14C dates in two clearly disjointed series seems to indicate two successive occupations, whose chronology coincides fairly well with Joël Vital's proposals in favour of a slight delay in the expansion of the barbed wire towards the north, and a diachrony with the Vaise style.

KEYWORDS: Bell Beaker, Rhodano-Provençal group, Burgundian-Jurassic group, Vaise style, Early Bronze Age, Barbed decorations, Archaeological culture, Chronology

*Corresponding author: pierre-jerome.rey@univ-smb.fr

Chalcolithic Bell Beaker Pottery in the El Portalón de Cueva Mayor Site (Sierra de Atapuerca, Spain)

Amalia Pérez Romero¹, *Marta Francés Negro¹, and José M. Carretero¹

¹*Laboratorio evolución Humana, University of Burgos (Spain)*

Chalcolithic used to be represented mainly by burial archaeological contexts. The Bell Beaker pottery decoration found as grave goods has defined a cultural period in European prehistory, the Bell Beaker Chalcolithic. This period and pottery spread along Europe during the 4th millennium BP. But Bell Beaker societies were not uniform and changed their social practice through the time, with the incorporation of many innovations related to e.g. farming practices or dietary habits.

In this communication we present the Bell Beaker Chalcolithic archaeological record of El Portalón de Cueva Mayor cave (Atapuerca, Spain). This Holocene archaeological site records an occupation from 4500-4100 cal. BP where different human activities have been distinguished: habitational floors and fireplaces, post-holes and *fumiers* layers. After a funerary use during the onset of the Chalcolithic (5000 cal. BP) the cave was used for stabling and habitational purposes where abundant archaeological material was deposited pottery and lithic, bone and metal tools. The human group which used this cave developed mixed economy, with farming and hunting-gatherers strategies.

The Level 6 showed a huge quantity of pottery shards, 19 with typical Bell Beaker decoration:

- International MHV (2 fragments) and CZM (5 fragments)
- Ciempozuelos (6 fragments)
- Somaén (1 fragment)
- Silos/La Vaquera (5 fragments)

Typologically we recognize a carinated bowl and a bowl (Ciempozuelos and Silos/La Vaquera Bell Beaker typology). The pottery thickness is both coarse and fine (<10mm) and the external surface is well burnished. The vessels of Somaén and Silos/La Vaquera type present a rough surface. Mineralogical analysis of the pottery fragments allowed to recognize several Manufacture Groups (MG). The identified raw materials seem to be available nearby the archaeological site, being, in general, considered a local manufacture. In general, the MGs and raw materials are similar to previous Neolithic pottery in the site, this fact points to a continuity in the pottery manufacture during the Neolithic and Chalcolithic.

KEYWORDS: Chalcolithic, Bell Beaker, North Spain, Habitational context

*Corresponding author: martafn86@gmail.com

Non-Destructive Analysis of a Beaker from Central Slovenia: Imported or Locally Produced Artefact?

*Elena Leghissa¹, Angelo De Min², Zsolt Kasztovszky³, Veronika Szilágyi³, Manuela Montagnari Kokelj⁴, and Federico Bernardini^{5,6}

¹ ZRC SAZU Institute of Archaeology (Slovenia)

² Department of Mathematics and Geosciences, University of Trieste (Italy)

³ Centre for Energy Research (Hungary)

⁴ Department of Humanities, University of Trieste (Italy)

⁵ Centro Fermi, Museo Storico della Fisica e Centro di Studi e Ricerche "Enrico Fermi" (Italy)

⁶ Multidisciplinary Laboratory, The "Abdus Salam" International Centre for Theoretical Physics (Italy)

During the mid-3rd millennium BC central Slovenia, north-eastern Italy and the eastern Adriatic coast developed similar cultural traditions in pottery production which have been ascribed to the so-called Ljubljana culture. Among the investigated sites of this period, the Deschmann's pile dwellings near Ig, in the Ljubljansko barje in central Slovenia, in their younger phase of existence (c. 2600-2400 B.C.), are probably the most famous. As many scholars already pointed out, numerous finds attributed to the Ljubljana culture suggest a potential interaction between this culture and the Bell Beaker one: among them, ceramic vessels with a specific ornamentation technique (the so-called barbed-wire decoration), flint daggers, boar's tusks, metal daggers and awls, and so on. Nevertheless, a small pear-shaped vessel from the Deschmann's pile dwellings, decorated with a linear band incised motif reminiscent of the Bell Beaker metope decoration, is the only artefact of this type known from central Slovenia. Despite its similarity with the typical beakers of the Bell Beaker culture, no precise typological analogies have been found in the literature. For these reasons, technological and chemical analysis have been carried out on it and comparative pottery materials attributed to the Ljubljana Culture with the purpose to understand if such beaker was locally produced or imported to central Slovenia. Since the finds from the Deschmann's pile dwellings cannot be sampled for destructive analysis, we have adopted a non-destructive approach combining X-ray Computed Microtomography (microCT) and Prompt Gamma Activation Analysis (PGAA) to explore their average structural and compositional (elemental) features, respectively. The results obtained so far will be presented at the Conference.

KEYWORDS: Late Copper Age, Central Slovenia, Ljubljana culture, Bell Beaker culture, Non-destructive analysis (PGAA and micro CT)

*Corresponding author: elena.leghissa@zrc-sazu.si

Bell Beaker and Epi-Bell Beaker in the Florentine Area: Update on Pottery and Metal Production

*Lucia Sarti¹, Nicoletta Volante¹, Gianna Giachi², Pasquino Pallecchi², and Chiara De Marco¹

¹ *Dipartimento di Scienze storiche e dei Beni culturali, Università di Siena (Italy)*

² *Soprintendenza Archeologia, Belle arti e Paesaggio per Firenze, Pistoia e Prato; Museo e Istituto Fiorentino di Preistoria, Florence (Italy)*

Our knowledge from the third millennium BC in the Florentina area has notably increased since the Bell Beaker in Italy meeting. Revisions and new studies about the Bell Beaker pottery productions in the Florentine area update the knowledge with regard to the expertise documented in the last research. This proposes insight on the new studies on Fosso di Lumino (Sesto Fiorentino, Florence), a settlement with a sequence of Bell Beaker and Epi-Bell Beakers levels and some evidence of metallurgical production zones inside the site. This paper dedicates a focus on the development of Bell Beaker metallurgy in the Florentine area. The chronostratigraphic sequence of the Copper Age in the Florence region was defined more than 15 years ago in its general outlines and updated by a series of research projects, producing general conclusions about Bell Beakers and its passage to the Early Bronze Age in Central Italy. In the Florentine area the metallurgy is documented in Copper Age settlements by finished artifacts and by traces of metalworking, since the second part of the 4th millennium B.C. In the Bell-Beaker production finished artifacts appear more varied. In Epi-Bell Beaker sites a faible increase of metalworking zones is documented. Although compositional, technical and functional analyses and studies for characterizing the supply areas are in course, some preliminary archaeometric data are available to integrate the chrono-cultural framework.

