



International conference

# The Transformation of Europe in the Third Millennium BC

Riva del Garda, Trento, Italy - Centro Congressi  
25 - 28 October 2023

## ABSTRACTS



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Abstract book: Roberta Oberosler, Maria Raffaella Caviglioli, Centro Duplicazioni PAT

Excursion: Monica Dorigatti, Paolo Bellintani, Mirta Franzoi, Luisa Moser, Elena Silvestri

Acknowledgements: Istituto Italiano di Preistoria e Protostoria, APT Garda Trentino, MAG Museo dell'Alto Garda, Riva del Garda Fiere e Congressi, ONTHEGO building memories, Trentino Marketing



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# **ABSTRACTS**



## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

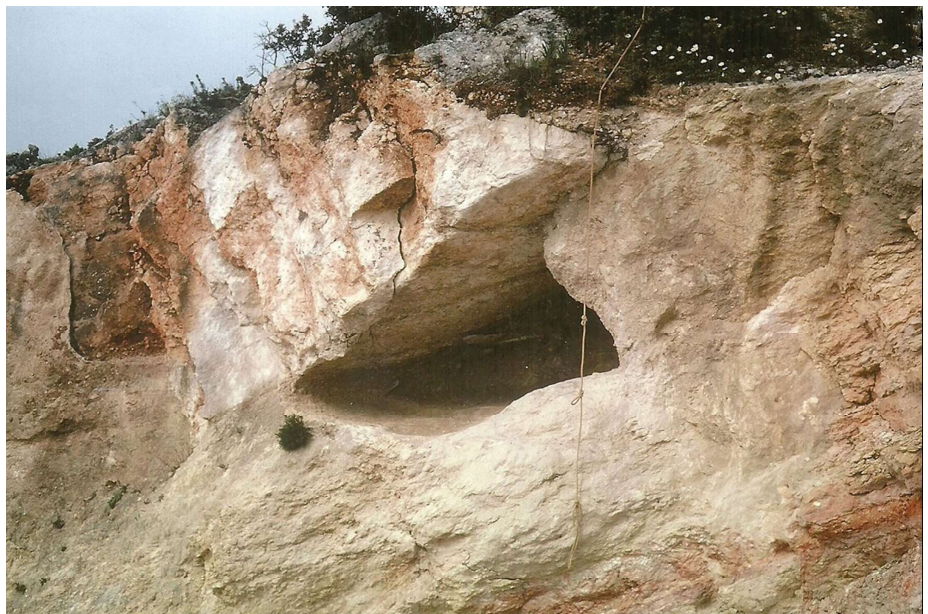
### **The necropolis of the Verdelha dos Ruivos cave and the genesis of the Bell Beaker Complex in Portuguese Extremadura**

*João Luís Cardoso*

The Verdelha dos Ruivos cave, located around 20 km NNE of Lisbon, is the only necropolis of the Bell Beaker Complex identified in Portugal to date in which it was possible to isolate single burials and reconstruct the original position of the corpses.

The cave was occasionally identified in 1973, during the inspection of a Cretaceous limestone quarry, whose exploration front sectioned the cavity, leaving only the distal part of it. The excavation was carried out by a team from the Geological Services of Portugal led by O. da Veiga Ferreira, which included a medicine doctor, which constituted an obvious added value for characterizing the composition of the population and knowledge of the methods of inhumation used. The small crypt that remained of the primitive natural cavity, whose brown filling contrasted with the color of the limestone, was completely emptied by an hardened carbonate breccia, with abundant limestone blocks, containing archaeological remains. The hardness of this very consolidated filling made it difficult to carry out the excavation, which began in October 1973 and ended only in May 1974. Four main levels were identified, consisting of successive individual tombs in dorsal decubitus, on the left or right side, with the body retracted, in the uterine position. It was possible to identify the position of 11 graves, some covered by small limestone slabs, with the most fragile anatomical segments having disappeared.

The archaeological remains included several artefacts, which were not very abundant, including all the objects considered characteristic of Bell Beaker Complex: sperm whale tooth buttons, gold spirals, a Palmela point, idols and ceramics, with the decorated ones being exclusively of the Bell Beaker Complex, which leads to the conclusion that the funerary use of the cave is exclusively from a community belonging to this cultural complex.



The absolute dating carried out allowed us to place the beginning of this necropolis between 2700 and 2600 years BC, extending into the second half of the 3rd millennium BC. These results are consistent with the remarkable antiquity of the emergence of the Bell Beaker Complex in the Tagus estuary region, as was demonstrated by the results obtained at the prehistoric settlement of Leceia, located approximately 30 km to the SW, a reality that will be also valued and discussed in this communication.

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### **Travelling through space and time. Burial Mounds, Stereotypes and Bell Beaker Cosmology**

*Karsten Wentink*

Throughout northern Europe, thousands of burial mounds were erected in the third millennium BCE. Starting in the Corded Ware culture, individual people were being buried underneath these mounds, often equipped with an almost rigid set of grave goods. This practice continued in the second half of the third millennium BCE with the start of the Bell Beaker phenomenon. In large parts of Europe, a 'typical' set of objects was placed in graves, known as the 'Bell Beaker package'.

This presentation will focus on the significance and meaning of these Late Neolithic graves. Why were people buried in a seemingly standardized manner, what did this signify and what does this reveal about these individuals, their role in society, their cultural identity and the people that buried them? By performing in-depth analyses of all the individual grave goods from Dutch graves, which includes use-wear analysis and experiments, the biography of grave goods is explored. Subsequently the nature of these graves themselves are explored as contexts of deposition, and how these are part of a much wider 'sacrificial landscape'.

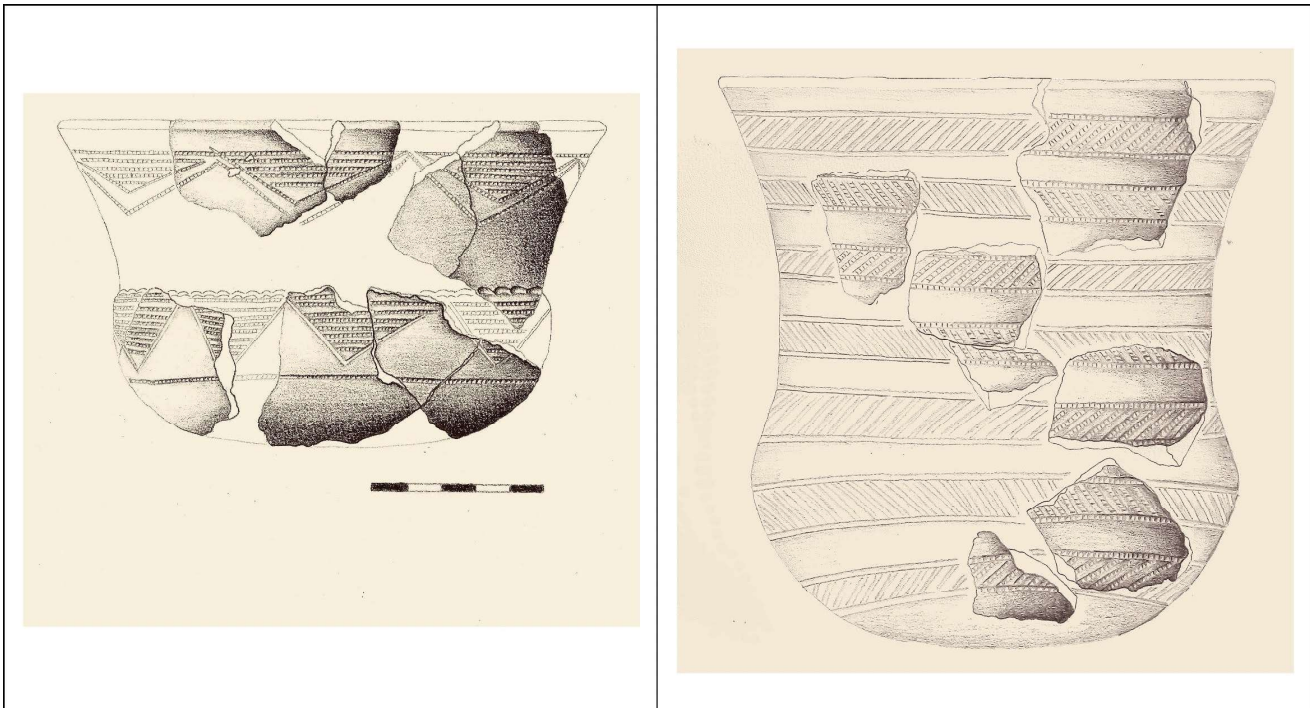
A novel and comprehensive interpretation is presented that shows how the objects from graves were connected with travel, drinking ceremonies and maintaining long-distance relationships.

