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ABSTRACT

Bell Beaker Footed Bowls in the Iberian Peninsula

A Trial Inventory apropos a Find from the Lapa do Fumo Cave (Sesimbra, Portugal)

João Luís Cardoso – Marco António Andrade – Rui Gil

The Lapa do Fumo cave (Sesimbra, Estremadura, Portugal) features a funerary context that has been extensively used since the Early Neolithic. A recent review of the votive assemblages revealed the presence of a vessel sherd belonging to a Bell Beaker footed bowl, featuring part of the base and the start of the foot, with incised decoration on the outer surface. This type of vessel, although quite rare, is known from various Bell Beaker complexes of the Iberian Peninsula throughout the entire time span of the Beaker phenomenon, mostly corresponding to the second half of the 3rd millennium BCE. Its geographical distribution in Iberia is equally widespread, occurring both in funerary and residential contexts. Starting from the Lapa do Fumo sherd presented herein, the authors will present an inventory of all known examples, integrating them into their respective chronological and cultural contexts. A technical and functional discussion is also included, based on an estimate of these items' capacities.

KEYWORDS

Iberian Peninsula, Portuguese Estremadura, Chalcolithic, Bell Beaker, Footed bowls

Bell Beaker Footed Bowls in the Iberian Peninsula

A Trial Inventory apropos a Find from the Lapa do Fumo Cave (Sesimbra, Portugal)

1 Lapa do Fumo: Location, Context and Research History

¹ Lapa do Fumo is a natural cave located in the municipality of Sesimbra, near the boundary of a south-facing Jurassic limestone platform, overlooking the ocean (Fig. 1). Its archaeological interest was first acknowledged on August 30, 1956, when Eduardo da Cunha Serrão visited the cave for the first time (Fig. 2). Given the scientific importance evidenced by the successive archaeological interventions conducted therein, it was classified as a Public Interest Site in 1982 (decree no. 28/82, of February 26). Excavation works conducted by Eduardo da Cunha Serrão began shortly after his first visit, becoming more systematic the following year and until 1960, only to be resumed in 1964 with the participation of Gustavo Marques. Meanwhile, a study of the ceramic wares with burnished decoration had been published in 1958, describing them for the first time¹. Later on, the study dedicated to the so-called ›red layer‹ resulted from the excavations conducted jointly by both archaeologists². Meanwhile, the importance of the medieval presence in the cave was emphasised by the discovery of an important set of 12th-century Almoravid coins (*quirates*) recovered in 1956 during the first explorations³.

² The studies concerning all the remains recovered in the meantime and their stratigraphy clearly demonstrated the considerable time span of the human occupation⁴, a fact that was emphasised by the same author years later⁵.

³ This paper is part of the ongoing systematic review of the Lapa do Fumo assemblages, undertaken by one of the authors (J.L.C.), which began with the systematic publication of the Late Bronze Age pottery with burnished decoration, first identified

1 Serrão 1958; Serrão 1959.

2 Serrão – Marques 1971.

3 Figanier 1958; Marinho 1968.

4 Serrão 1968.

5 Serrão 1975, fig. 14; Serrão 1978, fig. 5; Serrão 1994.



Fig. 1: On the left, location of Lapa do Fumo in the Western Iberian Peninsula. On the right, location of Lapa do Fumo in the Portuguese Military Chart, scale 1 : 25,000, sheet 464 (Sesimbra).

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and enhanced in Portugal by Eduardo da Cunha Serrão⁶. This is still the most remarkable assemblage of these wares ever found in the country.

4 These studies actually triggered the invitation sent in 2004 by the then Director of the National Archaeological Museum, Luís Raposo, to the first author (J.L.C.), to study the archaeological remains and the corresponding documentation relating to the municipality of Sesimbra, which had been deposited in that museum by the family of the late archaeologist and architect Gustavo Marques⁷; several contributions have already been published.

5 At first, the focus was on the study of the assemblages recovered by Gustavo Marques from the Chalcolithic settlement of Outeiro Redondo⁸. This study preceded the research project dedicated to what can currently be considered the most important pre-historic site in the municipality of Sesimbra, as evidenced by the results obtained during the successive excavation field seasons conducted at the site between 2005 and 2016⁹.

6 Soon afterwards, assemblages from other archaeological occupations of the cave were studied and published, closely linked to the data provided by the field notes of Eduardo da Cunha Serrão and Gustavo Marques. Copies or originals of these notes have also been deposited at the National Archaeological Museum by the latter archaeologist's relatives. It was thus possible to contextualise both in stratigraphic and spatial terms the significant Evolved Early Neolithic assemblage recovered from the site. A first report on this assemblage was presented in two overviews dedicated to the Neolithic of Estremadura¹⁰, followed by a monograph that demonstrated the real importance of the earliest occupation of the cave, of funerary nature, dating from the Evolved Early Neolithic¹¹.

6 Cardoso 1995; Cardoso 1996.

7 Official letter no. 595 of October 11, 2004.

8 Cardoso 2009.

9 Cardoso 2019a.

10 Cardoso 2010; Cardoso 2015.

11 Cardoso – Martins 2018.



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7 Previously, the Lapa do Fumo Iron Age assemblages were virtually unknown. Thus, the identification of a significant ceramic assemblage, addressed in the scope of a detailed study, became undeniably relevant in terms of the ritual use of some of Estremadura's natural caves during this period¹².

8 In the framework of this project, it was also important to review previously published studies, among which one of the most interesting aspects addressed in detail by the excavators: the formation of the so-called ›red layer‹. This was a level of secondary tombs deposited on the previously prepared floor of the cave, involving ceremonial rituals including fire and the intense use of red ochre as a colouring agent, sprinkled over the previously deposited bones, as described by the excavators¹³. The contribution by one of the authors (J.L.C.) pertaining to the funerary occupation of this chrono-cultural stage of the cave's occupation – the Middle Neolithic – includes a critical analysis of the information published thus far on the chronology of this layer. The available data were completed by new radiocarbon datings obtained by said author and now published for the first time, as well as a discussion of the methodologies adopted in the successive archaeological interventions conducted at the cave, which severely limit their scientific use, as they are quite disparate and difficult to correlate given the different criteria adopted¹⁴.

Fig. 2: Lapa do Fumo. View of the entrance, located on the limestone cornice occupying the top of the southern slope of Arrábida, dominating the sea. Photo taken in 1957, when the first archaeological works were carried out on the cave.

12 Arruda – Cardoso 2013.

13 Serrão – Marques 1971.

14 Cardoso 2021.

9 The monographic study of particularly interesting isolated materials was also carried out. This is the case of a recycled slate plaque occasionally recovered in the cave, making Lapa do Fumo one of the necropolises with the highest number of this type of reused artefact¹⁵, despite the scarce number of whole and fragmented plaques recovered¹⁶.

10 The present contribution is part of the systematic review and publication of the pre- and protohistoric assemblages from Lapa do Fumo – deposited at the municipality of Sesimbra – both unpublished and previously published, which we hope will continue to be carried out under the coordination of one of the authors (J.L.C.).

2 The Lapa do Fumo Footed Bowl

11 This study concerns a find detected by the first author and accompanied by the third author during the review of the pre- and protohistoric remains recovered in the excavations conducted by Eduardo da Cunha Serrão, or jointly by the latter and Gustavo Marques, currently deposited at the premises of the municipality of Sesimbra, as part of the work started by both in July 2024.

12 It corresponds to a pottery sherd preserving part of the ring connecting the inside of a Bell Beaker bowl to its foot. Thus, we are dealing with yet another example of the so-called footed bowls, in this case with incised decoration on the connection to the foot (a band of oblique lines bordered by a horizontal line), which certainly corresponds to an extension of the decoration on the outer surface of the bowl (Fig. 3). It bears the reference »AR.LF.00177.60« and is devoid of any other identifying element, which makes it impossible to know its position inside the cave.

13 The rarity of this type of Bell Beaker ware, on the one hand, and the lack of an up-to-date inventory of the finds recorded so far in Iberia, on the other, triggered the present study.

14 In terms of the possible recovery contexts, the Bell Beaker footed bowl presented here was found as part of a set composed of other Bell Beaker vessels, not yet fully accounted for, included in the so-called Stratigraphic Complex I (mainly in layer Ia) together with other characteristic artefacts (such as an archer's wrist-guard). Such context corresponds to the Cultural Horizon C of the cave use episodes, containing Chalcolithic remains disturbed by later uses (from the Bronze Age to the Middle Ages, which could explain the fragmented character of the Bell Beaker assemblage). This set is perfectly integrated into a late phase of the Lower Tagus Complex (»Grupo de Palme-la«), dating from the last third of the 3rd millennium BCE, with bell-shaped vessels and Palmela-type bowls with decorations mainly dominated by incised geometric motives (similar to what is documented in the neighbouring cave of Lapa do Bugio¹⁷); therefore, it is apparently included in its original deposition/use context, which thus makes Lapa do Fumo a primary Bell Beaker funerary site.