KEYWORDS: Bell Beaker, Florentine area, Productions, Pottery, Metallurgy

*Corresponding author: lucia.sarti@unisi.it

Bell Beaker Lithic Assemblages in the Florentine Area: Revisions, New Studies, and Updates

*Isabella Matera^{1,2}, Fabio Martini³, and Lucia Sarti⁴

¹ *University Paul Valéry-Montpellier (France)*

² *Florence University and Museo e Istituto Fiorentino di Preistoria, Florence (Italy)*

³ *Dipartimento di Storia, Archeologia, Geografia, Arte e Spettacolo (SAGAS), Università di Firenze (Italy)*

⁴ *Dipartimento di Scienze storiche e dei Beni culturali, Università di Siena (Italy)*

The Authors present an update about the BB lithic productions in the Florentine area. The background is the techno-typological context edited for the Italian meeting of Archéologie et Gobelets. Other complexes were analyzed until today and the lithological development perspective is updated here, related to the pre-BB tradition, to the BB profile and to the final outcome (Epi-BB).

Recent studies, some in progress, show the evolution of the Bell Beaker and Epi-Bell Beaker lithic productions, delineating in some steps. The step of Evolved Bell Beaker is well documented in the Florentine area and new studies confirm the evolutionary hypothesis proposed in some previous reports. The sequence, updated after recent evidence, is here proposed on the basis of the diverse combinations of technological, typological and stylistic parameters of the lithic assemblages, related to the information obtained from pottery analysis. The reconstruction of the productive strategies concern the raw material, technology, typometry and typology. The Bell Beaker lithic aspect is quite homogeneous in the Florentine area. The Authors present some hypotheses concerning the elements shared by the BB and pre-BB complexes, the innovations in BB lithic productions and the characters of the evolutionary dynamics. A special focus is presented on the lithic assemblages of Semitella and Olmi, with a revision and new information. An important question is proposed again, related to the possibility to define the BB litho-technique in the Florentine area, the limited adoption of few cosmopolitan specialized types, and the techno-typological links with the local pre-BB tradition.

KEYWORDS: Bell Beaker, Italy, Florentine area, Lithic assemblages

*Corresponding author: isabella.matera.0@gmail.com

Thursday Afternoon (21.01.2021): Archaeological Material

- **Page 18:** Matera et al., *Bell Beaker Lithic Industry Between France and Italy: New Insights from Lombardy and Languedoc*
- **Page 19:** Vitani and Bailly, *Stone Bracers in Western Europe: New Perspectives from Bell Beaker and Early Bronze Age Contexts*
- **Page 20:** Aurino and De Falco, *Mind the Gap: Bell Beaker Presence in Copper Age Campania, Southern Italy*
- **Page 21:** Miranda et al., *Torre Crognola (Northern Latium, Italy): A Large Settlement with Bell Beaker Finds*
- **Page 22:** Boenzi and Mancusi, *On the Edge of the Swamp. Absorption and Transformaton of the Bell Beaker Phenomenon in the Later Copper Age Settlement of Poggioreale (Naples)*
- **Page 24:** Pedrotti et al., *The Bell Beaker Rock Sanctuary Pigloner Kopf (South Tyrol, Italy)*

Bell Beaker Lithic Industry Between France and Italy: New Insights from Lombardy and Languedoc

*Isabella Matera^{1,2}, Robin Furestier¹, and Domenico Lo Vetro^{2,3}

¹ UMR 5140 – Archéologie des Sociétés Méditerranéennes (ASM), Université Paul Valéry-Montpellier 3 (France)

² Unità di Preistoria, Dipartimento SAGAS, Florence University (Italy)

³ Museo e Istituto fiorentino di Preistoria (Italy)

Authors present the results of a techno-typological study of a few Bell Beaker lithic industries from Lombardy (Calcinatè-Campo Musna and Brescia-San Polo) and eastern Languedoc (Maupas and Beaussement). This new data, integrated with the information available on stone assemblages from both Northern-Central Italy and French Midi, contribute to improve knowledge on domestic Bell Beaker lithic production.

The comparison between Lombardy and Languedoc Bell Beaker lithic assemblages show regional differences and similarities on both the technical and the typological point of view. From a technological point of view, many analogies can be observed. *Chaîne opératoires* are aimed at the production of small and irregular flakes through the exploitation of small-sized blocks of local chert. Cores reduction is performed by hard percussion and, less frequently, through anvil percussion technique. Differences consist mainly in the occurrence of blades and bladelets. In Lombardy, items related to a systematic bladelets production *in situ* (e.g. crests and *tablettes*) occur more frequently than in French Midi.

Regarding the typological aspects, some differences concern the presence of specific types of arrowheads in the two areas; in particular as regard the occurrence of tanged with squared barbs items, which are more frequent in French Midi, whereas hollow base arrowheads lack as in the whole of south-eastern France. Despite these differences, certain similarities (e.g. scrapers, microlithic crescents) are attested.

This study provides new information on Bell Beaker lithic production of Northern-Central Italy and French Midi and can also contribute to improve knowledge on influences and relationships between these regions.

KEYWORDS: Bell Beaker lithics, Lithic technology, Southeast France, North-Central Italy, Bell Beaker relationships

*Corresponding author: isabella.matera.0@gmail.com

Stone Bracers in Western Europe: New Perspectives from Bell Beaker and Early Bronze Age Contexts

*Julien Vitani¹ and Maxence Bailly¹

¹ Aix-Marseille University, Laboratoire Méditerranéen de Préhistoire Europe-Afrique UMR 7269 (France)

Stone bracers, also called “wrist-guards”, “Armschutzplatten” or “brassards d’archer”, have been recently investigated in Britain and Central Europe where the contexts of these polished stone items are rather clear, while the situation remains quite different in continental western Europe for several reasons. In the western area of the Bell Beaker phenomenon, we are indeed facing difficult problems such as discoveries spread over dozens of publications (sometimes rather hard to obtain for the oldest ones), a great diversity of shapes, a few recycled fragments and many indeterminable other ones, a lot of poorly understood archaeological contexts and numerous questions about the reliability of typological associations. And the last but not the least, the identification of a “Bell Beaker stone bracer” is currently subject to an on-going redefinition based on recent use-wear analysis. Faced with these persistent difficulties, we therefore thought a new inventory checking of every stone bracer found in Western Europe was necessary, prior to any general analysis. Today, in order to provide answers to old and new issues about stone bracers and the Bell Beaker phenomenon, our aim is twofold. First, we will present a geographical and typological analysis of the stone bracers discovered in continental western Europe. The second part deals with new insights about the place and archaeological meaning of these uncommon items and associated material.