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### The Bell Beaker phenomenon in Northwest Iberia: considerations concerning its chronology, archaeological contexts and pottery styles

*Maria de Jesus Sanches, Helena Barbosa*

This paper examines the Bell Beaker phenomenon and presents a synthesis of the known evidence from Northwestern Iberia (Galicia and the Lower Douro basin) — stylistics, contexts and chronology —, with particular emphasis on pottery. Considering the spatial distribution of the various campaniform styles, the archaeological contexts in which they were found, the available dates, its temporalities, and the relationship with local / regional imagery, we aim to discuss the social significance that the Bell Beaker ceramics assumed over time. We conclude that in this region, this is a long-term, multifaceted phenomenon that has been assimilated locally in very different ways in terms of the rhythms, meanings, agency contexts and roles played within each of the regional identities. Additionally, we intend to discuss the manifestation of this highly symbolic phenomenon both on its broader European level as well and its mechanisms of dissemination and acceptance / rejection in the Northwestern Iberian region.



*Decorated bell-shaped bowls from the same archaeological context in the Crasto de Palheiros-Murça (Northern Portugal).*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### **Do Bell Beakers actually have an origin?**

*Martin Furholt*

This contribution will deal with the different attempts to give meaning to 'the Bell Beaker phenomenon'. I will discuss and compare different approaches to interpreting the overall phenomenon, and the similarities and differences between regions, and find categories usually subsumed under the term, and point to aspects usually, or at least often, missed, or omitted from discussion. The main question, in my view, is, whether or to what degree 'the Bell Beaker phenomenon' is an archaeological construction, and to what extent it refers to relevant aspects of prehistoric lives. This will then be contextualized in the larger picture of 3rd millennium archaeological units and connected narratives, taking into account the newest aDNA data, and archaeological discussions.



## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### The puzzle at the crossroads: Cetina style, culture and phenomenon

*Stašo Forenbaher*

More than half a century ago, 130 mounds were excavated around the source of Cetina River in the eastern Adriatic hinterland. They contained prehistoric artifacts from different periods, including a specific kind of decorated pottery. Those finds became known as the material remains of “Cetina culture”. Since then, similar pottery has been reported occasionally from across a wide stretch of the central Mediterranean, including southern Italy, western Greece, and possibly Malta. Meanwhile, the contents of “Cetina culture” (primarily, the characteristic Cetina style pottery, as well as other remains presumably associated with that pottery) remained poorly defined in its heartland, and even less well dated. Most of the available information comes from old excavations and is incomplete, inconclusive or questionable. In consequence, the archaeology of “Cetina culture” is riddled with unresolved issues, controversies and unwarranted “established facts”. Thorough reassessment and revision of what we think that we know about Cetina are necessary prerequisites for understanding the wider “Cetina phenomenon”, and the second half of the 3rd millennium BC in the eastern Adriatic and beyond.



*A characteristic Cetina-style beaker and a group of prehistoric mounds.*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### Living in the borderlands without perceiving the borders: the Bell Beakers and the Balkans

*Maja Gori*

In the western Balkans Bell Beaker pottery is known from two sites: Petrovaradin, located on the upper Serbian course of the Danube, and Ostrikovac, a settlement along the Velika Morava. On the other hand, the so-called Cetina phenomenon that developed in the eastern Adriatic can be regarded as something arising at the periphery of the Bell Beaker area and can be interpreted as a “failed attempt to carry on the Bell Beaker ideology” in the Balkans (Heyd 2007, 102). This paper addresses the Bell Beakers phenomenon from a western Balkan perspective, that is from the standpoint of the groups that inhabited the mountainous area roughly enclosed between the Danube and Morava River system and the Adriatic whose material culture have no Bell Beaker elements. These are known in the literature as Armenochori, Bujanj-Hum III and Belotić-Bela Crkva groups,



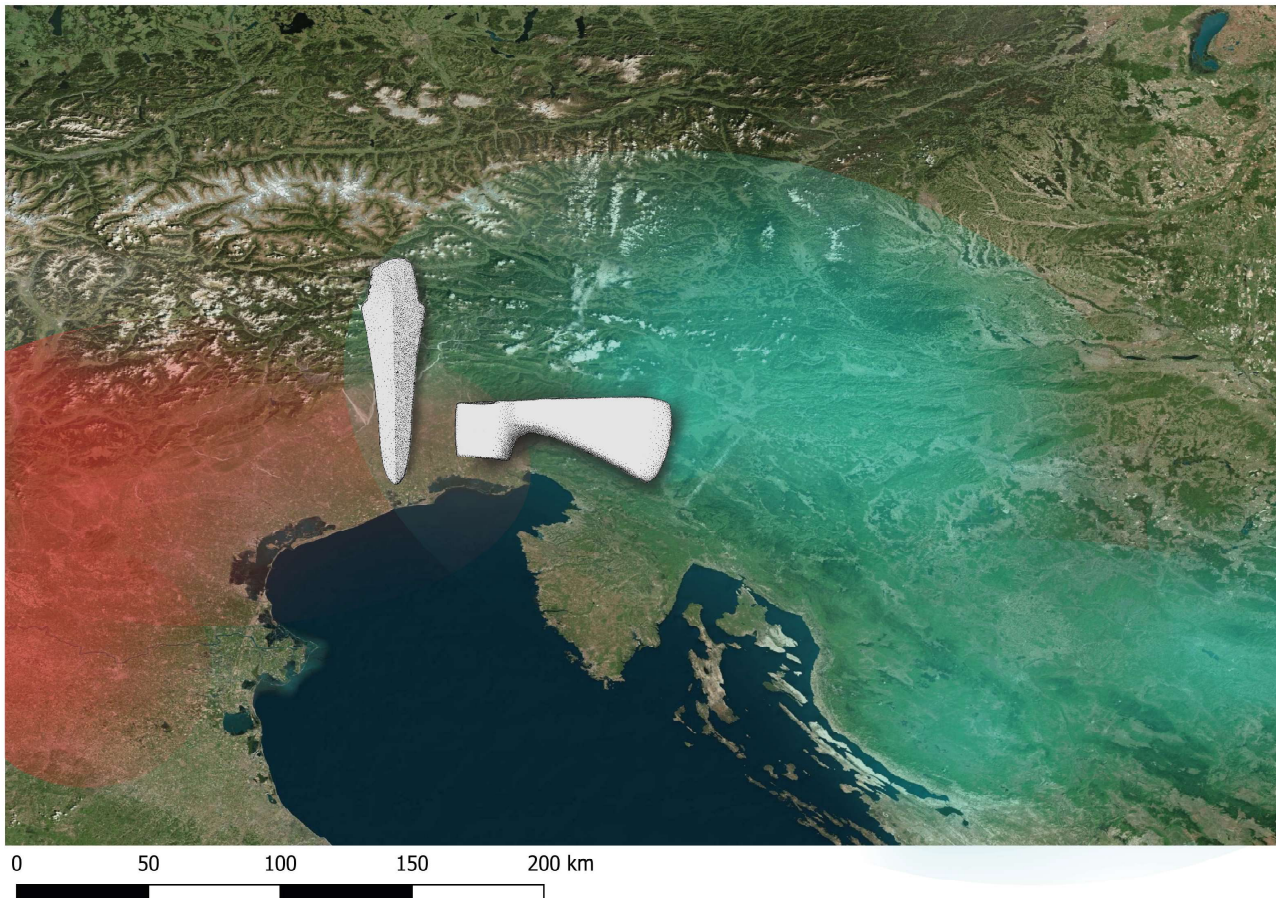
which emerged following the collapse of the Vučedol complex in the mid-3rd millennium BCE, and are characterized by a widespread use of undecorated pottery in both settlements and cemeteries. This in various ways contrasts with Dalmatia, where the large majority of the Cetina pottery is richly decorated. However, the fundamental characteristic that distinguishes Central from Mediterranean Balkans is the settlement pattern. While settlements associated to Cetina style pottery are virtually unknown, the Central Balkan groups present a much more varied and abundant set of archaeological evidence concerning dwelling practices. Based on selected examples, I will try to address the following questions: can we define Cetina as borderland between the Bell Beakers and the contemporary Central Balkans groups? Is the idea of borderland only based on ceramic landscapes or do we have elements to think that it was also perceived as such by the Balkan communities? Can we detect an influence of the Bell Beakers in Central Balkans not related to material culture?

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### Maritime and Alpine impactful cultural components in the northern Adriatic at the dawn of the Early Bronze Age

*Elisabetta Borgna, Giulio Simeoni*

Although the state of the art regarding the knowledge of the cultural dynamics and population patterns in the western Caput Adriae or Friuli Venezia Giulia does not include a great deal of new discoveries, several suggestions deriving from the intense updated scholarly debate on a macro-regional level offer the opportunity to reappraise the discussion on the role of Caput Adriae at the interface of the large exchange networks of the 3rd millennium BC, involving both Bell Beaker and Balkan-Adriatic components. Old data coming from caves, settlement contexts and stray finds from Friuli are re-considered together with some new data, which seem to show that during the second half of the millennium inner, upland and mountain routes were favored for communication and transmission of eastern cultural components, thus following a pattern well-rooted in the previous centuries, dominated by Vučedol/Ljubljana components. Main objectives of the paper are to define modes and nature of the interregional contacts, and to comment on some evidence of change and transformation involving the northern Adriatic regions towards the end of the period or the beginning of the Early Bronze Age, when a new trend towards the occupation of the lowland plain may be suggested.



*The Caput Adriae region at the crossroads of the Western - Bell Beaker and Eastern - Balkan Adriatic areas.*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### Relations, connections, interactions, resources, human mobility: (fuzzy) Beakers in Northern Italy.