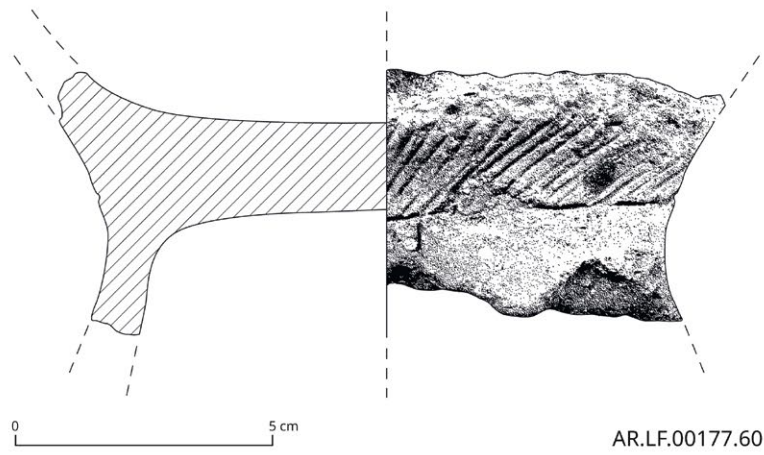
15 As described by Eduardo da Cunha Serrão, »this layer is located on top of another (and perfectly isolated from it) in which Bell Beaker pottery is absent, offering an undisturbed set, identifiable with the western megalithic Culture«¹⁸. In fact, the dense use of this cave during the Middle and Late Neolithic, documented in Stratigraphic Unit II (the »red layer« already mentioned above, corresponding to Cultural Horizon B), which includes several engraved slate plaques, and where one can frame some of the

15 Cardoso – Vilaça 2020.

16 Serrão – Marques 1971.

17 Cf. Cardoso 1992.

18 Serrão 1975, 213; translated from the original in Portuguese by the authors.



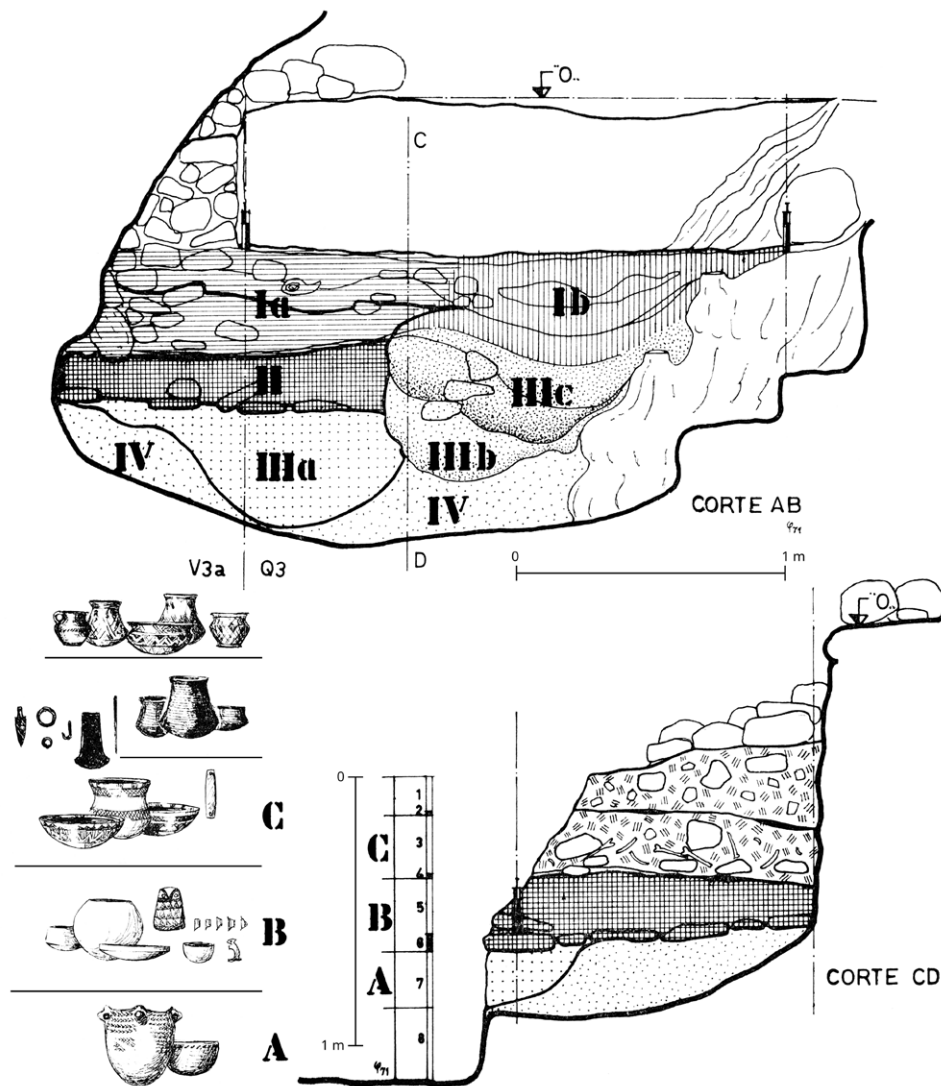
3

recycled plaques mentioned above, is perfectly individualised from the Bell Beaker horizon by a level of compacted clay at the top of the Neolithic sequence, as if ›sealing‹ this previous use of the cave, and physically distinguishing both cultural horizons and their particular artefactual features (Fig. 4).

Fig. 3: The fragment of the footed bowl of Lapa do Fumo with incised decoration.

Fig. 4: Stratigraphic profiles documented in the Lapa do Fumo cave, with indication of the Stratigraphic Units and Complexes identified therein; the correlation between these Units and Stratigraphic Complexes and their respective Cultural Horizons is shown below: Horizon A, Early Neolithic (mainly in Stratigraphic Complex III, with scant evidence in Stratigraphic Unit IV); Horizon B, Middle/ Late Neolithic (Stratigraphic Unit II, corresponding to the ›red layer‹); Horizon C, Middle/ Late Chalcolithic and Middle to Late Bronze Age (Stratigraphic Complex I). On the left, the main artefactual components that characterise these Horizons are represented, showing the Bell Beaker pottery included in Horizon C.

4



4

3 Framework and Geographical Distribution of Iberian Bell Beaker Footed Bowls

16 The emergence and consolidation of regional Bell Beaker ceramic styles, which seem to have appeared in the Lower Tagus area as early as the second quarter of the 3rd millennium BCE¹⁹, entailed a differentiation of forms, themes, motifs, and decorative techniques, thus reflecting the development of particular and autonomous cultural complexes, which consolidated the very social identities of these communities with a clear geographical impact. This phenomenon is particularly evident throughout the second half of the 3rd millennium BCE, and increasingly so during its final centuries.

17 Hence, the main groups with their own specificities can be distinguished as follows²⁰: the Complexes of Lower Tagus (the ›Grupo de Palmela‹, covering the Lower Tagus area), Cienpозuelos (covering the central Iberian region, in the area between the Upper Tagus and the Upper Guadiana rivers), Carmona (covering southwestern

19 Cardoso 2014a; Cardoso 2014b; Cardoso 2017; Cardoso 2019b.

20 Ferreira 1966; Harrison 1977; Guilaine 2019; cf. also the various regional syntheses in Rojo Guerra et al. 2005; Gonçalves 2017; Delibes – Guerra 2019.

Iberia, in the Lower Guadalquivir area), Almería (covering southeastern Iberia), Elche (covering the Levantine area) and Salomó (covering the Catalan area). There could also be a group centred in northwestern Iberia, which could be referred to as the Galician Complex, seemingly more related to the complexes of the Atlantic rim and particularly to the Breton area.

18 Obviously, these are not rigid groups, as they interacted and influenced each other, e. g., the wide expansion of Ciempozuelos stylistic elements spreading from their original area of emergence in Central Iberia to areas such as the Levantine coast and the Alentejo region²¹, or even to the Lower Tagus region, as attested to in the Coruche area²², or even on the Lisbon peninsula at the Freiria settlement²³.

19 In this strict context of interactions and along the formal adaptation of pre-existing morphotypes, such as the characteristic bowls with a thickened rim from the Lower Tagus area (the so-called Palmela-type bowls), new forms emerge, such as the bell-shaped vessels and their counterparts, the carinated bowls (the ›caçoilas‹ or ›cazuelas‹) with a more or less high or sharp carination, shouldered bowls and troncoconical vessels, similar to the Early Chalcolithic cylindrical cups (›copos‹) of Estremadura, which could be their immediate predecessors²⁴, or even ›bomb-shaped‹ pots, among others. This group includes, among other exceptional forms, footed bowls, also known as ›pedestal bowls‹ or ›fruitstands‹, the equivalent of the Iberian ›copas de pie‹, ›taças com pé‹, ›fruteras‹ or ›fruteiras‹, and the French ›coupes à pied‹.

20 As already suggested, the characteristic shape of the footed bowls, with a hemispherical body and a cylindrical or troncoconical foot, would be the result of the combination of two ceramic items characteristic of the Chalcolithic period in southwestern Iberia: the large, open bowls (with or without thickened rims) and the so-called vessel stands‹ or stand-vessels²⁵. Indeed, there is a ›vessel stand‹ in the El Acebuchal complex, with a markedly hyperboloid body, decorated with typically Bell Beaker geometric motifs²⁶, which would logically be used jointly with one of the different open bowls recovered therein. Hence, this assimilation seems fully justifiable (Fig. 5).

4 Inventory

21 With a wide geographical distribution in Iberia, footed bowls are found in contexts with different functionalities, all of which can be integrated in Bell Beaker contexts in both funerary and residential environments and with datings spanning the entire second half of the 3rd millennium BCE (Fig. 6. 7. 8).

Freixo (Batalha, Leiria)

22 This site is characterised by an initial phase of Evolved Early Neolithic occupation, followed by a faint Late Chalcolithic occupation, evidenced by the presence of Bell Beaker pottery²⁷.