KEYWORDS: Bell Beaker, Bracers, Wrist-guards, Sharpeners, Metallurgy

*Corresponding author: julien.vitani@laposte.net

Mind the Gap: Bell Beaker Presence in Copper Age Campania, Southern Italy

Paola Aurino¹ and *Maria De Falco²

¹ *Soprintendenza Archeologia, Belle Arti e Architettura dell'area Metropolitana di Napoli (Italy)*

² *Durham University (UK)*

The aim of this paper is to put together the Bell Beaker evidence known at present in Copper Age Campania, South Italy, in its different forms and in light of the contemporary trends in Italy and Europe. South Italy is particularly receptive of external influences during the Copper Age, either coming from the Balkans and Aegean or from the rest of Italy and Europe. Nevertheless, the Bell Beaker phenomenon, largely spreading in the rest of Europe, is poorly attested in this area where it is documented mainly as few and isolated fragments in different sites. This pattern strongly differs from the considerable evidence documented in North Italy and Central Italy where more substantial findings attest a more extensive presence. In the case of Tyrrhenian South Italy, and especially Campania region, two main types of evidence are generally detected: fragments of actual Bell Beakers or objects generally circulating in Bell Beaker environments.

In the first case, portions of Bell Beakers, rarely whole, are attested in different contexts both funerary and domestic (e.g. Paestum, cemetery near the Temple of Cerere). In the second case, metal and bone objects of Bell Beaker influence have been detected in different sites, such as the sites of Paestum and Acerra. The spot presence of Bell Beaker influences in Campania from one side confirms the large diffusion and strong impact of this phenomenon also in peripheral areas, but also suggests different degrees of permeability to external influences, different patterns of exchange and circulation of foreign goods, models and styles in the Copper Age communities across the Italian Peninsula.

KEYWORDS: Copper Age, Campania, Italy, Bell Beaker, Influence

*Corresponding author: maria.de-falco@durham.ac.uk

Torre Crognola (Northern Latium, Italy): A Large Settlement with Bell Beaker Finds

*Pasquale Miranda¹, Giovanni Carboni², Vincenzo D'Ercole³, Marco Pacciarelli¹, and Massimo Pennacchioni

¹ *Università di Napoli Federico II (Italy)*

² *Università di Roma Sapienza (Italy)*

³ *Università di Chieti-Pescara G. D'Annunzio (Italy)*

During an archaeological survey carried out in the 70s of the last century by the *Gruppo Archeologico Romano* (GAR) an important prehistoric settlement was discovered at the site of Torre Crognola, located in the northern Latium along the Fiora river, about 3.5 km north of the Etruscan city of Vulci. The survey made it possible to collect in the plowed fields a large amount of Late Copper Age artifacts, densely distributed over a large area, covering no less than 5 hectares (an extension that ranks in the highest range of contemporary settlements). A recent survey of the University of Naples Federico II brought to light new materials in the northern area of the site, and allowed to find some caves and shelters with finds of the Copper and Bronze Ages (which are added to other natural cavities already known that yielded pottery of the same periods).

The material culture of the site is largely attributable to the Bell Beaker culture (in a version that presents interesting comparisons with Sardinia) and to the contemporary cultural group of central Italy called *Ortucchio facies*. This latter cultural aspect can now be better studied and understood thanks to the detailed chronocultural sequence reconstructed through many excavations carried out in the area around Rome, recently published completely in the comprehensive work *Roma Prima del Mito*.

The abundance of Bell Beaker pottery and other artefacts of local type, its remarkable extension, and the presence of several caves and shelters with finds dated to 4th-2nd millennia BC make the Torre Crognola site an archaeological complex of great potential for the study of the Copper Age, and in particular of the Bell Beaker phenomenon.

KEYWORDS: Copper Age, Bell Beaker, Vulci, Torre Crognola, Survey

*Corresponding author: pasquale-miranda@hotmail.it

On the Edge of the Swamp. Absorption and Transformation of the Bell Beaker Phenomenon in the Later Copper Age Settlement of Poggioreale (Naples)

*Giuliana Boenzi¹ and Viviana Germana Mancusi²

¹ *Soprintendenza archeologia belle arti e paesaggio per il comune di Napoli (Italy)*

² *Collaboratore esterno Soprintendenza archeologia belle arti e paesaggio per il comune di Napoli (Italy)*

As part of the conference, we aim to present some reflections on an important context of materials found during the preliminary excavations for the construction of the Poggioreale station of the Naples L1 underground.

The area in which the intervention falls is located in the eastern part of the city, on the slopes of Poggioreale hill, which dominates the topographic bottom determined by the plain of the Sebeto river, affected by wet marshy sedimentation until the modern times. The area is characterized by a rather complex paleomorphology determined by the tufaceous substratum on which have been deposited, in the last 13,000 years, interspersed with paleosols and/or peaty sediments, eruptive levels ascribable to the activity of the Phlegrean caldera and subordinately of the Somma Vesuvio.

Of particular importance are the data that emerged for the pre-protolithic period of attendance, when the area is crossed by deep paleoincisions, which are gradually filled between the Bronze Age and the historical era.

In relation to the subject of the conference, of particular interest is the sequence identified between the deposits related to the Phlegrean eruption of Agnano Monte Spina (4482-4625 years BP; 2760-2620 BC) and of Astroni (III mill. BC), at above which, the soils formed in BA (BA 1-2) and obliterated by cinerites ascribable to the Avellino eruption (3945 ± 10 cal BP, 1995 ± 10 cal BC), are mainly characterized by traces of cultivation in the area.

The sequence, datable between the advanced Copper Age and the beginning of BA1, allows documenting the presence of an important occupation of the hilly offshoots and the relative arrangement of the riverbank. On the eastern bank of the paleosurface above the Agnano Monte Spina eruption, a circular structure has been identified; on the western bank at the foot of the hill, levels of drainage functional to reclamation and/or containment operations of the riverbed have been investigated, associated with temporary preparations and palisades, in fact there are numerous pole holes.

These levels have returned the most consistent corpus of materials, consisting of abundant fragments pertaining to rough coarse, but above all a conspicuous presence of semi-fine and fine pottery, which present an extraordinary and characteristic variety in decorative motifs. In addition to pottery, the presence of abundant lithic industry is reported, subordinately on bone and copper.

Both the shapes and the decorative motifs, the latter attested with a remarkable variety and quality of execution associated with that of the doughs, refer to a late moment of the Laterza facies which sees the progressive hybridization with Bell-Beaker and Cetina elements giving life to a particular cultural aspect, very similar to that of the "dragged comb ware". In all the decorative motifs there is a clear influence and a readable absorption of the bell-beaker motifs and shapes that are mixed with some decorations from the Cetina horizon.