*Franco Nicolis, Elisabetta Mottes*

Knowledge on the cultural development of the second half of the third millennium BC in north-eastern Italy has been enriched in recent years thanks to the discoveries of both settlements and funerary sites, some published exhaustively, others still under study.

The new documentation, however, does not seem to have substantially changed the interpretative framework of the cultural development of this area which still remains rather unclear.

Against the background of a Copper Age substratum that was very regionally structured and poorly characterized from the point of view of material culture, new cultural aspects that were also rather fuzzy emerged.

In this context, the presence of the Bell Beaker stands out which, despite showing influences from other areas of the phenomenon, nevertheless seems to maintain a certain local identity.

This period, however, shows clear archaeological evidence of human mobility and connections between different and sometimes very distant regions. The results of archaeogenetic investigations on human remains from recent discoveries will be able to clarify many aspects of these dynamics.

In this presentation we will try to elaborate a series of reflections on the cultural systems that have activated, favored or only allowed the creation of these interactions, on their internal complexity and on the nature of the resources involved in these relationship mechanisms.



1. Assizzi (Pergine Valsugana, Trento): Copper shaft-hole axe;
2. Montesei di Serse (Pergine Valsugana, Trento): Pottery;
3. Verò Doss Ciaslir (Predaia, Trento): Bone rod-shaped pendants.

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### **Cross-cultural encounters and transformation: overlapping spheres of interactions in the 3rd millennium BC Central Mediterranean**

*Giulia Recchia*

As diverse scholars have pointed out, in the second half of the 3rd millennium BC diverse spheres of interactions were at play in the central Mediterranean: the Bell Beaker one, the Aegean one and the Adriatic one (so-called Cetina sphere). Looking at the territorial distribution of elements related to each sphere, there were zones of overlapping/interplay particularly in the Italian peninsula, signalling some permeability between these spheres. Yet, different models have been suggested as regards the extension of these interaction spheres, their chronology, their interplay, and the patterns of connectivity underlying each of them. One of the points of debate is as to whether Adriatic/Cetina interactions operated at the 'periphery' of the Bell-Beaker sphere or whether these spheres were rather autonomous, prompted by local factors and independent connectivity patterns.

By briefly revisiting the different interpretative proposals and the available data, this presentation aims at discussing alternative models, also considering the differing aftermaths these interactions had on a regional scale.

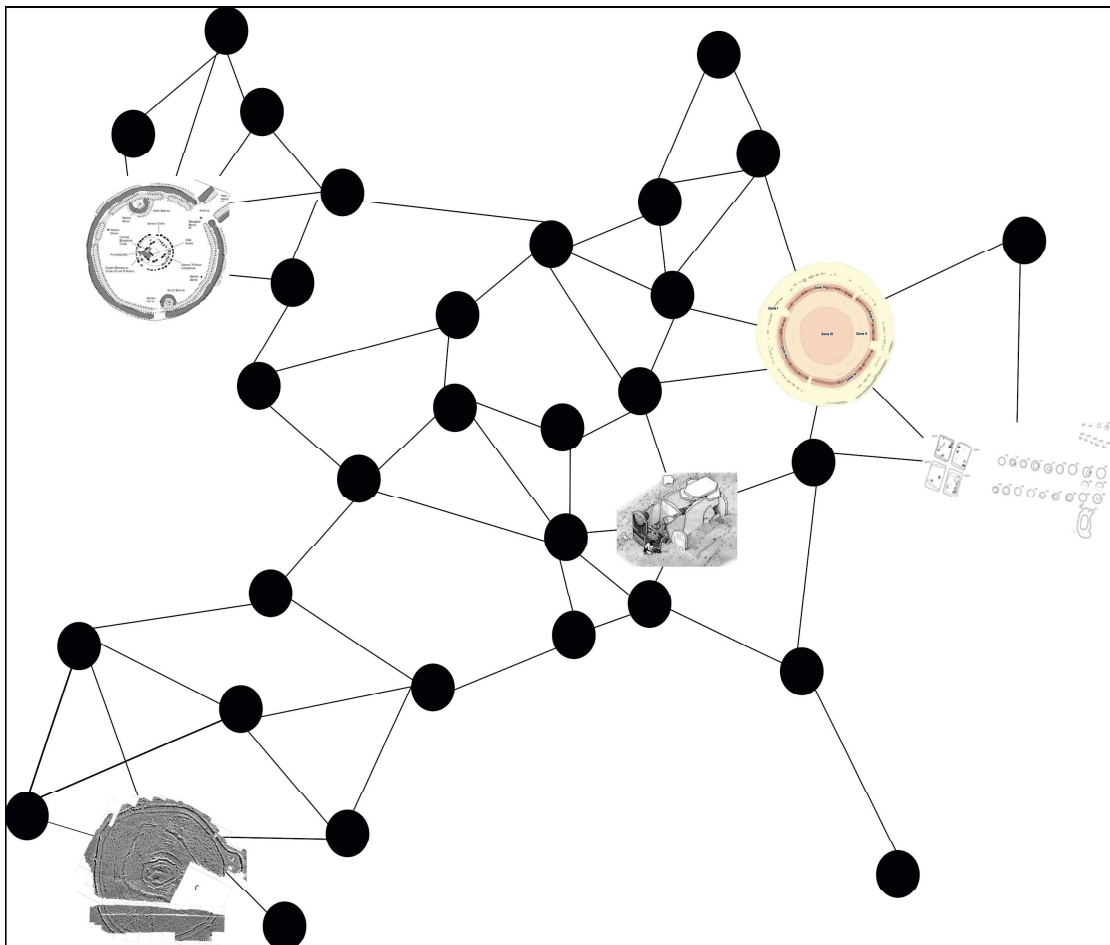
## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### Places of shared belief, places of collective action: on the role of ideologies in the maintenance of the Bell Beaker network

*Marc Vander Linden*

During its long historiography, there has always been a near consensus that ideology, understood as system of ideas, is a key component and causal factor in the making of the Bell Beaker Phenomenon. While most of the discussion has focused on the content – with the funerary evidence being essential – and putative homogeneity of this ideology(ies), less attention has been paid to how it was enacted and reproduced across communities, and thus how it effectively helped maintaining whatever cultural or social coherence is encapsulated by the Bell Beaker Phenomenon.

In this sense, the mobility of human agents is essential. Shifting away from the current focus on various forms of dispersal, in the biological sense of the word (i.e. movement of individuals from their birthplace to other locations for breeding), this contribution will rather explore other types of mobility and the landscapes they occur in, and especially the status of gathering places, deemed “prominent nodes” in the ideological Bell Beaker network(s).



*Abstract representation of the Bell Beaker network with selected places of gathering as “prominent nodes”.*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

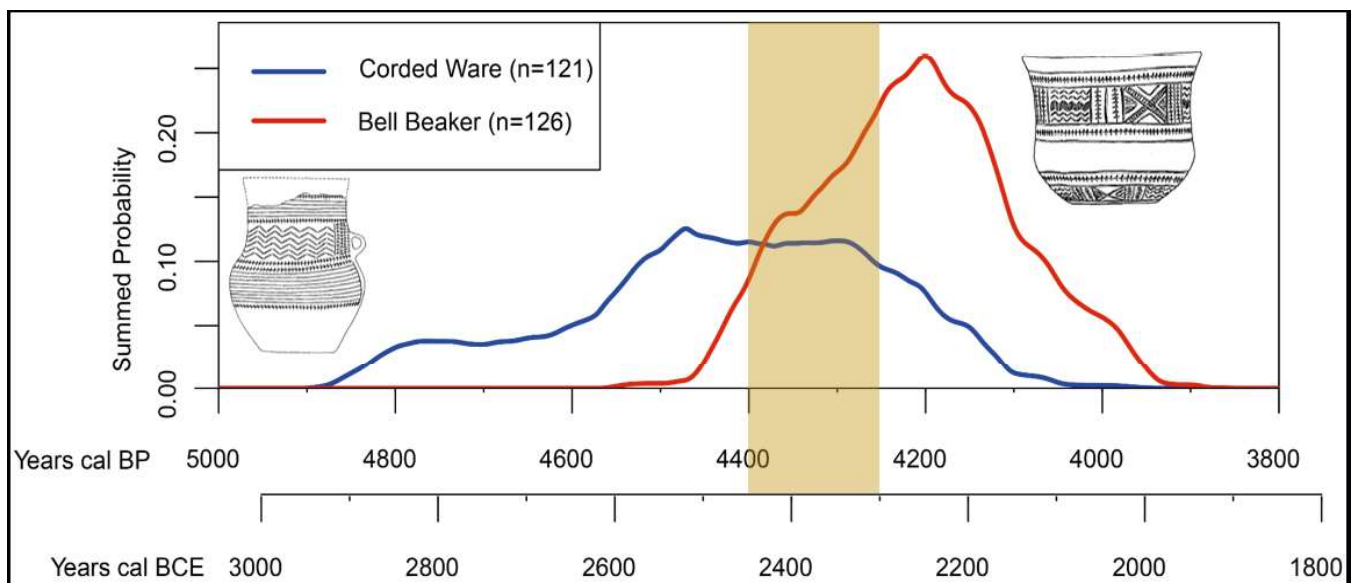
### Bell Beaker, Corded Ware, Schoenfeld: Material Links and the Reflux Theory - A Reconsideration

Ralph Großmann

Europe in the 3rd millennium BC is characterised by the so-called Beaker Phenomena. They are characterised by a distinct cultural "package" of gender-specific burials. The so-called "Schoenfeld culture" is to be distinguished from these large complexes on the basis of its material and ritual characteristics.