23 The limited amount of remains from the latter stage suggests a short-term, sporadic occupation, possibly a small seasonal camp that was part of a settlement

21 Garrido Pena 1997; Bueno Ramírez et al. 2017.

22 Gonçalves et al. 2017.

23 Cardoso et al. 2013.

24 Cardoso 2019b.

25 Gonçalves 2005, 155.

26 Harrison et al. 1976, 137 fig. 44.

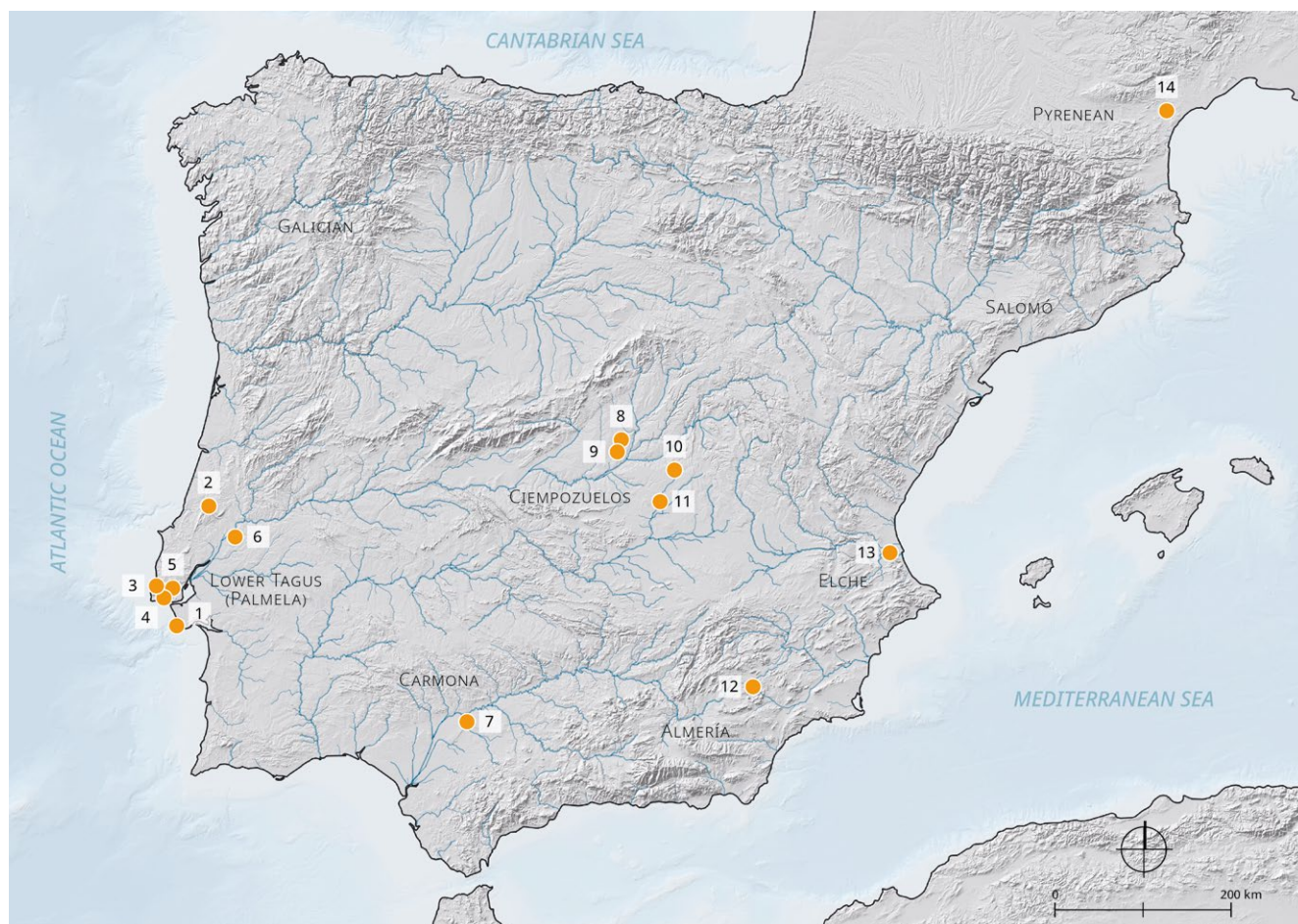
27 Andrade 2015; Andrade – Ramos 2013.

Fig. 5: Above, an idealised representation of a large open hemispherical bowl and a vessel stand; below, the proposed reconstitution of their joint use.

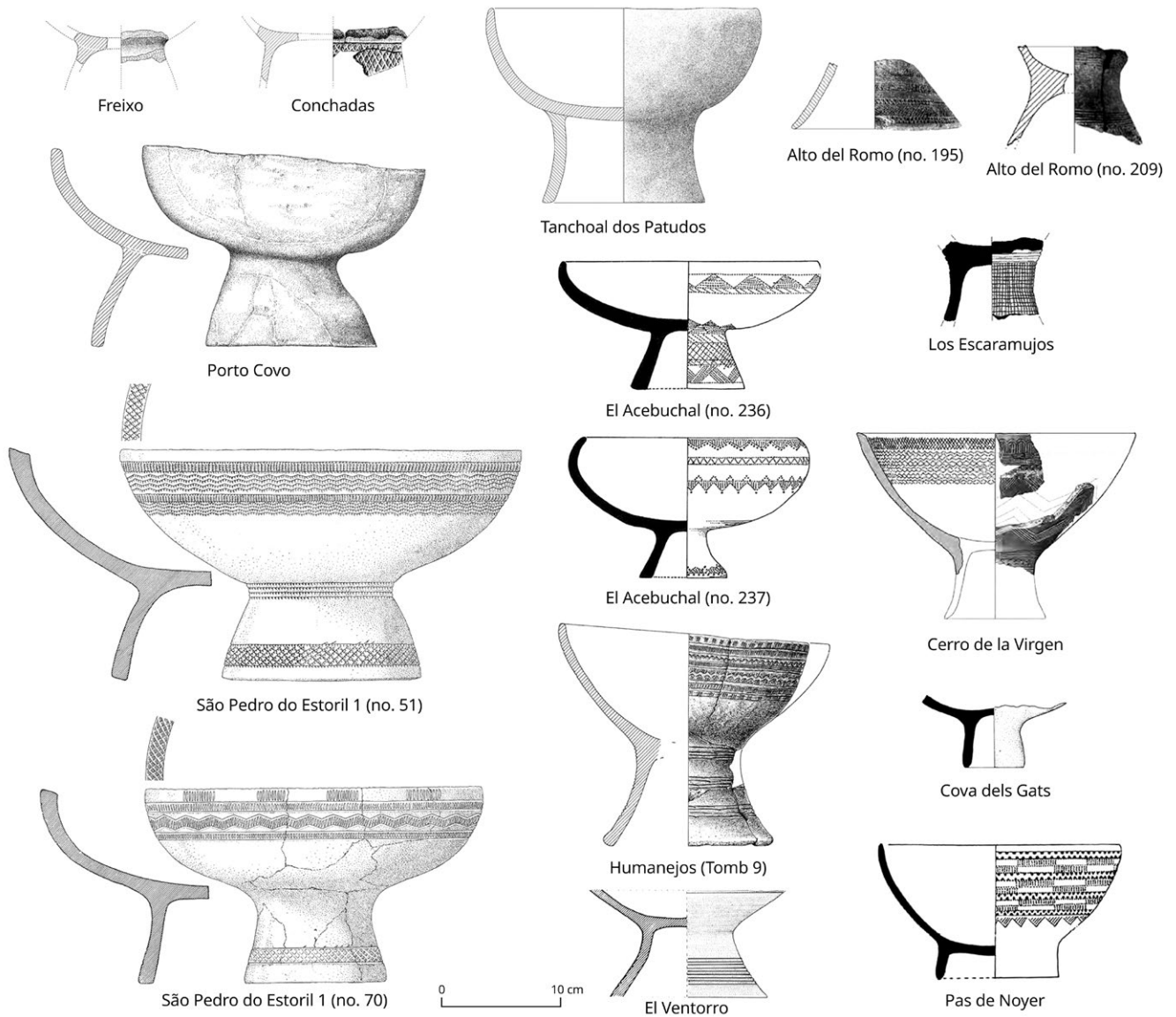


Fig. 6: Distribution of the Bell Beaker footed bowls in the Iberian Peninsula; the main complexes considered are indicated (Lower Tagus/Palmela, Ciempozuelos, Carmona, Almería, Elche, Salomó and Galician). 1 Lapa do Fumo, Sesimbra; 2 Freixo, Batalha; 3 Porto Covo, Cascais; 4 São Pedro do Estoril 1, Cascais; 5 Conchadas, Sintra; 6 Tanchoal dos Patudos, Alpiarça; 7 El Acebuchal, Carmona; 8 El Ventorro, Madrid; 9 Humanejos, Madrid; 10 Alto del Romo, Tarancón; 11 Los Escaramujos, La Puebla de Almoradiel; 12 Cerro de la Virgen, Orce; 13 Cova dels Gats, Alzira. We also include the Pas de Noyer, Armissan find (14), as part of the Pyrenean Complex but culturally related to the Salomó Complex.

5



6



7

network, still not fully understood. The decorative motifs recorded on the Bell Beaker ceramics belong exclusively to the incised geometric style applied to bowls with or without thickened rims, along with plain forms that can be ascribed to the same chrono-cultural stage, such as small carinated bowls or shouldered vessels and bowls with inwardly thickened rims and flat lips, thus corresponding to a late moment of the Bell Beaker complex of the Lower Tagus within the last quarter of the 3rd millennium BCE.

24 This assemblage includes a sherd of the base of a ceramic vessel, preserving the start of the foot. The characteristics of the paste are similar to those recorded in the unequivocally Bell Beaker-type vessels from this site. Thus, we are dealing with a footed bowl²⁸. This is an apparently plain vessel, although the size of the fragment does not allow us to state this with absolute certainty (potentially decorated areas may not have been preserved, e.g., below the rim or on the foot).

Fig. 7: Iberian Bell Beaker footed bowls: Freixo, Batalha; Conchadas, Sintra; Porto Covo, Cascais; São Pedro do Estoril 1, Cascais; Tanchoal dos Patudos, Alpiarça; El Acebuchal, Carmona; Humanejos, Madrid; El Ventorro, Madrid; Alto del Romo, Tarancón; Los Escaramujos, La Puebla de Almoradiel; Cerro de la Virgen, Orce; Cova dels Gats, Alzira. The Pas de Noyer, Armissan find is also included.