Of particular interest is also the treatment of the surfaces and the quality of the pottery that seem to project the settlement totally within the Balkan panorama. There is a cultural aspect with a completely new ceramic production, both for the particular workmanship of the mixtures and for the remarkable quality of the decorations, which are very articulated and not always find precise comparisons in the peninsular panorama. The people who occupied the settlement area overlooking the paleo-riverbed of Poggioreale probably belonged to a cultural enclave that gave life to a completely new and peculiar material production where the presence of allogeneic elements related to the bell-beaker phenomenon is absolutely clear and legible.

KEYWORDS: Copper Age, Italian prehistory, Laterza Bell-Beaker, Cetina

*Corresponding author: giuliana.boenzi@beniculturali.it

The Bell Beaker Rock Sanctuary Piglone Kopf (South Tyrol, Italy)

Annaluisa Pedrotti¹, Ivana Angelini², Gilberto Artioli², Caterina Canovaro², Umberto Tecchiati³, and *Hanns Oberrauch¹

¹ *Università degli Studi di Trento (Italy)*

² *Università degli Studi di Padova (Italy)*

³ *Università degli Studi di Milano (Italy)*

Bell beaker metallurgists sacrificed burnt offerings such as animal bones, flint tools, smashed pottery and products of the local metallurgy in the Eastern Alps in the middle of 3rd millennium BC.

The archaeological site *Piglone Kopf* in South Tyrol (Northern Italy) was excavated between 1995-2013. On the top of the rock tower (550m) two hoards of flint preforms and finished objects from imported flint of the Lessini/Baldo mountains were found. They were accompanied by tanged arrowheads and coarse pottery decorated with fingerprints. The rock tower of porphyritic sandstone is divided by vertical crevices, effusing a warm and humid air stream of +15°C in the wintertime. This geothermal phenomenon may be the reason for the deposition of the flint hoards and the accumulation of birch tar, radiocarbon dated around 2900 BC (Rame 1/2).

The second phase of occupation is focused on a rock-shelter under the rock tower, which was filled as a secondary deposit with coaly layers containing ash and the remains of burnt offerings, radiocarbon dated between 2700-2300 BC (Rame 2/3). The findings meet all the criteria of the alpine phenomenon of the so-called "Brandopferplätze". Such burning rituals were practised from the early/middle Bronze Age until the late Roman Empire (1800 BC – 400 AD), but seem to begin even earlier around 2500 BC.

The archaeological record is composed by thousands of mostly burnt and calcinated animal bones from different species: deer, pig/boar, sheep/goat, cattle, bear, wolf, dog, fish, turtle, otter, beaver, bivalves and cereals. There are no human bones. The lithic industry is composed of 14,500 often burnt pieces made of local and imported flint, including 30 hollow-based and tanged arrowheads in the Bell Beaker typology, 300 geometric microliths and over 100 used sickle blades. The pottery is composed of 18,000 fragments of mostly coarse ceramic decorated with fingerprints and traces of secondary combustion. Many pieces show the influence of the Bell Beaker common ware, e.g. handled pitchers and large undecorated beakers.

The metallurgical industry consists of two hoards containing a total of 10 small copper axes of the miniaturized Fresach type, known from Austria. This hoard of shaft-hole copper axes is the most western point of the large distribution area in the Balkans and the Danube basin. Some of the seven copper awls are like the Ig-Ljubljana type. A singular faceted copper dagger seems to be influenced by the Fontbouisse culture of Southern France and Western Switzerland, a copper pin with enroled head is similar to Auvernier examples. Many small copper fragments can be related to the final step of melting process, proved by fragments of crucibles analysed by pXRF. The chemical and isotopic nature of the copper objects were investigated on micro-samples by SEM-EDS, EPMA and LIA analyses for provenience study. It seems, that the Bell Beaker people started to produce copper tools like small unemployable shaft-hole axes as ingots, using for the first time the local ores in the southern part of the Eastern Alps (Trentino-South Tyrol). During the Bronze Age the site

was completely abandoned. But the site shows a kind of discontinuity of worship with an Iron Age fibula in bronze and a small hoard of seven Roman silver coins from the 2nd- 3rd century AD.

KEYWORDS: Metallurgy, Bell Beaker common ware, Burnt offerings, Copper hoard, Eastern Alps

*Corresponding author: hanns.oberrauch@unitn.it

Friday Morning (22.01.2021): *Funerary Archaeology and Anthropology*

- **Page 27:** Abegg, *Life in Death – Stories of Health, Diseases, and Care told by Bell Beaker Bones of the Petit-Chasseur Necropolis, Sion, Canton of Valais, Switzerland*
- **Page 28:** Puster, *The Bell Beaker Phenomenon in the Southern Part of the Upper Rhine Valley*
- **Page 29:** Curdy et al., *New Perspectives from Saint-Martin-de-Corléans: Bell Beaker Funerary Rituals within the Chrono-Cultural Sequence of the Megalithic Area*
- **Page 31:** Ryan-Despraz and Nicolas, *Great Warriors? Great Hunters? Something Else? Biographies of the Bell Beaker Archers and their Equipment from the Czech Republic*
- **Page 32:** Caraglio et al., *A Bipartite Network Analysis of Bell Beaker Decoration Diversity in Camino de Las Yeseras (Madrid, Spain)*
- **Page 33:** Turek and Krištuf, *Beakers, Death and Monuments in Landscape*

Life in Death – Stories of Health, Diseases, and Care told by Bell Beaker Bones of the Petit-Chasseur Necropolis, Sion, Canton of Valais, Switzerland

*Claudine Abegg¹

¹ *University of Geneva, Laboratory of Prehistoric Archaeology and Anthropology, Department F.-A. Forel for Environmental and Aquatic Sciences, Geneva (Switzerland)*

The Bell Beaker phenomenon intrigues by its reach and its complexity. Aspects of its material culture makes it an entity with a common denomination, whilst the populations that composed it retained artefacts and traditions of their own. As a result, the life experience of Bell Beaker populations could have differed greatly across geography and chronology.

Bones are the most direct witnesses of the lives of past populations. With the right tools and framework, the paleopathologist can observe, qualify, quantify, and interpret bone lesions to track signs of diseases, and construct a narrative of how the environment as well as biological and socio-cultural context might have influenced how these individuals lived out their lives. Recently, a non-invasive research project was completed on the bones of the Final Neolithic and Bell Beaker burials of the Petit-Chasseur necropolis in Sion, Valais, Switzerland. As this “meeting place”, communities came together to bury some of their dead – what do these bones tell us about their lives?

This communication proposes to explore the results of the research and present an overview of the kind of lesions that this population might have encountered, as well as comparing it with the bones of the burials dated to the Final Neolithic of the region, buried in the very same necropolis. Moreover, does the lesions both group present offer clues as to who was buried in these megalithic monuments? This communication proposes to explore this problematic, and to demonstrate how a non-invasive, systematic approach to commingled remains can yield clues as to the deceased' lives.