This paper does not attempt to highlight the differences between the groups of the 3rd millennium BC, but rather, in a reconsideration, the *similarities and references* between Corded Ware and Bell Beaker, and between the Beaker Phenomena and the Schoenfeld Culture. These references include, in particular, ceramic forms and decorative motifs.

The analyses show not only references on a local and regional level, e.g. in Central Germany, but also references on a supra-regional level, suggesting communication routes and mobility, e.g. between the Iberian and Central German Bell Beaker phenomena. The author will also show that Sangmeister's reflux theory should be reconsidered in the light of recent scientific research (14C dating, aDNA analyses).



Demography based on 14C-data in Circumharz region (only burials, Std.  $\leq 40$ ); 2450 – 2300 BCE (brown bar): Phase of complex ornamented Corded Ware beakers and main Phase of Bell Beaker & Corded Ware interrelations.

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### From east to west: sex/gender system in Bell Beaker elite

*Eni Soriano*

The Bell Beaker phenomenon has always been a world of warrior men. Or so it is shown in recreations and images and is asserted, actively or by omission, in numerous studies. But is this image real, is it fiction, or is it simply a mere desire of the masculinity? The heteronormative sex/gender system of the contemporary Western society naturalizes a binary and hierarchical division of bodies, with only two stable and opposing sex/gender categories, linked by the mandatory practice of heterosexuality. However, we know of historical and ethnographic examples of multigender societies with non-stable or more fluid sex/gender categories. Is it, then, legitimate to uncritically transfer the Western model to the past? Through queer theory, this presentation reviews data from Bell Beaker tombs from various regions of Europe, especially the Iberian Peninsula and Czechia. The results show, in the case of adults, a complex non-binary structure, including, among other categories, armed women. It should be noted that these categories are in no way a masculinization of women's tombs or a feminization of men's tombs. Additionally, the possibility of a fluid or non-existing sex/gender attribution among non-adults is suggested.



*Possible appearance of a leader dressed in all the characteristic elements of the Bell Beaker "package" in Iberia (adapted from Rafael Garrido-Pena, 2014. Drawing: Luis Pascual Repiso).*



## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### The Trinity of the Bell Beaker Phenomenon or a Network of the Rising Sun?

Volker Heyd

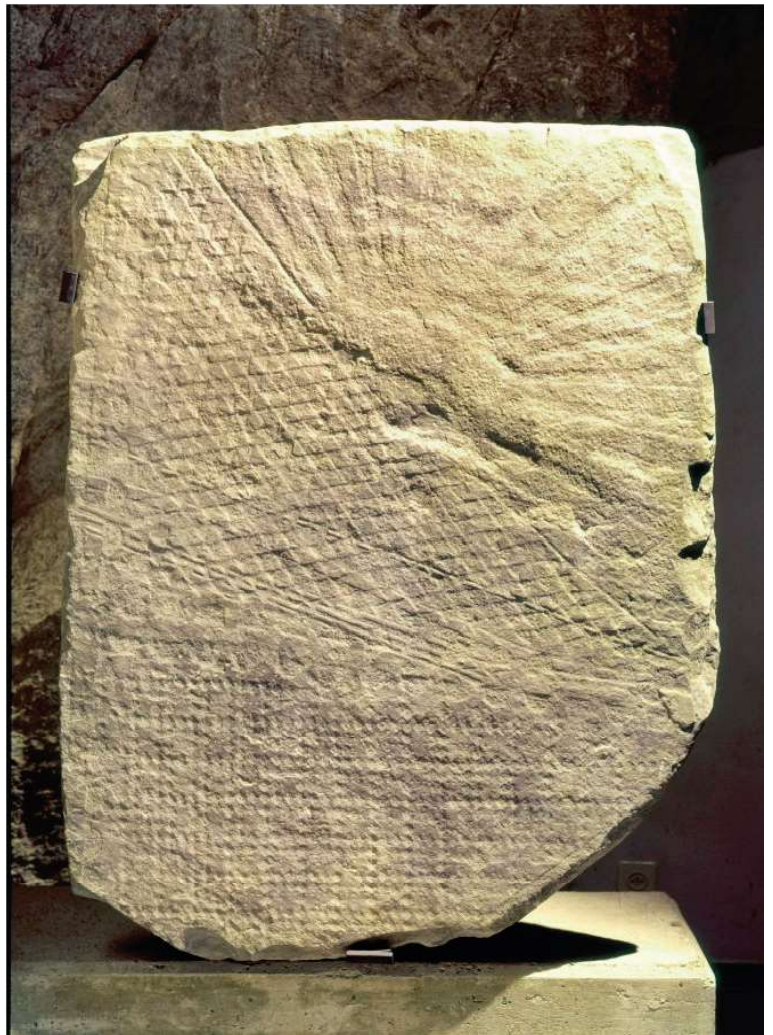
When overlooking Bell Beaker studies over the last six decades trying to pinpoint the origins of Beakers and associated finds, three regions and cultural milieus stand out as being mostly named:

1) An out-of-Chalcolithic-Western Iberia movement in form of a seemingly ideological diffusion which propelled the original idea eastwards both along the Atlantic and Mediterranean coastlines and across the Pyrenees, ultimately up to the Rhône-Rhine river system; and...

2) An out-of-Central Europe demic diffusion, seemingly originating along the Rhine river (Dutch model, in part) targeting both west and east and, since the Olalde et al. study in Nature 2017, representing very much the late Corded Ware population reaction against the original idea. However, there is also a third region and this is: 3) An out-of-the-Carpathian Basin push. It is linked with the appearance of metopic beaker decoration, handles, and cups and plates of the *Begleitkeramik* with the Vučedol culture, but we know now it has to be chronologically post-Vučedol and might involve, following indirectly Papac et al. 2021, the migration of more and genetically different people.

All these findings not only stand for the potential threefold origins of the European Bell Beaker phenomenon as widely described in earlier and recent literature but also for three fundamentally different mechanisms in the propagation and manifestation of the Beaker idea.

There seems also to exist, however, a potential fourth mechanism that overarches and combines all: A special world-view seemingly centered around the Sun and Afterlife that could well resemble a Religion. Aspects of sun imagery in Bell Beaker contexts across Europe in stone, clay and gold can speak for such as do burial orientation systems and sites like Stonehenge and Pömmelte which have clear sun ecliptic alignments. Would a kind of sun worship be that unusual for Europe in the mid-Third Millennium BC? There is a good deal to learn from contemporary textual, visual and architectural evidence from Egypt and Mesopotamia.



## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### Social and Ideological Changes with the first Bell Beakers in Iberian Peninsula (2250-2400 BC)

*Alfredo Mederos Martín, Thomas X. Schuhmacher*

The region of the first appearance of Bell Beaker pottery and the socio-economic and ideological causes of its generalization and rapid acceptance, probably in just one generation, have not yet been adequately resolved. All these transformations are contemporary with a strengthening of fortification systems in many settlements in the South of the Iberian Peninsula, suggesting an unstable political context with an increase in conflict. On the other hand, the Iberian Peninsula has a small percentage of well-studied individual Bell Beaker burials that do not reuse previous megalithic collective burials. The tombs of Humanejos (Madrid) suggest a slightly older age of the maritime bell beakers, 2566-2295 BC, compared to the Ciempozuelos bell beakers, which also seem to have lasted longer, 2484-2136 BC. This 50-year difference could imply two generations. Furthermore, the domestic contexts of the Lisbon peninsula in Portugal suggest a slightly older age, 2600 BC, which has not been well confirmed in contemporary Portuguese individual tombs. An analysis of the context where the genesis of the maritime Bell Beakers in the Iberian Peninsula will be presented, and attention will also be paid to the large settlement of Valencina de la Concepción (Seville), with 200 ha during the Middle Chalcolithic, 2800-2550 BC, where an important set of maritime Bell Beakers has also been documented.