28 Andrade – Ramos 2013, 486 fig. 2.

| Site | Context | Location | Cultural Complex | Dating | Condition | Main Decorative Style | References |
|----------------------------|----------------------------------|-----------------------------------------------------|-----------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------|
| 1 – Lapa do Fumo | Funerary (cave) | Sesimbra, Setúbal Lower Estremadura | Lower Tagus (Palmela) | Middle/Late Chalcolithic | Sherd of 1 vessel preserving the start of the foot and the base of the bowl | Incised geometric motives | This study |
| 2 – Freixo | Residential | Batalha, Leiria Upper Estremadura | Lower Tagus (Palmela) | Late Chalcolithic | Sherd of 1 vessel preserving the start of the foot and the base of the bowl | Plain | Andrade – Ramos 2013 |
| 3 – Porto Covo | Funerary (cave) | Cascais, Lisbon Lower Estremadura | Lower Tagus (Palmela) | Late Chalcolithic | 1 complete vessel | Plain | Paço – Vaultier 1943; Paço – Vaultier 1956 Gonçalves 2008 |
| 4 – São Pedro do Estoril 1 | Funerary (hypogeum) | Cascais, Lisbon Lower Estremadura | Lower Tagus (Palmela) | Middle/Late Chalcolithic (2500–2050 cal BC) | 2 complete vessels | Combed geometric motives with white inlays | Leisner et al. 1964; Gonçalves 2005 |
| 5 – Conchadas | Funerary (dolmen) | Sintra, Lisbon Lower Estremadura | Lower Tagus (Palmela) | Middle/Late Chalcolithic | Sherd of 1 vessel preserving part of the foot and the base of the bowl | Incised geometric motives | Ribeiro et al. 1961; Leisner 1965 |
| 6 – Tanchoal dos Patudos | Funerary (?) | Alpiarça, Santarem Ribatejo | Lower Tagus (Palmela) | Middle/Late Chalcolithic | 1 partially complete vessel (reconstitutable form) | Plain | Corrêa 1936; Marques 1972 |
| 7 – El Acebuchal | Funerary (pit grave or hypogeum) | Carmona, Seville Western Andalusia | Carmona | Middle/Late Chalcolithic | 2 complete vessels | Combed geometric motives with white inlays | Harrison et al. 1976 |
| 8 – El Ventorro | Residential | Villaverde Bajo, Madrid Community of Madrid | Ciempozuelos | Middle/Late Chalcolithic (2600–2050 cal BC) | Sherd of 1 vessel preserving the foot and the base of the bowl | Incised motives | Priego Fernández – Quero Castro 1992 |
| 9 – Humanejos (Tomb 9) | Funerary (hypogeum) | Parla, Madrid Community of Madrid | Ciempozuelos | Middle/Late Chalcolithic (2500–2000 cal BC) | 1 complete vessel (reconstituted) | Incised geometric motives | Garrido Pena et al. 2019 |
| 10 – Alto del Romo | Residential | Tarancón, Cuenca Castile – La Mancha | Ciempozuelos | Middle/Late Chalcolithic | Sherds of 4 different vessels preserving part of the foot or part of the foot and the base of the bowl | Plain Incised geometric motives | Vicente Navarro et al. 2007; Vicente Navarro – Rodríguez-Malo 2010 |
| 11 – Los Escarmujos | Residential | La Puebla de Almoradiel, Toledo Castile – La Mancha | Ciempozuelos | Late Chalcolithic | Sherd of 1 vessel preserving part of the foot and the base of the bowl | Incised geometric motives | López Martínez – Martín Alonso 2010 |
| 12 – Cerro de la Virgen | Residential | Orce, Granada Eastern Andalusia | Almería | Middle/Late Chalcolithic (2500–2150 cal BC) | Sherds of 1 vessel preserving the rim and base of the bowl and the start of the foot | Incised geometric motives | Molina González et al. 2017 |
| 13 – Cova dels Gats | Funerary (cave) | Alzira, Valencia Valencian Community | Elche | Late Chalcolithic | Sherd of 1 vessel preserving the foot and the base of the bowl | Plain | Bernabeu Aubán 1984 |
| 14 – Pas de Noyer | Funerary (cave) | Armissan, Aude Western Occitania | Pyrenean | Late Chalcolithic | 1 complete (?) vessel | Combed and incised geometric motives | Guilaine 1965 |

Fig. 8: Inventory of sites with Bell Beaker footed bowls in the Iberian Peninsula (the Pas de Noyer, Armissan find is also included); the numbering that precedes the toponym refers to its indication in Fig. 6.

Porto Covo (Cascais, Lisbon)

25 This small karst cavity featured a phase of initial use dating from the Middle Neolithic (mid/second half of the 4th millennium BCE, with geometric armatures and polished stone artefacts), a poorly characterised intermediate phase dating from the Early Chalcolithic (first half of the 3rd millennium BCE); and a final phase dating from the Late Chalcolithic (second half of the 3rd millennium BCE) which included Bell Beaker wares²⁹. This phasing is partly corroborated by the dates obtained, basically with intervals centred on the mid- and third quarter of the 4th millennium BCE, and an isolated dating to the second quarter of the 3rd millennium BCE³⁰.

26 The exhumed Bell Beaker assemblage was ascribed to a single burial, whose grave goods include a plain footed bowl³¹ and possibly also a plain, bell-shaped vessel and a Palmela-type point. The fact that only plain vessels were recovered may indicate that this deposition took place at a late stage of the Bell Beaker phenomenon.

São Pedro do Estoril 1 (Cascais, Lisbon)

27 Included in a group of two hypogean tombs with identical features located just over ten metres apart, tomb 1 of São Pedro do Estoril revealed an extensive funerary use over a longer time span³².

28 These tombs were probably built and originally used during the late Middle Neolithic or early Late Neolithic period, as evidenced by the grave goods found in tomb 2 (consisting of polished stone artefacts) as well as by the results of one of the radiocarbon datings obtained for tomb 1, centred on the mid-4th millennium BCE³³. Hence, these tombs were used extensively during the Early Chalcolithic period, in the first half of the 3rd millennium BCE, as evidenced by the presence of abundant ceramic vessels (including ribbed cups or bowls, and ›lamp vessels‹), knapped stone artefacts (blades, arrowheads), cylindrical limestone idols, bone ›bottleneck idols‹ (›ídolos-gola‹), bone pins and other assorted items of adornment³⁴.

29 The period of use corresponding to the Middle/Late Chalcolithic period (during the second half of the 3rd millennium BCE) is characterised by the presence of Bell Beaker vessels (plain bell-shaped vessels or with ›maritime‹ style decorations, bowls with combed geometric decoration; carinated bowls with combed and incised geometric decoration; thickened rim bowls with incised geometric decoration; and footed bowls with geometric decoration), copper artefacts (small daggers, points, and awls), archer's wrist-guards, bone or ivory buttons, and gold spirals³⁵. Dating results indicate a context from the second half of the 3rd millennium BCE for this assemblage³⁶.

30 The two footed bowls recovered herein were found virtually in their original position, roughly in the central area of the tomb, between the 0.75–0.66 m and 0.65–0.56 m excavation levels and correspond to items number 51 and 70 according to the field records, respectively³⁷. Both were part of the so-called Group 5 of Bell Beaker depositions³⁸, spatially related to well-individualised human remains, configuring specific inhumations. Bowl no. 51 (the largest) was directly associated with a plain bell-shaped

29 Paço – Vaultier 1943; Paço – Vaultier 1956; Gonçalves 2008.

30 Gonçalves 2008, 161.

31 Gonçalves 2008, 130 f. fig. 2.38.

32 Leisner et al. 1964; Leisner 1965, 100–117 pls. 82–93; cf. also Gonçalves 2003; Gonçalves 2005.

33 Cf. Leisner 1965, pl. 85; Gonçalves 2005, 68; Gonçalves 2009, 492.

34 Leisner 1965, pls. 85–89.

35 Leisner 1965, pls. 85–87. 90–93.

36 Gonçalves 2005, 68; Gonçalves 2009, 492.

37 Cf. Leisner 1965, pl. 84.

38 Cf. Leisner et al. 1964, 64 f.

vessel and bowl no. 70 was associated with the set of eleven bone buttons arranged in a line, apparently *in situ*, which characterised the famous ›coat burial‹³⁹. The latter was quite close to bowl no. 51; some other buttons, copper awls, and two gold spirals can be indirectly associated with it.

31 Both footed bowls feature combed geometric decorations (with certain compositions apparently framed by incised lines), applied to the upper half of the body (a frieze below the rim, complemented by metopes in the case of bowl no. 70), combined with reticulated motifs on the lip and a band of reticulated motifs framed by fluting at the base of the foot. Bowl no. 51 also bears a band of four horizontal grooves at the junction between the body and the foot. Both items have polished surfaces, with the decoration filled in with ›white inlay‹⁴⁰.

32 The overall context of these items (mainly in terms of their ›stylistic‹ features) supports their ascription to a full moment of the Lower Tagus Bell Beaker complex, as evidenced by the radiocarbon dating results, which may reach back as far as the mid-3rd millennium BCE.