KEYWORDS: Paleopathology, Final Neolithic, Bell Beaker, Anthropology, Prehistoric Switzerland

*Corresponding author: Claudine.Abegg@unige.ch

The Bell Beaker Phenomenon in the Southern Part of the Upper Rhine Valley

*Katalin Puster¹

¹ *Eberhard Karls Universität Tübingen (Germany)*

The southern Upper Rhine Valley forms the most western part of the Bell Beaker East Group and is archaeologically particularly interesting due to its border to the West Group. By analysing old and new grave complexes in the South-Baden region, a classification of the remains can be presented. Despite the special location and many possible reference points to other Bell Beaker areas, the southern Upper Rhine Valley clearly distinguishes itself from foreign influences and seems isolated from the middle Bell Beaker phase after Heyd 2000 also within the eastern group. This can for example be seen by the absence of the typical East Group metope decoration.

However, other researchers have shown, as well by taking Radiocarbon dates into account, that the Beaker used as guiding object for relative chronologies does not form chronological indicators neither by form nor decoration, but must, for example, provide social reasons for variations (Junius 2013; Conrad 2007; Salanova 1998; Shennan 1975). One of the studied graves supports this assumption solely by relative chronological features. For the future verification of this circumstance, further absolute data must be compiled, collected and examined in connection with the appearance of the Bell Beaker in the southern Upper Rhine Valley. For this purpose, the work presented here can provide five further Radiocarbon datings.

The archaeological and osteological examination of the graves also emphasises how important the combination of both disciplines is for gaining knowledge about the death rituals of earlier cultures and how much it is still underestimated. Despite the small data base, the South-Baden sample provides valuable insights into the people of the Bell Beaker Phenomenon and their living conditions. In addition, it is shown that the grave goods and the bipolar gender differentiated burial habit give clues to the gender role of the buried, but this does not necessarily coincide with the sex often suspected thereby. Some examples from the southern Upper Rhine Valley show that the Bell Beaker society was flexible in terms of individual ingestion of gender and that women and men could take on both roles in different variations (Metzler 2005).

KEYWORDS: Bell Beaker graves, Southern Upper Rhine valley, Archaeology and palaeoanthropology, Gender versus sex, Relative and absolute chronology

*Corresponding author: katalin.puster@student.uni-tuebingen.de

New Perspectives from Saint-Martin-de-Corléans: Bell Beaker Funerary Rituals within the Chrono-Cultural Sequence of the Megalithic Area

Philippe Curdy¹, Angela Maria Ferroni², *Giovanna Pizziolo³, Raffaella Poggiani Keller⁴, Lucia Sarti³, Marco Baioni⁵, Domenico Lo Vetro^{6,7}, and Simona Marongiu³

¹ *Aria S.A. Sion (Switzerland)*

² *Ministero per i beni e le attività culturali e per il turismo, Rome (Italy)*

³ *Dipartimento di Scienze Storiche e dei Beni Culturali, Università di Siena (Italy)*

⁴ *Soprintendenza per i beni archeologici della Lombardia (Italy)*

⁵ *Museo archeologico della Valle Sabbia, Gavardo (BS) (Italy)*

⁶ *Unità di Preistoria, Dipartimento SAGAS, Florence University (Italy)*

⁷ *Museo e Istituto fiorentino di Preistoria (Italy)*

On the basis of the data emerged by the recent studies undertaken on Saint-Martin-de-Corléans (Aosta, Italy) due to the opening of the new Museum of the Megalithic Area, the Authors, including the Scientific Committee of the musealisation project (C. Ph., F. A.M., P.K. R., S.L.) propose some readings and interpretations of the site based on the archaeological data documented by F. Mezzena and on new analysis and studies undertaken in recent years. In this occasion a specific focus is dedicated to funerary evidence and rituals of the Bell Beaker phase presented within the sequence of the different actions which took place in that context and which characterised the formation of the megalithic area.

This contribution concerns the discussion on the funerary structures and in particular presents the data related to recent analysis on absolute chronology, on the observations made on human remains and on the elements of the grave goods. This information have been used to develop a taphonomic interpretation of the different actions occurred in the funerary contexts.

The funerary monuments constitute a new use of Saint-Martin-de-Corléans site which took place after several archaeological phases as the ploughing of the area, the excavation of pits and alignments of poles and stelae. Some tombs are built along these alignments and in several cases they reuse the stelae in their structure. As suggested by F. Mezzena in the megalithic area different ritual actions were repeated in continuous succession until the construction of the funerary monuments. Moreover also some funerary structures have been modified and involved in a series of ritual activities, which include a prolonged use of the tombs.

At Saint-Martin-de-Corléans the funerary ritual is not homogeneous: cremation and inhumation generally collective, primary (bones in anatomical connection) and secondary (bones not in connection). The analysis of data will be presented related to the general framework of the site and at the scale of each single funerary structure. The contribution presents with more details the Tomb II, the large dolmen on a triangular platform with multiple burials deposited in different phases. The analysis of Tomb II will be particularly related to the funerary monuments found at Petit Chasseur (Sion) which show significant similarities with the funerary rituals recorded at Saint-Martin-de-Corléans.

On the basis of typological finds and 14C dates, the tombs seem to have been in use since the mid-third millennium BC. (Bell Beaker phase) until the first centuries of the second millennium BC (Early Bronze Age). Furthermore some data which could be related to funerary activities undertaken in a pre Bell Beaker phase will be discussed.

KEYWORDS: Funerary rituals and structures, Megalithism, Taphonomy, Bell Beaker, Alpine context, Copper Age

*Corresponding author: giovanna.pizziolo@unisi.it

Great Warriors? Great Hunters? Something Else? Biographies of the Bell Beaker Archers and their Equipment from the Czech Republic

*Jessica Ryan-Despraz¹ and Clément Nicolas²

¹ *University of Geneva, Laboratory of Prehistoric Archaeology and Anthropology, Department F.-A. Forel for Environmental and Aquatic Sciences, Geneva (Switzerland)*

² *Post-doc Marie Curie, Bournemouth University/UMR 8215 Trajectoires (United Kingdom)*

The Czech Republic constitutes one of the densest areas of Bell Beaker graves in Europe. The so called 'archers burials' are well represented with over 260 graves identified through the deposition of archery-related items. This rich corpus has been the focus of two complementary studies of archery-related items and the osteology of suspected and non-suspected archers.

A techno-functional approach allows tracking the biography of archery-related items (arrowheads, bracers, arrowshaft smoothers, bow-shaped pendants, and daggers) and shows that while some weapons were used, others show traces of transport over an extended duration as well as a particular investment in display items. Therefore, the biography, deposition, and association of archery-related objects point out a rather socially constructed picture of the archer identity.