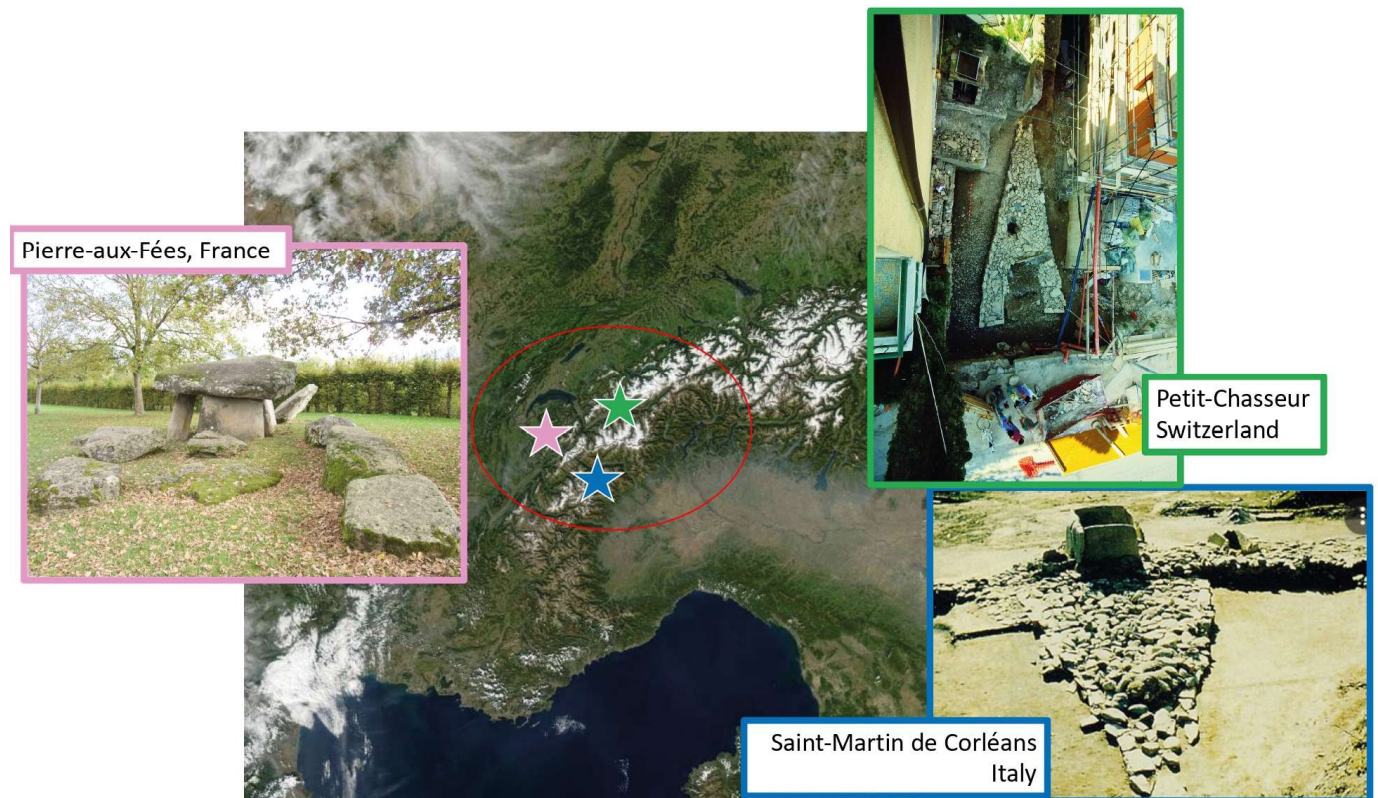


## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### When craftspeople move: a social approach of the Bell Beaker societies around the Alps

Marie Besse, Jessica Ryan-Despraz, Florian Cousseau, Claudine Abegg

We will present the Bell Beaker phenomenon in the Alps and neighbouring regions, posing the hypothesis that some craftspeople worked to produce specific objects that are found at the burial sites of specific people. We will therefore combine the study of the complex architecture of dolmens, the richly decorated stelae, the jewelry made of precious gold and silver, and the finely decorated pottery, all of which would have required specific know-how and detailed knowledge of raw material supply networks to be fabricated. As such, we would like to present this problematic, resting upon the idea that it is possible to distinguish « everyday » craftspeople, supplying their own artisanal needs and comprising most of the population, and « specialized » craftspeople, detaining specific know-how that was not shared by the entire population. Our starting point will be the dolmen necropolises of Petit-Chasseur (Sion, Switzerland), Saint-Martin de Corléans (Aosta, Italy) and Pierre-aux-Fées (Reignier-Esery, France). We would discuss the hypothesis whereby in such highly complex social systems, specialized craftspeople can be identified through the production of specific objects, and that these specialized craftspeople could have been itinerant, moving across the various Bell Beaker territories.



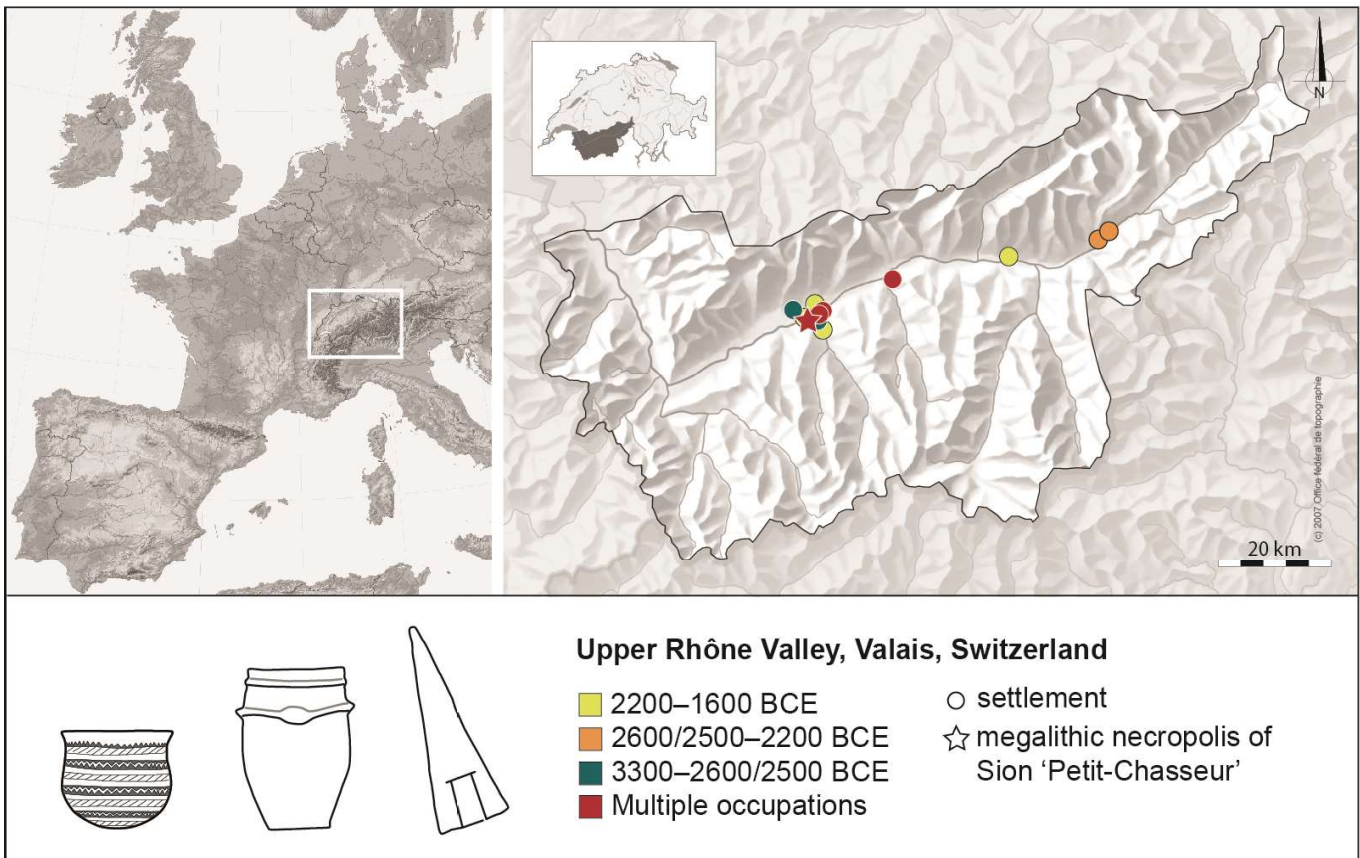
# THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

## Beakers, jars and dolmens: A history of western Alpine societies and their constellations of practice between 3300 and 1600 BCE

Eve Derenne, Delia Carloni

This paper explores the ceramic production processes in the Upper Rhône Valley (Valais, Switzerland) during the third and second millennium BCE, investigating the megalithic necropolis of Sion 'Petit-Chasseur' and 13 settlements unearthed in the area. This work, based on the concept of pottery *chaînes opératoires*, first identifies the techno-petrographic groups present in each assemblage. Subsequently, it examines the distribution and diffusion of these ceramic traditions from both a contemporary and diachronic perspective. It specifically focuses on the integration of the Bell Beaker traditions into the local context and their transmission to the Bronze Age.

This study also compares the ceramic traditions found in the necropolis with those in the settlements to determine whether the full range of ceramic traditions was present in the funerary context. Through this analysis, we aim to address questions about access to the necropolis and the usage of its megalithic monuments over time. Furthermore, we seek to uncover connections between different archaeological sites, revealing existing networks and shedding light on the past existence of constellations of practice in this valley located at the crossroads of many transalpine routes.