[Conchadas \(Sintra, Lisbon\)](#)

33 This is a dolmen featuring a chamber and corridor, built and originally used between the end of the 4th millennium BCE and the first half of the following millennium. This monument yielded polished and knapped stone artefacts (geometric armatures, arrowheads and blades), ceramic vessels (including ribbed vessels and decorated with spine motifs on the inner surface), engraved slate plaques, cylindrical limestone idols, bone lagomorph figurines, and bone pins with plain detachable heads⁴¹. A second stage in the use of this tomb, which can be ascribed to the second half of the 3rd millennium BCE and to the peak phase of the Lower Tagus Bell Beaker complex, is evidenced by the presence of Bell Beaker vessels (including vessels with ›maritime‹ style decoration and bowls with combed and incised geometric decoration) and bone or ivory buttons⁴². Several fragments of a decorated Bell Beaker vessel were identified, but its shape could not be reconstructed. It was suggested by Rui Boaventura⁴³, and earlier by Konrad Spindler⁴⁴, that it might correspond to a footed bowl, wrongly orientated by Vera Leisner⁴⁵. By repositioning the various fragments of this vessel on the basis of the graphic information published by the latter author, it is possible to see that this item's foot is decorated with a band of reticulated incisions, a pattern that would be repeated on the body, as shown by the fragments of the wall that have been preserved. Richard Harrison described it, but as a ›composite vessel‹, assigning it a combed decoration⁴⁶.

[Tanchoal dos Patudos \(Alpiarça, Santarém\)](#)

34 This site is mainly known for its Late Bronze Age necropolis⁴⁷ but also features a Bell Beaker occupation that is difficult to characterise. The assemblage from the latter stage includes a plain footed bowl, a trilobate vase with combed geometric decoration and a bowl also with combed geometric decoration that is quite exceptional among the

39 Gonçalves 2005, 89; Gonçalves 2008, 171.

40 Leisner et al. 1964, 47. 51 pls. K. L; Leisner 1965, pls. 92. 93.

41 Leisner – Ferreira 1959; Ribeiro et al. 1961; Leisner 1965, 35–38 pls. 26–28.

42 Ribeiro et al. 1961; Leisner 1965, pls. 27. 28.

43 Boaventura 2009, 106 f.

44 Spindler 1981, 256.

45 Leisner 1965, pls. 28. 81.

46 Harrison 1977, 139.

47 Marques – Andrade 1974; Vilaça et al. 1999.

Bell Beaker wares⁴⁸. It was recovered by workers in unclear conditions, apparently in various places of the same estate and along with the finds from the Bronze Age incineration necropolis⁴⁹. Later reviews of this assemblage⁵⁰ ascribed these three vessels to the Bell Beaker occupation but attributed the origin of the bowl with combed geometric decoration to the area of Castelo de Alpiarça, and not to Tanchoal dos Patudos⁵¹.

35 The undecorated footed bowl is well preserved⁵². The condition of the recovered items, as well as the presence of exceptional types, such as the trilobate vessel, suggests the existence of a funerary context. Indeed, this site is part of a wider context that includes the neighbouring areas of Castelo and Cabeço da Bruxa, which also yielded Bell Beaker pottery belonging to the combed geometric and incised geometric styles⁵³. Particularly in the case of Cabeço da Bruxa, given the characteristics of the recovered items, this could be a funerary context⁵⁴.

[El Acebuchal \(Carmona, Seville\)](#)

36 Located in the area of influence of the large demographic centre of Valencina de la Concepción (some 30 km away), a strict reading of this site raises some questions, mainly due to its early excavation at the end of the 19th century, motivated by the intervention in the Orientalizing necropolis that overlaps it. Actually, according to the available data, the existence of a residential space and a funerary space are combined here, a fact that has proven to be common in this region during the Bell Beaker period. Although Richard Harrison and his collaborators point out that there is no concrete evidence of funerary contexts that can be associated with Bell Beaker levels⁵⁵, the later published documentation from the excavation during the first decade of the 20th century clearly indicates the association of Bell Beaker vessels with funerary depositions⁵⁶. Thus, while the site's residential contexts are evidenced by the identification of the so-called hut floors and silos, in addition to all the panoply of artefacts and ecofacts that characterise this type of occupations, the funerary contexts are evidenced by the presence of negative structures (which may correspond to unstructured graves or small hypogea, sometimes spatially related to the aforementioned »hut floors«). These funerary contexts yielded, in association with human remains, relatively well-preserved Bell Beaker vessels, as well as other items characteristic of the Bell Beaker package, such as copper artefacts, archers' wrist-guards and bone or ivory buttons.

37 The large assemblage of Bell Beaker pottery associated with both funerary and residential contexts includes a significant number of Bell Beaker vessels with »maritime« style decoration, as well as hemispherical bowls and carinated bowls (along with other less usual forms) with combed and incised geometric decoration⁵⁷. This assemblage also includes two footed bowls (nos. 236 and 237) with combed geometric decorations, characteristic of the Carmona Complex (which may have resulted from the assimilation of features from the Lower Tagus and Ciempozuelos Complexes). The decorative patterns were applied to the upper half of the vessel's body (frieze below the rim), combined

48 Corrêa 1916; Corrêa 1936.

49 Corrêa 1916, 331; Corrêa 1936, 134 cf. pls. 4, 6.

50 Marques 1972; Harrison 1977, 155.

51 Marques 1972, pl. 1.

52 Corrêa 1916, 332 fig. 3; Corrêa 1936, pl. II 4; Marques 1972, pl. 1.

53 Cf. Gonçalves et al. 2017, 117–119.

54 Cf. Kalb – Höck 1980; Kalb – Höck 1981/1982, 61.

55 Harrison et al. 1976, 83.

56 Lazarich González et al. 1995.

57 Harrison 1977, 71 f.; cf. also Harrison et al. 1976.

with equally geometric motifs applied to the foot. The surfaces were polished, and the decoration was filled in with ›white inlays‹.

38 We would highlight the ›vessel stand‹ with geometric decoration similar to the footed bowls⁵⁸, which can be integrated into the same cultural context (reinforcing the proposal put forward above regarding the relationship between bowls and ›stands‹ during the Bell Beaker period).

[El Ventorro \(Villaverde Bajo, Madrid\)](#)

39 This settlement features a long occupation sequence, from the Late Neolithic/Early Chalcolithic (in the lower stratum and including typical Late Neolithic carinated bowls) to the Late Chalcolithic (in the upper stratum, with abundant Bell Beaker pottery, dated to the second half of the 3rd millennium BCE)⁵⁹.

40 The Bell Beaker assemblage includes the typical styles of the Ciempozuelos Complex, with imprinted and mostly incised geometric motifs (the latter sometimes complemented by imprinted motifs) applied to bell-shaped vessels, carinated bowls and hemispherical bowls, also on the inner surface of the vessels (frieze of geometric ›herringbone‹ motifs below the rim line) or on their bases (bands radiating from the *omphalós*), a distinctive feature of this group.

41 Along with some of these characteristic items (including bell-shaped vessels with composite decoration), a fragment of a footed bowl was recovered in one of the ›hut floors‹; the lower half of this vessel was decorated with a band of nine incised horizontal grooves⁶⁰. Hence, it can be ascribed to the Ciempozuelos Complex and can be associated with a dating result centred on the last third of the 3rd millennium BCE, although it should be noted that the recovery of the dated sample is related to the pre-Bell Beaker phase of the settlement⁶¹.

[Humanejos \(Parla, Madrid\)](#)

42 This is an extensive residential context, including a ditched enclosure that was probably occupied between the beginning of the Chalcolithic and the Bronze Age, associated with an equally extensive necropolis. The funerary contexts documented here, particularly the Bell Beaker ones, correspond to unstructured tombs or small, scattered hypogea, used throughout the second half of the 3rd millennium BCE, according to the results of the available radiocarbon datings⁶².

43 Only nine of these tombs contained Bell Beaker assemblages (although there were others that provided comparable radiocarbon datings); the grave goods include all the fundamental elements of the Ciempozuelos Complex, also with ›maritime‹ style vessels. In addition to plain vessels, there are also vessels with imprinted and incised geometric decoration (sometimes combined) applied to bell-shaped vessels, carinated bowls and hemispherical bowls. Decoration can be found on the inner surface of the vessels (frieze with geometric herringbone‹ motifs below the rim line) or on the base (bands radiating from the *omphalós*), a distinctive feature of this group. They are associated with other typical elements, such as copper artefacts (Palmela-type points, tanged daggers, awls, halberd and axe), archers' wrist-guards, gold ornaments, buttons and bone or ivory beads.

58 Harrison et al. 1976, 137 fig. 44.

59 Priego Fernández – Quero Castro 1992; Díaz-del-Río 2001.

60 Priego Fernández – Quero Castro 1992, 235 fig. 119.

61 Priego Fernández – Quero Castro 1992, 368 f.

62 Garrido Pena et al. 2019.

44 Tomb 9⁶³ corresponds to a small ›well-like‹ hypogeum where a minimum of two burials were recorded; the set of grave goods includes a footed bowl, a ›maritime‹ style bell-shaped vessel, a large carinated bowl with combed geometric decoration, a hemispherical bowl with composite geometric decoration, a bell-shaped vessel with incised geometric decoration, a plain bowl and an ivory button. The footed bowl is decorated with incised geometric motifs arranged on the upper half of the body; the foot is also decorated, starting from its junction with the body, with three bands of four incised horizontal flutings⁶⁴.

45 The available radiocarbon datings for this context indicate two statistically distinct stages⁶⁵: one centred on the third quarter of the 3rd millennium BCE and another centred on the last quarter of the same millennium. This is consistent with two episodes of use, between the full and the final stages of the Ciempozuelos Complex. The deposition of the footed bowl may correspond to this last moment (although the disturbances recorded do not allow us to state this with certainty).

Alto del Romo (Tarancón, Cuenca)

46 This settlement apparently features a single occupation phase, during the second half of the 3rd millennium BCE⁶⁶.

47 The group of Bell Beaker wares includes the specific decorative motifs of the Ciempozuelos Complex (including later elements of the Dornajos type), with mainly incised geometric decorations (sometimes complemented with imprinted patterns) applied to Bell Beaker vessels, carinated bowls and hemispherical bowls, including, once again, decoration on the inner surface of the vessels (frieze of geometric herringbone‹ motifs below the rim line) or on their bases (bands radiating from the *omphalós*).