The anthropological analyses involve the development of a theoretical model of a specialized archer's physical development based on biomechanics and modern medical reports. Skeletal analyses according to this model have the potential to predict whether or not an individual was a specialized archer. The population-comparison aspect of these analyses additionally found variations in the level of muscular development between the suspected and the non-suspected archers indicating that the former was less involved in hard manual activity. This provides evidence for a labor differentiation between the burials and thus perhaps some level of social stratification that is linked to archery. This deeper understanding of individual identity could influence how archaeologists interpret these burials and the items within them.

In this communication, we will focus in particular on the cases of possible specialized archers recognized within the greater corpus of suspected archers from the Hoštice I (Moravia) cemetery. These findings can then be situated within the broader scope of Bell Beaker archer burials. Results from the two complementary studies will contribute perspectives assessing the role of archery in terms of hunting and warfare as well as the implications of object and individual identity on current interpretations of these "archer" burials. This will include a broad look at individual identity alongside item distribution and their associations with differentiations involving sex, age, and richness. The ensemble of each of these findings seems to point towards one dominant trend – that these "archer" burials are linked more to the idea of social status than to a practical archery function. This in turn raises questions concerning social stratification, inheritance, and the importance of archery both as a practice and as a symbol within Bell Beaker societies. Thus the appearance of "archer" burials are especially ambivalent, putting into question not only the role of archery during the Bell Beaker period, but also the identity of these "archers".

KEYWORDS: Bell Beaker, Archers, Czech Republic, Anthropology, Techno-functional analysis

*Corresponding author: Jessica.Ryan@unige.ch

A Bipartite Network Analysis of Bell Beaker Decoration Diversity in Camino de Las Yeseras (Madrid, Spain)

*Agnès Caraglio¹, Patricia Ríos², and Corina Liesau²

¹ Aix Marseille Univ, CNRS, Minist Culture, LAMPEA, Aix-en-Provence (France)

² Dpto. de Prehistoria y Arqueología, Facultad de Filosofía y Letras, Universidad Autónoma de Madrid (Spain)

In the archaeological literature, the Bell Beaker tradition is usually suggested as a male and warrior "ideology", especially through grave goods. However, it does not reflect a monolithic cultural 'identity' but rather a real blended cultural practice reconciled at regional levels through ongoing interactions between collective and individual symbolic concepts. In Central Iberia, recent studies of the Bell Beaker funerary contexts have revealed recurrent practices, such the use of artificial caves and hypogea and the extraction and movement of human bones, as in the well-known Camino de las Yeseras site (San Fernando de Henares, Madrid). In a precedent work, we highlighted the presumed intra-site relations between two women and a girl buried in different funerary areas of this site, using an unipartite network analysis, based on a similarity index of ceramics decorative patterns. In this present paper, we would like to compare and approve these results, using a bipartite network analysis, more suitable for visualizing diffusion phenomena or identify graves that are similar and ceramics' patterns that are most often found in association. The vessels analysed belong to eight Bell beaker tombs documented in Camino de las Yeseras during the second half of the third millennium BCE. The validation of this protocol with this reduce corpus could help us, then with a larger corpus, to shed new light on the distribution of Bell Beaker ceramics in the Central Iberia sites and gain greater understanding of the social context among the first metallurgical societies of the Central Iberian Peninsula.

KEYWORDS: Bell Beaker decorations, Burials, Bipartite network analysis, Madrid region

*Corresponding author: agnes.caraglio@gmail.com

Beakers, Death and Monuments in Landscape

* Jan Turek¹ and Petr Křišťuf²

¹ *Center for Theoretical Study, Charles University, Prague (Czech Republic)*

² *University of West Bohemia in Pilsen (Czech Republic)*

In this paper I am going to discuss the concept of ritual landscapes during the Neolithic Period and Copper Age in the Central Europe. I will specifically focus on the possibilities of reconstruction of the ritual landscape and settlement areas in relation to Bell Beaker cemeteries and ancestral monuments. The death as a social event was never isolated from other dimensions of social, economic and symbolic life of farming communities. The ceremonial level of funerary events connected to ancestral worship is reflected in the landscape with variety of monuments and their intra and extra territorial relations. It seems likely that the Beaker ritual landscape was constructed in symbolic system of much earlier pedigree. The cultural landscape of prehistoric farmers was divided and structured in a continuous diachronic development and the archetypes of landscape divisions and monuments (enclosures; hill-top sites; long barrows) as landmarks was part of the cosmological legacy for generations. Therefore it is important to understand the pattern of Bell Beaker funerary areas and monuments in relation to preceding palimpsest of funerary and ceremonial land use in order to reconstruct the long term perception of the farmer's world and its structure. In this approach some monuments, seemingly isolated, fit into much wider spatiotemporal structure of prehistoric community areas. Spatial case studies will be presented from territories of Central/North Bohemia and Central Moravia of 5th - 3rd Millennium BC.

KEYWORDS: Bell Beaker period, Monuments, Settlement areas, Ritual landscape, Bohemia, Moravia

*Corresponding author: turekjan@hotmail.com

Friday Afternoon (22.01.2021): *Reconstructing Bell Beaker Society*

- **Page 35:** Penco and Sarti, *Environmental and Economic Assets of Bell Beakers in the Florentine Plain (Italy). New Data from Fosso di Lumino*
- **Page 36:** Valera and Basílio, *The Plurality of Beaker Social Roles: The Depositions in the Centre of Perdigões Ditched Enclosure (South Portugal)*
- **Page 37:** Ripoche and Nicolas, *Commensality through a Solar Cult. Ceramic, Social Practices and Symbolism along the Atlantic Coast (2500-1650 BC)*
- **Page 38:** Basílio and Valera, *The Duality of Beakers: Possible Social Roles of Oddly Decorated S-Shaped Vessels from SW Iberia*
- **Page 40:** Lemerrier, *Phenomenon, Culture and Traditions: 24 Years Later*

Environmental and Economic Assets of Bell Beakers in the Florentine Plain (Italy). New Data from Fosso di Lumino

Matteo Penco¹ and *Lucia Sarti²

¹ *Dipartimento di Storia, Archeologia, Geografia, Arte e Spettacolo (SAGAS), Università di Firenze (Italy)*

² *Dipartimento di Scienze storiche e dei Beni culturali, Università di Siena (Italy)*

The Authors present a reconstruction of subsistence strategies and human-environment interactions in the Florentine plain related to Bell Beaker settlements both on the review of yet studied evidence (e.g. Querciola, Semitella, Lastruccia etc.) and on brand new data after the analysis of Fosso di Lumino site. The knowledge of the essential economic structure of a human community is the key to understanding the relationships between people and their surroundings. For the most important domestic animals, hypotheses will be given about breeding techniques and their targets (e.g. meat or secondary products crafting, labour power etc.). Furthermore, economic relevance, preys, places and schemes of the hunting practice will be discussed.