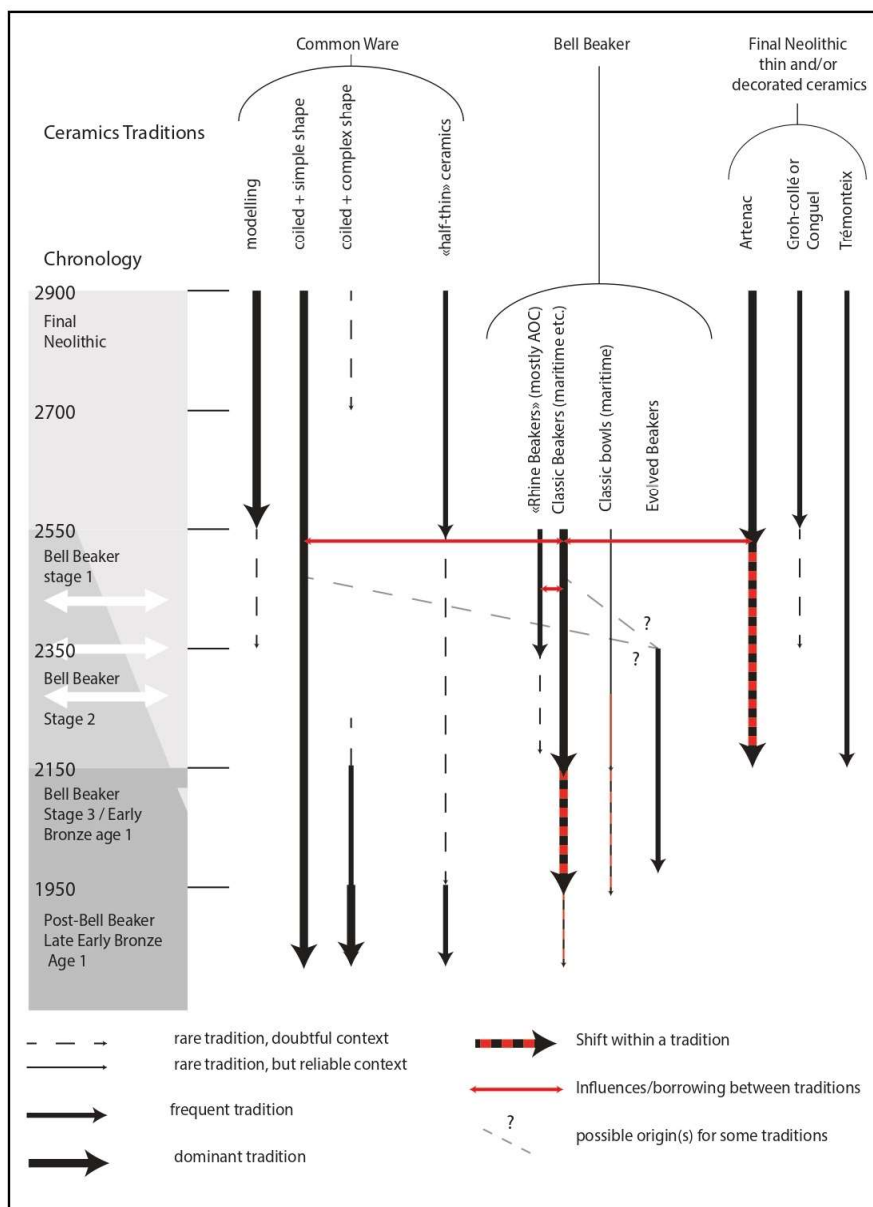
# THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

## Beyond the standard: the organisation of Bell Beaker ceramic production

Quentin Favrel

Ceramics remain one of the most notable component regarding the Bell Beaker phenomenon, yet, many component of this material remain understudied. If typology have been established in most place when data is available, it is still not the case for technological analysis. Considering the extent, duration and influence of the phenomenon this situation is paradoxal, because ceramic technology could either strengthening current theoretical framework or unravel them.

To assess the potential of this method, we have build a database for the Bell Beaker in Northwestern France, integrating all the sites and ceramics known, their context of discoveries and all radiocarbon datation. Moreover, seven hundred vessels were directly sampled for technological study. Based upon this, we produced a new typo-chronology and several statistical analysis to refine pre-existing models regarding Bell Beakers in our study area. This method has shown great heuristic potential, requiring us to revisit key concepts and set new ones. After presenting ceramics traditions, we discuss the definition of the Bell Beaker ceramics on economical ground, through the concept of remarkable product, following by a glimpse into the possible organisation of Bell Beaker ceramic production.



## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### **Transformations and continuities in subsistence and society: Bell Beaker-users in Britain**

*Mike Parker Pearson*

Genetic evidence for substantial population replacement of Britain's Neolithic population by Beaker-users and their descendants has caused researchers to reconsider assumed continuities in economic, social and ceremonial spheres during the late third millennium BC. Many of the classic architectural features of Late Neolithic Britain appear to have continued across the transition, such as henges, stone circles and timber circles, yet Beaker-period reuse and adoption displays new expressions and practices in construction methods and labour mobilisation.

Similarly, subsistence practices overall provide evidence for continuity whereas specific aspects reveal changes in settlement location, land use and the proportions of domesticated plants and animals raised. Although Beaker-associated inhumations of steppe-derived individuals in Britain do not date before 2475 BC, there is growing circumstantial evidence for a continental presence in the previous century; for example, metal tools may already have been in use and the indigenous Grooved Ware pottery may have drawn on motifs from Beaker ceramics.

Whilst the Beaker-users' arrival may have brought an end to the cultural and genetic isolation now being recognised by researchers for Britain's Middle and Late Neolithic, the beginning of the end of this isolation may have occurred during a contact period which has left little archaeological trace of such cross-Channel interactions.



*Stone circles continued to be built in the Beaker period in Britain, despite large-scale population replacement (photo by Jim Rylatt; PastParticipate Ltd).*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

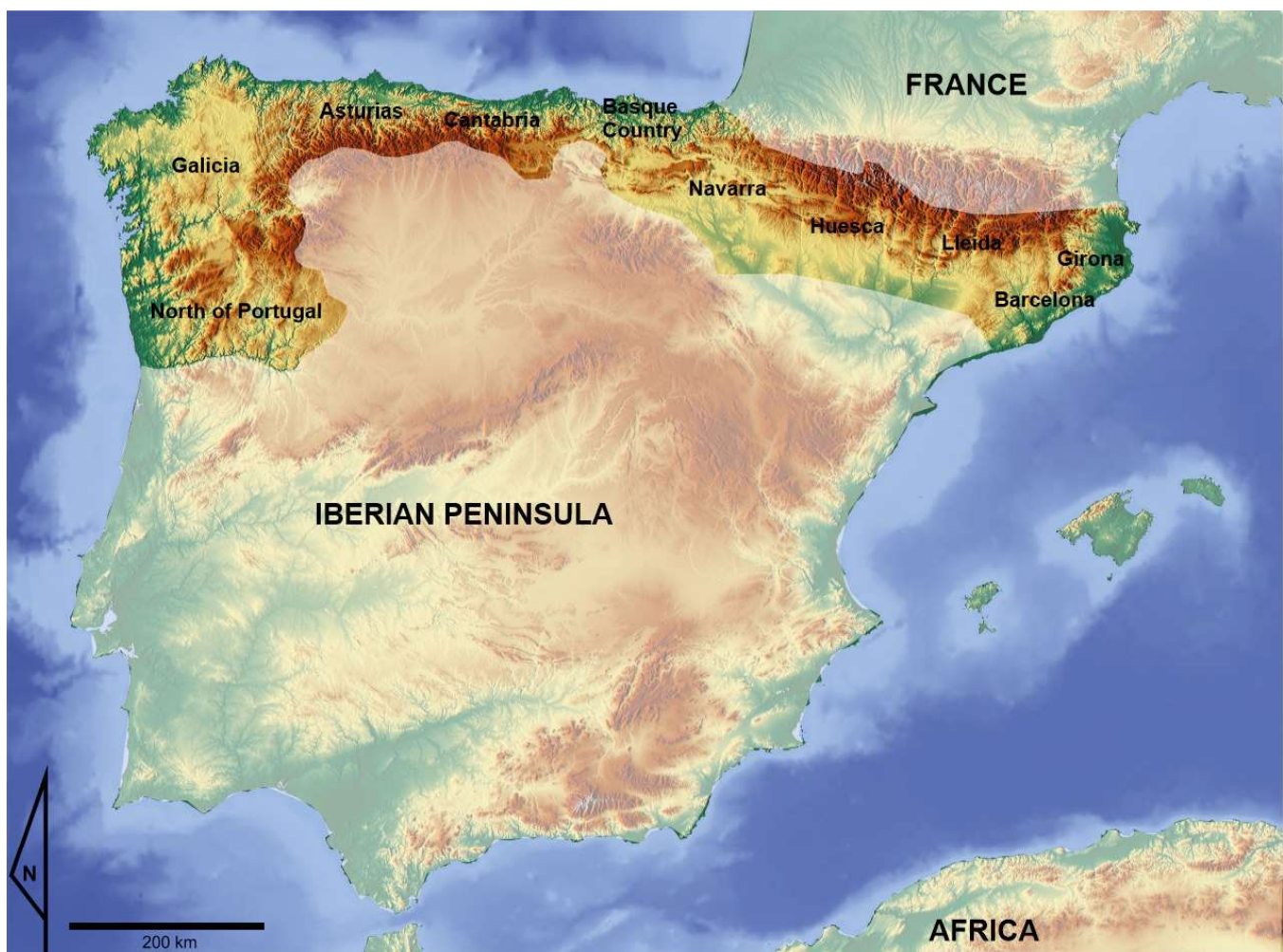
### Defining levels of identity through materiality: inquiring into the North and Northwest of Iberia

*M. Pilar Prieto Martínez*

The term identity is fashionable in archaeology and working with it in the study of the Bell Beaker is very timely. In the case of this presentation, I will address how identity is constructed in the communities that used bell beaker pottery in the north and northwest of the Iberian Peninsula. The most significant elements of material culture will be taken into account (pottery, metal, etc.) and their distribution in the sites of this wide area.