48 Four fragments of footed bowls, including plain components, have been identified in this context, associated with hemispherical bowls and carinated bowls with typical decorations of the Ciempozuelos Complex⁶⁷. Find no. 195 corresponds to part of the foot (but was graphically represented as if it were the vessel's mouth) and is decorated with three visible bands of reticulated incisions framed by bands of circular impressions. Find no. 209 preserves part of the vessel's base and a large part of the foot, which is decorated with bands of incised horizontal flutings. Other illustrated items also appear to preserve part of the start of the foot (judging from the illustration) and might be footed bowls, or some other type that has not yet been determined⁶⁸.

Los Escaramujos (La Puebla de Almoradiel, Toledo)

49 This settlement features an association of artefactual and structural aspects typical of this type of context, with two phases of occupation, one relating to the Late Chalcolithic period (last third of the 3rd millennium BCE), and the other to the Bronze Age, evidenced by the presence of ceramic forms and decorations that could be ascribed to the proto-Cogotas horizon⁶⁹.

50 The Bell Beaker assemblage includes the specific decorative motifs of the Ciempozuelos Complex, including later features of the Dornajos type, with mainly incised geometric decorations, sometimes complemented by imprinted patterns, applied to bell-shaped

63 Garrido Pena et al. 2019, 140–150.

64 Garrido Pena et al. 2019, 148 fig. 224; 182 fig. 252.

65 Garrido Pena et al. 2019, 22 fig. 9; 141.

66 Vicente Navarro et al. 2007; Vicente Navarro – Rodríguez-Malo 2010.

67 Vicente Navarro et al. 2007, 70 pl. 1; Vicente Navarro – Rodríguez-Malo 2010, 92 fig. 10.

68 Cf. Vicente Navarro – Rodríguez-Malo 2010, 90 fig. 8.

69 López Martínez – Martín Alonso 2010.

vessels, carinated bowls and hemispherical bowls. Also noteworthy is the characteristic application of decoration to the base of the vessels (bands radiating from the *omphalós*). This assemblage includes a fragment of a footed bowl that preserves part of the vessel's base and a large part of the foot, which is decorated with an incised reticulated band, topped, in the area where it joins the body, by another band of incised horizontal lines⁷⁰.

51 Although no absolute datings are known, this item could be ascribed to the full or final stages of the Ciempozuelos Complex.

Cerro de la Virgen (Orce, Granada)

52 This is a fortified settlement with long and complex sequences, combining residential and funerary spaces, from the Chalcolithic to the Bronze Age⁷¹. The original fortification dates back to the Middle Chalcolithic (mid-3rd millennium BCE). It was further extended during the following two phases, between the Late Chalcolithic and the Bronze Age (between the second half of the 3rd millennium BCE and the third quarter of the following millennium), as indicated by the available radiocarbon datings, including those relating to the associated funerary contexts⁷².

53 The Bell Beaker wares, initially characterised by the ›maritime‹ style, appear around the mid-3rd millennium BCE, gradually becoming less representative and being replaced, around the last quarter of the 3rd millennium BCE, by Bell Beakers with imprinted and mainly incised geometric decorations (sometimes complemented by imprinted motifs). This assemblage includes vessels with decoration applied to the inner surface (frieze of geometric herringbone‹ motifs or bands of zigzagging incised lines below the rim line). This corresponds to the development of the Almería Complex (in a way, an ›epilogue‹ to the Los Millares Culture), strongly influenced at an early stage by the models of the Ciempozuelos Complex⁷³.

54 Among the imprinted and incised decorations applied to Bell Beaker vessels, hemispherical bowls and carinated bowls, the assemblage includes part of the rim and base of a footed bowl, where part of the start of the foot can still be seen⁷⁴. It is decorated with incised geometric motifs above a band of circular imprinted motifs (in a frieze below the rim), under which, covering the lower two-thirds of the body, there are three bands of zigzagging incised lines; the foot, right from where it attaches to the vessel's body, is decorated with incised bands alternating with bands of circular imprinted motifs. This item belongs to the final stage of this second phase of the site's occupation and can therefore be ascribed to a full moment of the Almería Complex, after the influence of the Ciempozuelos styles, with dating results indicating the last quarter of the 3rd millennium BCE⁷⁵.

Cova dels Gats (Alzira, Valencia)

55 This karst cavity featured very homogeneous funerary use dating from the Late Chalcolithic period (during the last third of the 3rd millennium BCE), even taking into account the presence of certain ceramic and metal elements attributable to the Early Bronze Age.

56 The Bell Beaker assemblage includes a fragment of an apparently plain footed bowl⁷⁶. There are also ›maritime‹ style Beakers as well as vessels with imprinted

70 López Martínez – Martín Alonso 2010, 309 fig. 5.

71 Schüle – Pellicer 1966.

72 Molina González et al. 2004; Molina González et al. 2014; Molina González et al. 2017.

73 Molina González et al. 2017.

74 Molina González et al. 2017, 263 fig. 3.

75 Molina González et al. 2004, 150; Molina González et al. 2017, 261.

76 Bernabeu Aubán 1984, 48 fig. 16.

| Site | Inner diameter (cm) | Inner height (cm) | Ratio Diam./Ht. | Volume (cm ³) | Capacity (litres) |
|---------------------------------|---------------------|-------------------|-----------------|---------------------------|-------------------|
| Porto Covo | 21.5 | 8.5 | 2.53 | 1796.93 | 1.80 |
| Tanchoal dos Patudos | 21.6 | 8.4 | 2.57 | 1773.37 | 1.77 |
| São Pedro do Estoril 1 (no. 51) | 30.2 | 9.8 | 3.08 | 3570.34 | 3.57 |
| São Pedro do Estoril 1 (no. 70) | 25.2 | 7.7 | 3.27 | 1868.86 | 1.87 |
| El Acebuchal (no. 236) | 20.2 | 4.8 | 4.21 | 615.25 | 0.62 |
| El Acebuchal (no. 237) | 18.2 | 6.8 | 2.68 | 992.66 | 0.99 |
| Humanejos (Sep. 9) | 20.6 | 8.5 | 2.42 | 1694.79 | 1.70 |
| Cerro de la Virgen | 21.6 | 9.0 | 2.4 | 1984.86 | 1.99 |
| Pas de Noyer | 18.8 | 8.4 | 2.24 | 1463.03 | 1.46 |

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and incised decoration (Bell Beaker vessels, carinated bowls and hemispherical bowls, sometimes combining both techniques), plain vessels, Palmela-type copper points, bone buttons and beads, copper awls, and an archer's wrist-guard⁷⁷.

57 Even considering the presence of examples of the ›maritime‹ style, which could take the use of this context back to at least the mid-3rd millennium BCE, this occupation constitutes a ›typologically uniform‹ context, belonging to the full or final stages of the Elche Complex (Joan Bernabeu Aubán's ›Transition Horizon‹), with a strong regional character, parallel to the Ciempozuelos and Salomó Complexes⁷⁸.

Pas de Noyer (Armissan, Aude)

58 This is a funerary cave located not in Iberia but in the western part of the French Mediterranean strip, beyond the Pyrenees. Its inclusion in this study is justified by the obvious Iberian influence on the Bell Beaker groups of Southwestern France, particularly those of the Pyrenean Complex. Indeed, this corresponds to a group that falls within an intermediate phase of the regional Bell Beaker phenomenon (over the last third of the 3rd millennium BCE, after the advent of the first ›maritime‹ style vessels in the region from the mid-3rd millennium onwards). There are clear influences from the Salomó Complex and indirectly also from the Ciempozuelos Complex⁷⁹.

59 The footed bowl decorated with composite motifs, recovered from a context where imprinted and incised geometric decorations were applied to Bell Beaker vessels, bears bands of combed metopes alternating with bands of circular impressions, topped by a band of incised triangles, on the body⁸⁰. It was apparently recovered along with a Bell Beaker vessel bearing a similar decoration and, as mentioned above, can be ascribed to a full moment of the Pyrenean Complex (last third of the 3rd millennium BCE).

5 Closing Remarks

60 During the bibliographical survey that substantiated the considerations presented above, further information was gathered on the presence of footed bowls, which should also be considered. Konrad Spindler, in his inventory of the occurrences in Portuguese territory of his ›Fußschalen‹ and ›Fußgefäße‹ (bowls with stand or foot,

Fig. 9: Bell Beaker footed bowls in the Iberian Peninsula (also including the find from the Pas de Noyer cave, for the sake of context) and main reference measurements (inner diameter and inner height/depth, obtained from the values provided in the corresponding literature or determined on the basis of the supporting illustrations).

77 Bernabeu Aubán 1984, 16 f. 35–50 figs. 13–18.

78 Bernabeu Aubán 1984, 108 f.

79 Guilaine 1959; Guilaine 1965; Treinen 1970; Guilaine et al. 2003; Lemerrier 2003; Lemerrier et al. 2007; Lemerrier 2012.

80 Guilaine 1965, 37 fig. 3.

and vases with stand or foot), indicates, in addition to some of the items described above (e. g., from Tanchoal dos Patudos, Conchadas, Porto Covo, São Pedro do Estoril and even Lapa do Fumo), other items that could not be confirmed. These include finds from the caves of Nascente do Almonda (»an undecorated footed bowl«), Ponte da Laje (»fragment of a footed bowl«) and Verdelha dos Ruivos (»two footed bowls«), or even from Vila Nova de São Pedro (»two footed bowls«)⁸¹. However, recent exhaustive reviews of two of these complexes – Ponte da Laje cave and Verdelha dos Ruivos cave – conducted by one of the authors (J.L.C.) led to the following conclusions.