KEYWORDS: Bell Beaker, Italy, Tuscany, Environment, Archaeozoology

*Corresponding author: lucia.sarti@unisi.it

The Plurality of Beaker Social Roles: The Depositions in the Centre of Perdigões Ditched Enclosure (South Portugal)

*António Carlos Valera¹ and Ana Catarina Basílio¹

¹ *Era Arqueologia SA / Interdisciplinary Centre for Archaeology and Evolution of Human Behaviour, Algarve University (Portugal)*

Perdigões is a large ditched enclosure with a long chronology (3400 – 2000 BC) located in the Alentejo region, South Portugal. The centre of the site has occupations and building activity that covers all that time span. During the 3rd millennium BC, a complex succession of diversified ceremonial structures and ritualized practices were concentrated in that central area. During the first half of the millennium, a timber circle was built, followed by a succession of other timber structures and the formation of deposits with great amounts of faunal and pottery depositions. By the middle of the millennium, pit structures were opened in those layers to receive the secondary deposition of human cremated remains of more than 350 individuals, and several circular stone houses were built surrounding these funerary structures. These houses were then dismantled with some evidence of rituality in the procedures. By the third quarter of the 3rd millennium BC, structured depositions of beaker vessels, copper tools and other materials occurred, next to (but not integrated into) the previous structures that contained the cremated human remains. Besides, they were also next to evidence of metallurgical work. These depositions were later partially covered by a large stone cairn.

In this talk, the referred contexts will be presented, and the beaker contextual associations will be discussed in terms of the plurality of social roles and meanings that beakers may assume in the context of the development of complex societies during the 3rd millennium BC in this region. It will be highlighted the fact that in the site, as in the region, decorated beakers are kept out of funerary contexts and that their social engagement occurs mainly in domestic or ceremonial scenarios. It will also be debated the contextual proximity of these depositions to two other practices that involve ritual procedures and transformation through fire: the cremation and the metallurgical work. It will be argued that the social role and value of beakers are not intrinsically evident, but that emerged from the ways they are used and from the relations they established with other materials and activities and their social, ideological and cosmological meanings. Circumstances that provided them with a plural agency.

KEYWORDS: Perdigões, South Portugal, Beaker depositions, Beakers agency, Ditched enclosures

*Corresponding author: antoniovalera@era-arqueologia.pt

Commensality through a Solar Cult. Ceramic, Social Practices and Symbolism along the Atlantic Coast (2500-1650 BC)

*Julien Ripoche¹ and Théophane Nicolas²

¹ Université Paris 1 Panthéon-Sorbonne / UMR 8215 Trajectoire (France)

² 2-Inrap Grand-Ouest / UMR 8215 Trajectoires (France)

The Bell beaker phenomenon is characterised by new forms of ritual practices firstly known through the study of numerous beaker graves. These contexts are clearly linked to the representation of the individual and represent elites of those Neolithic societies. The early Bronze Age is then marked by a new increase of this social hierarchy and sees the development of particular wealthy graves along the Atlantic coast and beyond. Within these complex chiefdoms, social practices seem to acquire a community dimension at the end of the third millennium. In Brittany, ceramics appear as a low social ranking feature among funerary deposition. However, vases play a major role at both consumption and depositional scale, and a larger set of ceramic types is from now on deposit in graves. Many features let us think that a larger part of the population is then involved in the ritual life (elite, intermediate social ranks) from which emerges new social behaviours as feasting practices and *symposium*. These practices, meaningful, appear as necessary social strategies to link the different social ranks and to maintain the unity of the community. By extension, many domestic ceramic sets, seen as waste and garbage, yet display particular organisation related to meaningful gestures and practices. These everyday rituals, already recognized during the third millennium over Europe, take a great variety of forms during the early Bronze Age. In Brittany some domestic sites allow us to take a look at those particular sets from isolated foundation deposits to larger accumulations of ceramics, and other artefacts, linked to collective practices.

At this time the ceramic artefact itself is renewed in terms of form and ornamentation. A significant number of vessels are associated with handles (one to four and more), authorizing more complex social interactions and transmissions during ritual activities. Those decorative schemes, also known on metallic artefacts, can be interpreted as astral (solar and lunar) representations. They are well represented during the third millennium and especially in beaker context over a large part of Europe (Central Europe, Spain, Britain, etc. . .). In Atlantic France these representations are still scarce at the end of the Neolithic but know a major development during Bronze Age. As the object carrying them, they are closely linked to ritual and social practices. They're carrying major symbolic features and the organisation of the scenery (especially on the upper part and close to the bottom of the pots), renewed during this period, is linked to the relation maintained between the user and the assistance. Consequently these pots, known from many archeologic cultures, play a major role in these collective events and refer to meaningful social gestures. The role of the Bell beaker phenomenon in the genesis of those practices remains a major issue.

This presentation, firstly based on recent discoveries of ceramics from closed and dated contexts, will be the occasion to discuss the evolution of these communities through ritual, in particular meaningful occasions but also along everyday life activities.

KEYWORDS: Late Neolithic, Early Bronze Age, Ceramic, Brittany, Ritual, Social practices

*Corresponding author: ju.ripoche@gmail.com

The Duality of Beakers: Possible Social Roles of Oddly Decorated S-Shaped Vessels from SW Iberia

*Ana Catarina Basílio¹ and António Carlos Valera²

¹ *Era Arqueologia SA / Interdisciplinary Centre for Archaeology and Evolution of Human Behaviour, Algarve University (Portugal)*

The Bell Beaker phenomenon is, according to the current perspectives, the sum of several regional answers to a reality that generally shares common characteristics. As such, asymmetries and reconversions of different Bell Beaker materials and styles have been recognised, being assumed, in the Beaker contexts of SW Iberia, as materialising the agency of each of the acting human groups. Through identity and weighting processes but also negotiation and reinterpretation procedures, this same agency can assist one to understand and explain possible rejection/acceptance phenomena of novelties directly linked to Bell Beaker precepts. These are not only technological, decorative and morphological innovations (the vessel shape or the motifs), but mainly social conducts. As such, and although being one of the most studied cultural and social phenomena in this region (SW Iberia) and in the European prehistory, more specific adaptations, behaviours and local practices that fracture and segment the “original” phenomenon remain to be characterised. Others can even be presumed as unknown.

This seems to be the case of the contemporaneous and numerically scarce paired fingernail imprints and the so-far exclusive exemplar with “bottle cap” decoration. Both adorn the outer walls of “classical” European Bell Beakers, corresponding to deeper s-shaped vessels with smoother curvatures. This characteristic simultaneously emphasises a European connection and a contrast with the coexistent Iberian exemplars (smaller and compacted). Equally contrasting is the reduced communicative ability which seems to characterise these motifs. Although spread throughout the full containers’ surfaces, they are marked by intentional invisibility, inherent to the shallow imprints and lack of white inlay. This behaviour affects the visual appearance of the containers, but mainly their ability to be an integrant part of social and historical narratives created by the SW Iberian prehistoric communities. Also, considering the temporality of the decorative elements – second half 3rd millennium BC – and their contemporaneity with the Bell Beaker, a direct link between a broader expression and smaller trends can be highlighted, with the local/regional messages “taking advantage” of the wider accepted beaker meanings.