A spatial analysis of the material culture considering the contextual, local and regional levels can contribute to define if the impact of this new way of understanding the world has been strong or subtle and if it has been similar or, on the contrary, unequal, depending on the region. Studying the materiality can help us to (\*) understand the possible connections and conflicts existing in this process; (\*) investigate the relationship of 'the bell-beaker thing' with the previous settled cultures; (\*) characterize the existence of continuity or discontinuity of a Bell Beaker tradition in the Bronze Age.

It will be assessed whether the identities of this large region in Iberia fit into a large-scale Bell Beaker project, which reaches a large territory.



## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### **We don't want those pots: interpreting the Bell Beaker absence at Santa Vitória ditched enclosure (Southern Portugal)**

*Ana Catarina Basílio, António Valera*

Santa Vitória (Campo Maior, Portugal), was the first ditched enclosure excavated in Portugal, at the end of the XX century. However, little was known about its architecture, temporalities or materialities, until 2018.

This panorama changed with the beginning of the SANVIT project. During 4 years of fieldwork, it was possible to characterise the internal dynamics of this small lobulated enclosure, as well as to start drawing chronologies, and identifying social behaviours and practices.

One of the most notorious ones is the total absence of Bell Beaker elements in Santa Vitória, a pattern opposite to the one noted at the large enclosure of Monte da Contenda, only 4.3 km away from Santa Vitória. Here, during surface surveys, several decorated sherds were retrieved. This means that, with Santa Vitória fully functional, during the second half of the 3rd millennium BC, there seem to have been active regional exchange networks, with beaker materials circulating.

What brings these two enclosures together, and what might set them apart, will be explored to understand if the absence of Bell Beaker materialities in Santa Vitória can reflect an intentional exclusion caused by different social roles assigned to these two ditched enclosures or reflect a social resistance phenomenon.



*Panorama of the central enclosure of Santa Vitória (Campo Maior, Portugal).*



## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### Understanding Bell Beaker identities in Ireland - people, places and identities

*Neil Carlin*

The Irish manifestation of the so-called Beaker phenomenon has long been considered to be puzzlingly different, due to an apparent richness of settlement remains and a paucity of funerary evidence. However, the archaeological reality is more complex and the regional variability of the Irish material is typical of that seen elsewhere. Although stereotypical burials are rare, there is more evidence for Irish Beaker-associated funerary activity than generally recognised, some of which occur in specifically constructed megaliths known as wedge tombs. Furthermore, significant quantities of the supra-regionally styled items such as tanged copper daggers, wrist bracers, and v-perforated buttons that typically occur in Beaker graves have been found in Ireland, but as single finds or in hoards within 'natural places'. In this talk, I will characterise Beaker-associated social practices in Ireland and consider their similarities and differences to those of other regions. I will explore how these relate to the construction and expression of shared group identities and values, both within and beyond this island.



*Excavations at Parknabinnia wedge tomb on the Burren, Co. Clare (courtesy of Ros Ó Maoldúin).*

# THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

## Humans and Cups: an Archaeological Perspective

Olivier Lemerrier

To address the question of Beaker Folk versus Regional Identities, Mediterranean France is an interesting case study because it presents different Bell Beaker assemblages with ceramics of distinct styles and regional chronocultural sequences, from the end of the Neolithic to the Bronze Age, almost mastered. It is possible, in each region, to observe the moment and context of the appearance of Beaker objects, but also their assimilation and transformations over time until their disappearance at the end of the Early Bronze I, in a periodization into 3 main phases. The first Bell Beakers appear in contexts characteristic of local cultures of the Late Neolithic and not after their disappearance. In some regions, some technical transfers, associated with the evidence of production from local materials, also show that the introduction of Bell Beakers cannot be limited to the arrival of objects of foreign origin: humans move, bringing their traditions and their knowledge.

Probably over the course of a few decades, some regional Bell Beaker groups developed which derive from international Beakers. A phenomenon of acculturation occurs within local cultures. Many sites of which are replaced by sites of new regional Beaker cultures. However, local cultures do not disappear everywhere and obviously, in Mediterranean France, many cultures for example persist in the development of Beakers for several decades, whereas in Corsica, Bell Beaker does not even develop. Humans and drinking cups in various regions with different trajectories: it's history!



*Beaker sites in Mediterranean France in their national and European context. Examples of ceramic production from the ancient phase and recent regional groups (DAO. O. Lemerrier).*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### A sea change? Mobility, genetics and the Beaker Complex in Britain

Ian Armit

Recent aDNA analyses demonstrate that the centuries surrounding the arrival of the Beaker Complex saw significant migration into Britain from continental Europe. Indeed, the genetic evidence indicates replacement of 93% of the gene pool by the end of the third millennium BCE. Although the precise timing and duration of this effective population replacement remains uncertain (Armit and Reich 2021), its sheer scale raises many questions. At the most basic level, we need to understand how this process might have unfolded, particularly given the apparent lack of evidence for violence and societal conflict. Had the Late Neolithic population of Britain dwindled to such a level that it could be effectively assimilated by incomers over a few generations? If so, what factors contributed to this decline? Complicating matters further is the intricate relationship between new and existing populations manifested, for example, in the pronounced continuities evident in certain places that held great significance in the cosmologies of Late Neolithic communities. From the monumental landscape centred around Stonehenge in southern England to the remote sea caves at Covesea, northeast Scotland, Beaker-using communities embraced and adapted places with long histories of veneration. This paper explores the social and cultural implications of this demographic transformation.



*Beaker vessel from Wetwang Slack, East Yorkshire, UK (Wetwang/Garton Slack archive).*

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## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### **Investigating the 4th-2nd millennium BCE transition in Italy**

*Alissa Mittnik, Claudio Cavazzuti et alii*

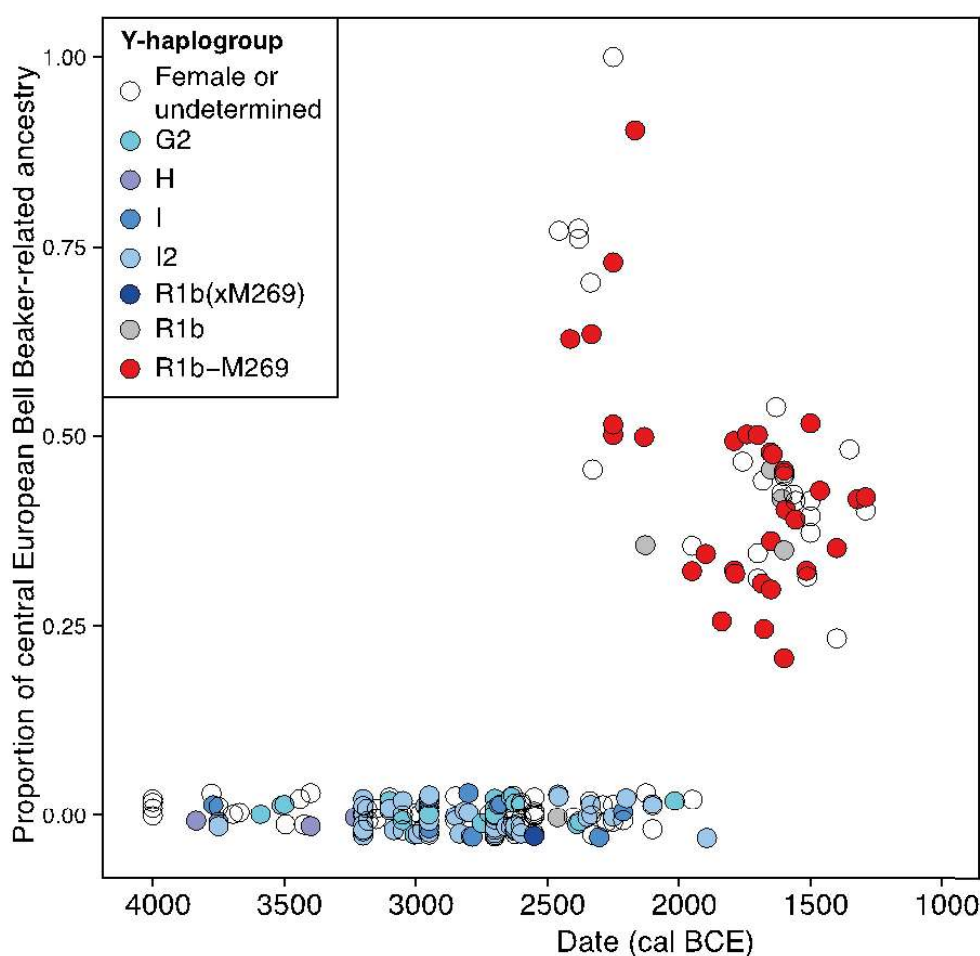
Similarly to most of Europe, the transition from Copper Age to the Bronze Age in the different regions of Italy is marked by crucial cultural and social changes, and the Bell Beaker phase appears as the real turning point in this process. The existence of supra-regional networks connecting continental Europe and Central Mediterranean is clearly identifiable from the distribution of goods, models and customs and implies intense mobility of people. While genomic time transects of the Eneolithic and Early Bronze Age transition exist for the islands of Sardinia and Sicily, describing these dynamics at a population level, published data is still sparse for the Italian peninsula. Here, we analysed genome-wide data from nearly 200 individuals from late 4th to early 2nd millennium BCE sites in three focal regions – The Po plain in Northern Italy, the Middle Adriatic region in Central Italy and Campania in Southern Italy. Using statistical modelling, uniparental markers and transregional relatedness detected through shared Identity-By-Descent, we trace the first appearance and subsequent spread of steppe-related ancestry. We show that the demographic shift associated with the cultural transition at the onset of the Bronze Age is not a uniform process across the peninsula.