61 As far as the Ponte da Laje cave is concerned, there is in fact a junction ring of a very eroded, high-footed vessel, which was ascribed to the Bronze Age⁸² and thus added to the assemblage recovered therein, based essentially on the characteristics of the paste with abundant volcanic minerals. This is often the case in Bronze Age, unlike the regional Bell Beaker pastes, which do not contain such minerals in this amount⁸³. A Bronze Age high-footed bowl is known in this region, preserved in the Alenquer Museum and referred to in the aforementioned paper, which had already been studied by Thomas Bubner in 1984. This is why this particular item was not included in the subsequent review of the Bell Beaker wares recovered from the site⁸⁴. Regarding the Verdelha dos Ruivos cave, a full review of the exhumed remains allows us to safely rule out the hypothesis that any item of this type was ever recovered there⁸⁵. On the other hand, the graphic information included in the literature referred to by Konrad Spindler concerning the other sites he mentions did not shed any light on this issue.

62 In any case, what is important to emphasise is that, considering the footed bowls that have been inventoried and their geographical distribution, it can be concluded that their production and use are not limited to a given region. Indeed, they are a form common to the different Bell Beaker complexes of Iberia (and even beyond). Moreover, their diachrony is also noteworthy, given their presence in a full or final period of Bell Beaker contexts, throughout the last third of the 3rd millennium BCE.

63 As opposed to the »traditional reading«, this form is not exclusively found in funerary contexts – where it is present in tombs of various types, either reused or built from scratch – but is also documented in residential contexts, including small sites with short occupations, such as Freixo. It can therefore be assumed that this is a form whose presence, although rare, was quite regular within the Bell Beaker »tableware«, where it may have had its own function; in addition to its connotation to funerary rituals, it certainly played a role in daily activities carried out in household environments, which does not rule out its »ceremonial character«. The finds from Alto del Romo may shed some light on this aspect, since the changes observed on the vessels' inner surfaces indicate that they were exposed to fire, involving the burning of as yet undetermined substances⁸⁶.

64 Figuring out the capacity⁸⁷ of these vessels also provides some interesting data. Indeed, their capacity lies mainly between 1.7 and 2 litres (Porto Covo, Tanchoal dos Patudos, Humanejos, Cerro de la Virgen and item no. 70 from São Pedro do Estoril 1), with an average value of 1.82 ± 0.11 litres. The vessels that feature different values are items no. 236 and no. 237 from El Acebuchal, with minimum capacities of around 0.6

81 Cf. Spindler 1981, 253–263 pl. 52; cf. also p. 162 n. 900.

82 Cardoso – Carreira 1996, 348 fig. 6, 1.

83 Cf. Cardoso et al. 2005; Convertini – Cardoso 2022.

84 Cardoso 2013.

85 Cardoso 2024.

86 Vicente Navarro et al. 2007, 52; Vicente Navarro – Rodríguez-Malo 2010, 73.

87 Volumes were calculated using the following formula: $V = 1/2 \pi h_2 (3r - h)$; h is the inner height of the vessel (i. e., its depth) and r its inner radius, obtained from the values provided in the corresponding literature or determined on the basis of the supporting illustrations; the values obtained in cm³ of volume were subsequently converted into capacities (litres).

and 1 litre, respectively, and maximum capacities of around 3.6 litres in the case of item no. 51 from São Pedro do Estoril 1 (Fig. 9). Overall, footed bowls had an average capacity of 1.79 ± 0.87 litres. These results do not mean that there was a ›standard measure‹, but rather an intentional ›regulation‹ or simply the result of needs, of the average quantity of the substance that would be handled during any ›ceremonial acts‹ (or any other kind of acts), around 1.8 litres.

65 The comparison exercises between the diameter/height ratio and the capacity of the vessels carried out by Rafael Garrido Pena and his collaborators concerning inland Iberia⁸⁸ support the hypothetical functionality of the different Bell Beaker forms, thus distinguishing between large storage vessels, distribution vessels, vessels intended for the consumption of liquid substances, and vessels intended for the consumption of solid substances. These results, combined with the analyses of the organic residues detected on some of these vessels, thus determining their specific functions (by detecting evidence of fermented drinks made from wheat or barley and traces of animal fat), suggest that they were used in cult or commensal ceremonies, both in residential and funerary settings. Hence, they fulfilled an obvious social role, and it has even been suggested that, in specific groups (such as the Lower Tagus, Carmona and Ciempozuelos Complexes), the footed bowls could serve as ›individual drinking vessels‹, and therefore could be integrated into the ›tableware‹ that would make up the ›ceremonial triad‹, often deposited together and consisting of the bell-shaped vessel, the carinated bowl and the hemispherical bowl, as it could replace the latter⁸⁹. However, while this interpretation may be acceptable for wares without thickened rims, concerning any vessels with thickened rims belonging to the Lower Tagus Complex, such use would naturally be made impossible by the very morphology of the vessels' rims.

66 On the other hand, calculating the capacity values obtained for the footed bowls in the scope of this study and integrating them into the set of values provided by Rafael Garrido Pena, shows that the diameter/height ratio and the capacity of footed bowls mean that, broadly speaking, they stand on the boundary between the hemispherical bowls or small carinated bowls intended for the consumption and distribution of liquid substances and the larger carinated bowls intended for the consumption of solid substances (the outliers being the two items from São Pedro do Estoril 1 and item no. 236 from El Acebuchal) (Fig. 10). Therefore, between the distribution vessel and the vessel for direct consumption, the definition of this type of vessel's functionality is open for the time being.

67 In this regard, an attempt to approach the functionality of Iberian Bell Beaker footed bowls could be tested by comparing them with elements with similar morphological features documented on other chrono-cultural contexts, even on other geographic frames. Therefore, based on a general European survey, the proposals listed below may be accepted.

68 At a local level (in the strict context of the Iberian Peninsula), the parallelism with the footed vessels from the Argaric Bronze Age of Southeastern Spain cannot go unmentioned; they are present, among others, at the sites of El Argar and Fuente Álamo, both in domestic and funerary contexts⁹⁰, as well as in contexts of reuse of earlier megalithic monuments, as documented in Los Eriales (Tomb 14) or Pantano de los Bermejales (Tomb 8), with radiocarbon datings between the mid- and second half of the 2nd millennium BCE⁹¹. They correspond to Hermanfrid Schubart's Form 7 of argaric

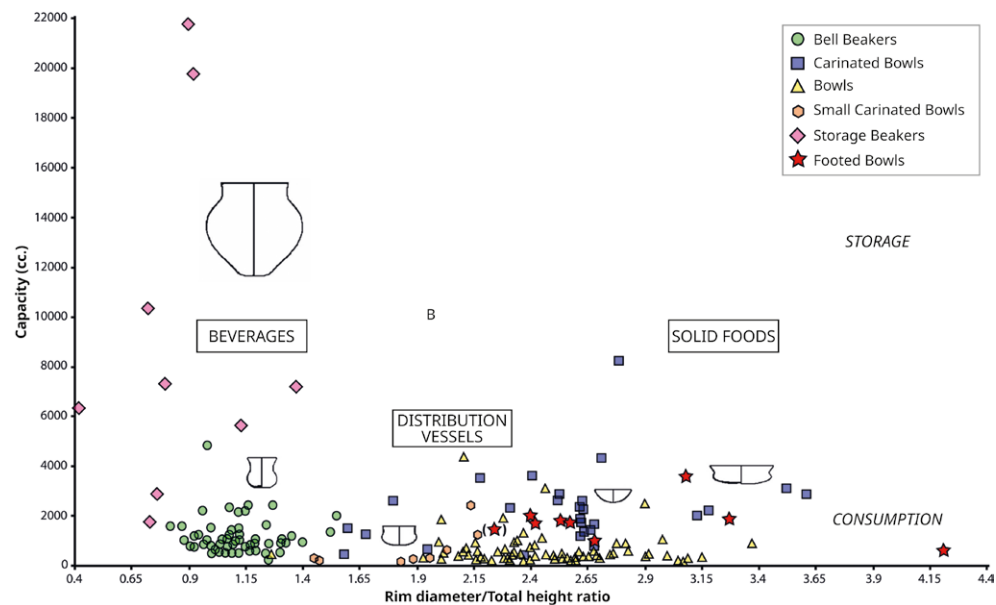
88 Garrido Pena et al. 2011.

89 Garrido Pena et al. 2011, 113–117; Garrido Pena 2019, 62 f.; Guerra Doce – Delibes de Castro 2019, 230–235.

90 Schubart 1975; Arteaga – Schubart 1980; Schubart et al. 2000; Schubart et al. 2006.

91 Leisner – Leisner 1943; Arribas – Ferrer 1997; Aranda Jiménez 2015; Milesi García et al. 2023.

Fig. 10: The relation between the diameter/height ratio and the capacity (in cm³) of typical Bell Beaker vessels (bell-shaped vessels, large and small carinated bowls, hemispherical bowls and storage vessels) and their potential functionality in ›commensality rituals‹, including data pertaining to the footed bowls studied herein (indicated by red stars; the Pas de Noyer cave item, for the sake of context, is indicated in brackets).



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pottery⁹², evolving from vessels with a troncoconical or cylindrical hollow foot (similar to the Bell Beaker footed bowls) to vessels with a tall and narrow foot (the so-called calyces), between the cultural horizons of El Argar A and El Argar B. The influence of these Southeastern Bronze Age vessels could also extend as far as South-Central Portugal if we consider their presence in the hypogeic necropolis of Torre Velha 3, directly dated to the mid-2nd millennium BCE⁹³, or even the example from the Ponte da Laje cave already mentioned⁹⁴.

69 In the Central Mediterranean region, specifically in the Sardinian and Corsican areas, they are also present in funerary contexts since the Early Bronze Age, being stated that they could have been ›inspired‹ by regional models of Late Bell Beaker footed bowls (which, in turn, could have been ›inspired‹ by the Iberian models, as mentioned below). Morphologically similar to these Iberian models, including the presence of incised geometric decoration only distinguished by the handles applied to the rim or the body and by the ›triangular windows‹ open on the stand that some examples have, they first appear integrated into funerary rituals, but are then progressively integrated into the domestic sphere throughout the Bronze Age⁹⁵.