Besides, and introducing the “Ferradeira Horizon”, the existence of resistance attempts to the changes in progress can also be put forward with the instrumentalization of elements imbued with specific messages (the S-shaped vessels), operationalising them with new messages, meanings and contexts.

With all this hypothesis the first question of this talk is if one should integrate the regional motifs within the Bell Beaker phenomenon. Also, and considering the scarceness, invisibility and contextual behaviour of the motifs the temporal changes in their agency and possible social roles can also be explored. All the behaviours and practices are going to be used to comprehend the Bell Beaker duality in this region: an obedience to the formal decorative canon while, simultaneously, there are local/regional reconfigurations and reinterpretations “hitchhiking” the broader Bell Beaker phenomenon.

KEYWORDS: 3rd millennium BC, Iberian peninsula, Paired fingernail imprints, "Bottle cap" imprints, Bell Beaker phenomenon, S-shape vessels

*Corresponding author: catarinasbasilio@gmail.com

Phenomenon, Culture and Traditions: 24 Years Later

*Olivier Lemerrier¹

¹ Université Paul Valéry – Montpellier 3, UMR 5140 ASM, LabEx Archimède (France)

In 1997, I proposed not to consider the Bell Beaker period as a uniform whole with the same meaning in space and especially in time. I speculated that over its long duration, the Bell Beaker period did not correspond to a single reality, but to a succession between:

- a phenomenon with a large geographic scope (the early phase)
- the acculturation of certain regional groups under the impact of this phenomenon, leading to the emergence of regional Bell Beaker cultures (middle phase)
- Bell Beaker traditions up to the first centuries of the second millennium in certain regions (late phase)

I then proposed that we see the juxtaposition of several entities of a different nature and scale during the middle phase:

- of regional or supra-regional groups defined by their decorated ceramics
- cultures on a scale of one or a few current countries defined by their common ceramics
- without a doubt, a civilization on a continental scale, in the sense of common values/practices/rites shared beyond material cultures

Concerning the Bell Beaker diffusion, I proposed not to confine the debate to the diffusion of socially valued objects and human mobility, because obviously the two phenomena are at work and probably at the same time.

In my opinion, it remains very important not to restrict the Bell Beaker period, either chronologically or geographically, to an overly reduced concept such as “the Bell Beaker Culture” because this leads to an inability to analyze it correctly and to understand each other: *“I did not entirely understand your argument, yet I disagree.”*

Each of these dimensions of the Bell Beaker period (and without a doubt there are others of which I have not thought) certainly deserve to be analyzed but with the condition that we do not deny the existence of the others and that we always put these particular approaches into perspective.

So, what should be the direction of Bell Beaker research for the next ten years? Some priorities and some possibilities...

KEYWORDS: Bell beakers, Phenomenon, Cultures, Traditions, Groups, Civilization, Diffusion, Mobility, Concepts, Historiography, Trends

*Corresponding author: bellbeaker@gmail.com

List of Authors

Claudine ABEGG
Ivana ANGELINI
Gilberto ARTIOLI
Paola AURINO
Maxence BAILLY
Marco BAIONI
Ana Catarina BASÍLIO
Federico BERNARDINI
Marie BESSE
Giuliana BOENZI
Caterina CANOVARO
Agnes CARAGLIO
Giovanni CARBONI
Delia CARLONI
José M. CARRETERO
Philippe CURDY
Vincenzo D'ERCOLE
Maria DE FALCO
Chiara DE MARCO
Angelo DE MIN
Eve DERENNE
Quentin FAVREL
Angela Maria FERRONI
Marta FRANCÉS NEGRO
Robin FURESTIER
Gianna GIACHI
Zsolt KASZTOVSZKY
Petr KRIŠTUF
Elena LEGHISSA
Olivier LEMERCIER
Corina LIESAU

Domenico LO VETRO
Viviana Germana MANCUSI
Simona MARONGIU
Fabio MARTINI
Isabella MATERA
Pasquale MIRANDA
Manuela MONTAGNARI KOKELJ
Clément NICOLAS
Théophile NICOLAS
Hanns OBERRAUCH
Marco PACCIARELLI
Pasquino PALLECCHI
Annaluisa PEDROTTI
Matteo PENCO
Massimo PENNACCHIONI
Amalia PÉREZ ROMERO
Giovanna PIZZILO
Raffaella POGGIANI KELLER
Katalin PUSTER
Pierre-Jérôme REY
Patricia RÍOS
Julien RIPOCHE
Jessica RYAN-DESPRAZ
Lucia SARTI
Veronika SZILÁGYI
Umberto TECCHIATI
Jean-Michel TREFFORT
Jan TUREK
António Carlos VALERA
Julien VITANI
Nicoletta VOLANTE

Practical Information

This conference is taking place in a **virtual format** due to the ongoing COVID-19 public health crisis. This therefore means that all participants will be presenting and communicating online. We will have an expert technician assisting us throughout the conference in order to ensure that things run as smoothly as possible. The necessary links to access the sessions are as follows:

- Thursday Session (morning and afternoon): [Click here](#)
- Virtual Workshop Option 1 (Archaeological Material): [Click here](#)
- Virtual Workshop Option 2 (Funerary Archaeology and Anthropology): [Click here](#)
- Friday Session (morning and afternoon): [Click here](#)

In order to facilitate organization and discussions, please make sure that your zoom profile contains your full name rather than initials or nicknames.

We will also post this information on our [website](#). Please consult this site regularly for updates.

Virtual Workshops

There will be two virtual workshops to choose from following the last presentation on Thursday afternoon. These two workshops will follow two of the conference themes: [Archaeological Material](#) and [Funerary Archaeology and Anthropology](#). Depending on the interests of those attending, it is possible that we will further separate into subgroups in order to simplify discussions. The goal of these workshops is for all interested participants to show an item (or image) from their study material, preferably those that raise questions (such as to their identification or classification) or are otherwise an artifact of interest. This is an opportunity for all participants to exhibit their material as well as to ask questions. **We therefore invite you to prepare an object for this virtual "show-and-tell".**

Publication

In order to valorize your contributions, we are currently planning on publishing the Conference Proceedings with **Archaeopress Archaeology**, which will be available in 2022. Those interested in submitting a paper should let us know as soon as possible. We will send out additional information concerning publication requirements to those who have expressed interest by February 2021. In the meantime, the current timeline for publication is as follows:

- 31 May 2021: First draft deadline
- 15 September 2021: The organizing committee will return the articles with commentary from two anonymous reviewers
- 15 November 2021: Deadline for the final version
- Early 2022: Publication of the conference proceedings in Archaeopress