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### The arrival of Steppe ancestry to the Iberian Peninsula

*Iñigo Olalde*

The 3rd millennium BC in Iberia is arguably one of the most intensively sampled periods in the ancient DNA literature over the past 5 years. These studies documented the arrival of groups from central Europe starting ~2,500 BC and their widespread long-lasting demographic impact so that after ~2,000 BC, all the Bronze Age individuals with available genomic data, from north to south and from west to east, derived 30-50% of their ancestry from these newcomers. It is also clear from the genetic data that during this event the local Chalcolithic paternal lineages became virtually extinct and were replaced by the lineages carried by the incoming groups, whereas the local maternal lineages were maintained, pointing to a sex-biased event. However, to understand the nature of the interactions between these two groups that eventually resulted in the large-scale patterns we observe in the current datasets, we need to retrieve genetic information about processes taking place at local and familiar scales. This requires a different approach, with dense samplings at particular sites during the critical period between 2500-2000 BC, a deeper integration with other types of bio-archaeological evidence, and contextualization with the rich archaeological record for this time period in Iberia.



*Proportions of ancestry related to Central European Bell Beaker-associated groups in the Iberian Peninsula.*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### Tracing the major Indo-European groups of Europe: Linguistic problems concerning the steppe-derived archaeological cultures of the 3rd millennium BCE

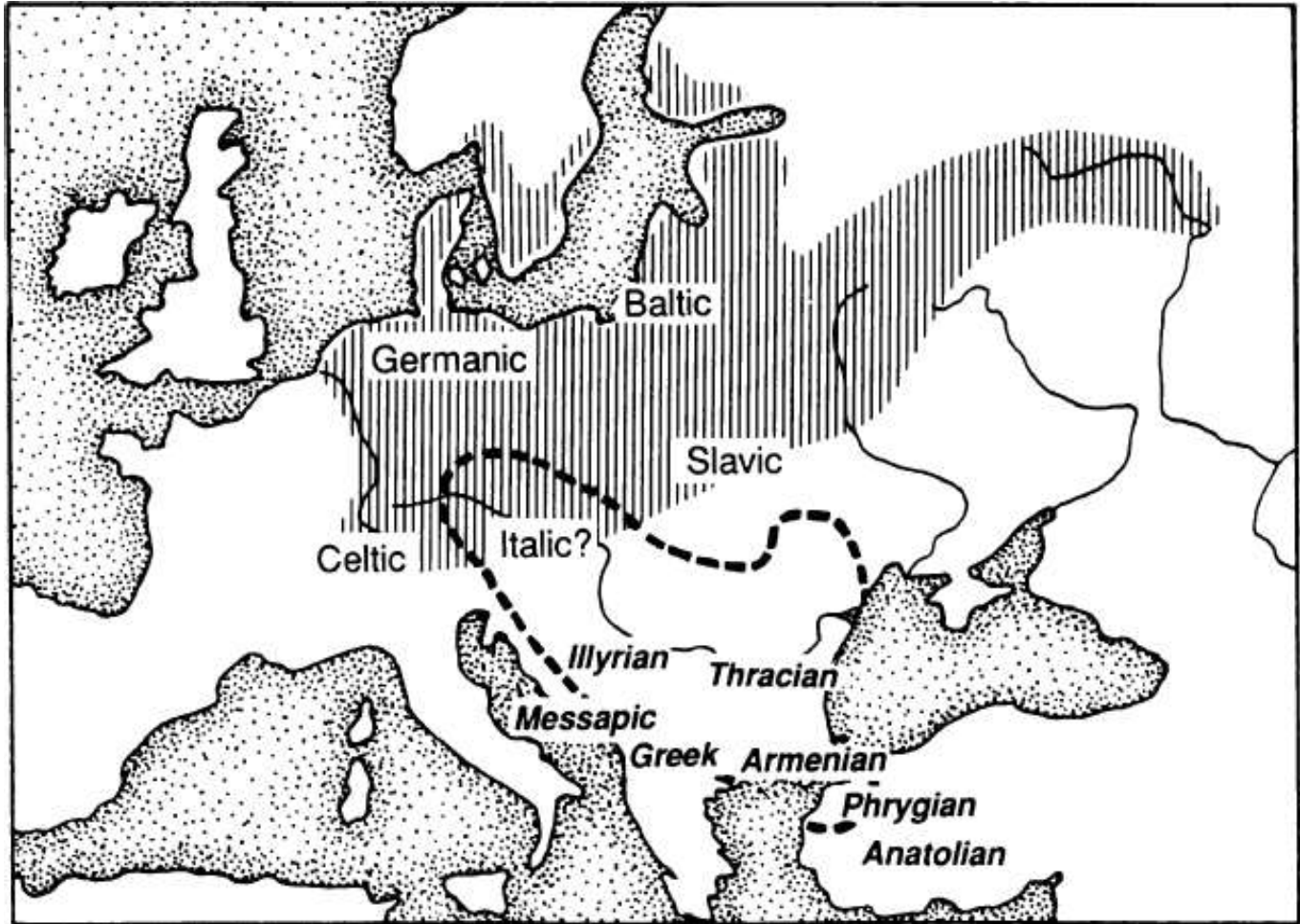
Guus Kroonen

In his classic book *In search of the Indo-Europeans*, J.P. Mallory stated that “both the Corded Ware horizon and the Balkan-Danubian complex are essential to any explanation of the origin of the Indo-Europeans of Europe” (1989: 109). Thirty years later, breakthroughs in the study of ancient DNA have confirmed the Corded Ware as a major channel for Yamnaya steppe ancestry into the areas in which Indo-European languages are historically spoken (Allentoft et al. 2015; Haak et al. 2015; Malmström et al. 2019). However, while the link between the Yamnaya and the Corded Ware populations offers a likely scenario for the spread of the Indo-European language family in general, the tracing of individual Indo-European subgroups from the 3rd millennium to the historical period remains challenging. Despite the allegedly central role of the Corded Ware, it is still unclear which of the subpopulations of the Corded Ware can be associated with Germanic or Balto-Slavic. In addition, genetic findings rather suggest that Celtic and Italic were mediated by speech communities their steppe ancestry from the Bell Beaker culture (Olalde et al. 2018; Saupe et al. 2021; Posth et al. 2021; Patterson et al. 2022), but especially Italic remains notoriously difficult to trace. This contribution reviews older and newer hypotheses concerning the prehistoric spreads of the major Indo-European subgroups of Europe.

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## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC



*Projection of the main Indo-European languages of West Eurasia projected onto the distributions of the Corded Ware horizon and Balkan-Danubian complex (J.P. Mallory, *In search of the Indo-Europeans*, 1989, p. 109).*

## THE TRANSFORMATION OF EUROPE IN THE THIRD MILLENNIUM BC

### **The genomic profiles of Bell Beaker-associated individuals in central and eastern Europe**

*Wolfgang Haak, Sandra Pense, Luka Papac, Adam Ben Rohrlach*

The period of the Bell Beaker phenomenon (BBP) falls amidst a time of major cultural and genomic transformations in Europe spanning the third millennium BC. Precluded by the arrival of “steppe-related ancestry” mediated through Corded Ware and Yamnaya-associated pastoralist groups, individuals associated with the BBP show - in reverse - an increase in early European farmer-related ancestry, attesting to a certain extent of local admixture. At the same time, BBP groups are the carriers of a further westward spread of ‘steppe-related’ ancestry, resulting in a complete turnover of Y haplogroup profiles in the Iberia peninsula, Britain and Ireland. This contrasts with the proposed western origin and chronological developments of the material cultural elements within the BBP itself. Central Europe also witnessed distinct shifts in genomic ancestries and Y haplogroup profiles, the reasons for which are not well understood. I will present and discuss available data, including many unpublished data points from critical regions in central Europe, where the BBP overlapped with the preceding Corded Ware complex as well as contemporaneous and subsequent Early Bronze Age groups, which showcases the complexities and new challenges high density sampling can provide. My overview ranges from broader population affinities, cross-regional connections via identity-by-descent analyses, to insights into kinship structures and social organization. The characterization of the main trends in changes of genomic ancestry are as important as the integrated analyses of various ‘outlier’ individuals or individual life histories, which add to a more nuanced picture of the major transformations in prehistoric Europe.