70 For the Eastern Mediterranean region between the Aegean and Anatolian areas, in a period extending from the Late Chalcolithic to the Early Iron Age, cultic and ritualistic purposes are attributed to footed vessels considering their presence in sanctuaries (specially found near altars). This ritual scope (as suggested for the Iberian Bell Beaker context) would imply the consumption of special foods and drinks (including the performance of libations), which could involve the subjection to fire of the liquid or solid substances contained in them (as ›heaters‹) or even their use as ›burners‹ (suggested by the circular or triangular holes open in the stand, like the examples of Corsica). They apparently are not integrated into domestic activities; their presence in funerary contexts serves as an indicator of prestige⁹⁶.

92 Cf. Schubart 2004, 66 fig. 3.

93 Cf. Alves et al. 2010.

94 Cardoso – Carreira 1996.

95 Pêche-Quilichini 2007; Pêche-Quilichini 2008, 62.

96 Cf. Akgül 2020, 88 f.; Budaichiev 2023, 1017 f.; cf. also Weingarten et al. 2011; Hamilakis – Sherratt 2012; Kouka – Menelaou 2018; Menelaou et al. 2024.

71 For examples from the Bronze Age and Iron Age of Central and Eastern Europe (also including elements around the Alps and the Italian peninsula), where the presence of this type of vessel is known since the Bell Beaker period (as demonstrated in the area around Budapest, for instance, where footed bowls decorated with incised motives distinguished only by the application of handles on the rim are present in contexts with radiocarbon datings similar to those obtained for Iberian contexts, around the last third of the 3rd millennium BC⁹⁷), their function as symbolic ›sacrificial‹ offerings related to funerary ceremonies is proposed – specifically related to rituals that involved the handling of fire, possibly as ›burners‹ or ›censers‹, as suggested for the Eastern Mediterranean region⁹⁸. Such a premise could be admitted for the Iberian Bell Beaker examples if we consider what was exposed above regarding the elements from Alto del Romo; however, as stated, their presence in residential contexts invalidates their strict function as exclusive components of funerary rituals, whatever their nature.

72 Regarding the geographical distribution of the Iberian Peninsula finds, and although they show a remarkable dispersion, there is a non-homogeneous distribution which emphasises their presence in two of the main Iberian Bell Beaker groups, the Lower Tagus and Ciempozuelos Complexes. The other occurrences are less significant and are influenced by both complexes, e. g., the Carmona and Almería groups⁹⁹. Their presence in extra-peninsular areas is documented by the French find from the Pas de Noyer cave and can also be glimpsed in the bowls with three or four massive feet and combed geometric decoration of the Late Sardinian Bell Beaker or in the bowls with a troncoconical stand and incised geometric decoration of the Late Sicilian Bell Beaker, for which a certain Iberian influence has also been argued¹⁰⁰.

73 This widespread dissemination of a specific form may be related to influences resulting from the circulation of other essential products, such as salt – the importance of its exploitation and circulation during the Bell Beaker period has already been highlighted¹⁰¹ – along with other ›prestige goods‹ with extra-peninsular origins, such as amber and ivory, which are likely to have been distributed through Mediterranean coastal routes¹⁰².

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97 Cf. Patay 2013, 310 fig. 20.

98 Kaiser 2013; Kulcsár – Szeverényi 2013; Pavliv 2022; Budaichiev 2023.

99 Harrison et al. 1976; Harrison 1977.

100 Guilaine 2004; Lemercier et al. 2007; Guilaine 2009; Melis 2019.

101 Guerra Doce et al. 2015; Delibes et al. 2017; Guerra Doce 2017; Guerra Doce 2023.

102 Murillo-Barroso – Montero-Ruiz 2017; Schuhmacher 2017; Odriozola et al. 2019.

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ZUSAMMENFASSUNG

Glockenbecherfußschalen auf der Iberischen Halbinsel

Eine versuchsweise Bestandsaufnahme anhand eines Fundes aus der Höhle Lapa do Fumo (Sesimbra, Portugal)

João Luís Cardoso – Marco António Andrade – Rui Gil

Die Höhle von Lapa do Fumo (Sesimbra, Estremadura, Portugal) weist einen Bestattungskontext mit einer kontinuierlichen Nutzung seit dem Frühneolithikum auf. Eine kürzlich erfolgte Überprüfung der Votivensembles hat das Vorhandensein eines Keramikfragments zutage gefördert, das zu einer glockenbecherzeitlichen Schale mit Fuß gehört und einen Teil der Basis sowie den Beginn des Fußes mit eingravierter Verzierung auf der Außenseite bewahrt. Dieser Gefäßtyp ist zwar recht selten, jedoch aus verschiedenen Kontexten mit Glockenbechern auf der Iberischen Halbinsel während der gesamten Dauer des Glockenbecherphänomens bekannt, insbesondere während der zweiten Hälfte des 3. Jahrtausends v. Chr. Seine geographische Verbreitung in Iberien ist ebenfalls weitreichend, er kommt sowohl in Bestattungs- als auch in Siedlungskontexten vor. Ausgehend von dem hier vorgestellten Fragment aus der Lapa do Fumo legen die Autoren ein Verzeichnis aller bekannten Beispiele vor und integrieren diese in ihre jeweiligen chronologischen und kulturellen Kontexte. Ebenso wird eine technische und funktionale Diskussion anhand einer Schätzung des Fassungsvermögens dieser Objekte geführt.

SCHLAGWÖRTER

Iberische Halbinsel, Portugiesische Estremadura, Chalkolithikum, Glockenbecher, Fußschalen

RESUMEN

Cuencos campaniformes con pie en la península ibérica

Un inventario preliminar a propósito de un hallazgo en la cueva de Lapa do Fumo (Sesimbra, Portugal)

João Luís Cardoso – Marco António Andrade – Rui Gil

La cueva de Lapa do Fumo (Sesimbra, Estremadura, Portugal) presenta un contexto funerario con un uso continuado desde el Neolítico Antiguo. Una reciente revisión de los conjuntos votivos reveló la presencia de un fragmento de cerámica perteneciente a un cuenco campaniforme con pie, que conserva parte de la base y el inicio del pie, con decoración incisa en la superficie externa. Este tipo de recipiente, aunque bastante raro, se conoce en varios contextos con vasos campaniformes de la península ibérica a lo largo de todo el período del fenómeno campaniforme, especialmente durante la segunda mitad del III milenio a. C. Su distribución geográfica en Iberia es igualmente amplia, presentándose tanto en contextos funerarios como residenciales. A partir del fragmento de Lapa do Fumo aquí presentado, los autores ofrecen un inventario de todos los ejemplos conocidos, integrándolos en sus respectivos contextos cronológicos y culturales. Asimismo, se incluye una discusión técnica y funcional basada en una estimación de la capacidad volumétrica de estos objetos.

PALABRAS CLAVE

Península ibérica, Estremadura portuguesa, Calcolítico, vaso campaniforme, cuencos con pie

ILLUSTRACION CREDITS

Cover: Cf. Fig. 7 (image detail).

Fig. 1: João Luís Cardoso, Marco António Andrade.

Portuguese Military Chart, scale 1 : 25,000; map top left: DAI Madrid, USGS, GEBCO (author: D. Blaschta, modifications: C. Comas-Mata) sheet 464 (Sesimbra); Lisbon: Army Cartographic Services.

Fig. 2: Archive of Gustavo Marques (National Archaeological Museum, Lisbon). Reproduction by João Luís Cardoso (Cardoso 2021, 17 fig. 1).

Fig. 3: Photo by João Luís Cardoso. Drawing by Marco António Andrade.

Fig. 4: Stratigraphic profiles documented in the Lapa do Fumo cave adapted from Serrão – Marques 1971, pl. IV; schematic profile with pottery adapted from Serrão 1978, 28 fig. 2.

Fig. 5: Marco António Andrade.

Fig. 6: Marco António Andrade; base map: DAI Madrid, USGS, GEBCO (author: D. Blaschta, modifications: C. Comas-Mata)

Fig. 7: Iberian Bell Beaker footed bowls: Freixo, Batalha (previously unpublished drawing, excavations conducted by M.A.A.); Conchadas, Sintra (reassembled, reorientated and redrawn based on Leisner 1965, pl. 28); Porto Covo, Cascais (adapted from Gonçalves 2008, 130 f. fig. 2.38); São Pedro do Estoril 1, Cascais (adapted from Leisner et al. 1964, 47. 51 pls. K. L); Tanchoal dos Patudos, Alpiarça (redrawn after Marques 1972, pl. 1); El Acebuchal, Carmona (adapted from Harrison et al. 1976, 136 fig. 43); Humanejos, Madrid (adapted from Garrido Pena et al. 2019, 182 fig. 252); El Ventorro, Madrid (adapted from Priego Fernández – Quero Castro 1992, 235 fig. 119); Alto del Romo, Tarancón (adapted from Vicente Navarro et al. 2007, 70 pl. 1, 195, reorientated); Los Escaramujos, La Puebla de Almoradiel (adapted from López Martínez – Martín Alonso 2010, 309 fig. 5); Cerro de la Virgen, Orce (Molina González et al. 2017, 263 fig. 3); Cova dels Gats, Alzira (adapted from Bernabeu Aubán 1984, 48 fig. 16). The Pas de Noyer, Armissan find is also included (adapted from Guilaine 1965, 37 fig. 2).

Fig. 8: Marco António Andrade.

Fig. 9: Marco António Andrade.

Fig. 10: Adapted from Garrido Pena et al. 2011, 112 fig. 7.1.

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