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The Social Context of Early Bronze Age Metalworking in Iberia: Evidence from the Burial Record

Abstract

The present contribution seeks to give a brief overview of Early Bronze Age burials from the Iberian Peninsula that include metalworking tools among the grave goods. It is discussed how these assemblages fit current models on the social context of early metalworking. Although the small size of the sample does not permit any definite conclusions, with the transition from Bell Beakers to ‘classical’ Early Bronze Age cultures, and in southeast Spain once again during the final stages of the Early Bronze Age, changes in the social context of metalworking seem to occur.

On a previous occasion, the present author has already given a brief overview of Iberian Early Bronze Age burials containing cushion stones and other metalworking implements, counting no more than a handful of such assemblages (Brandherm 2000a). Since then, some more burials have been identified that may be added to this inventory, all of them through a reassessment of earlier finds rather than new discoveries (fig. 1).

Following our call for more systematic work on the identification of such implements, some very promising survey and experimental work has been conducted. The bulk of Early Bronze Age metalworking tools from Iberia, however, continues to be comprised of cushion stones and stone hammers not from burials, but from settlements, such as Vila Nova de São Pedro in the Portuguese Estremadura or the Cerro de la Virgen in southeast Spain. In this it is quite distinct from the rest of Europe, where the vast majority of such tools have been recovered from burial contexts, while settlement finds of cushion stones or stone hammers are exceedingly rare (cf. Armbruster 2006a: 177). At least regarding the find circumstances of Early Bronze Age metalworking tools then, Hemingway’s dictum that “Spain is different” seems to hold true.

These differences in prevailing find circumstances notwithstanding, when taking into account the recent additions to our inventory of stone tools for metalworking, as far as the available tool set is concerned, the Iberian Peninsula now would appear to be firmly integrated in the Early Bronze Age koiné of a common metalworking technology that stretches over most of Europe, from the Lisbon Peninsula to the Caucasus.

This brings up the question of the social context of metalworking and the role of the metalworker in Early Bronze Age Iberia and in Europe at large. As far as Iberia is concerned, the earliest metalworking tools employed as grave goods were all recovered from collective burials. This is the case with the metalworking tools from hypogeum 1 at São Pedro do Estoril (Leisner 1965: 100–114 pl. 85.2, 5. 6), from the Gruta da Portucheira, cave 2 (Spindler/Gallay 1973: 34 pl. 20, 8, 9), as well as from the Bobadela (Leisner 1998: 139 pl. 104, 79) and Orca de Seixas passage tombs (Leisner 1998: 15–17 pl. 3, 1, 3, 5, 12, 13), all of them situated in central and northern Portugal and comprised of cushion stones and/or stone hammers.

From southeast Spain, there is only a probable whetstone, wrongly identified as a cushion stone by the present author on a previous occasion (Brandherm 2000a: 245 fig. 1, B 5), from L. Siret’s excavation of the tholos 1 at Loma de Belmonte (cf. Leisner/Leisner 1943: 59). Another likely whetstone, also previously suspected to be a cushion stone by the present writer, comes from the Través collective tomb in Catalonia (Cura Morera 1974: 21–25 fig. 1, 4). Finally, a further assemblage containing possible metalworking tools is known from the Tituaria tholos tomb, again in central Portugal, where a small stone tool, provisionally identified by the excavators as a ‘polishing stone’, and a flat pebble are distinguished from the pieces discussed above by their much smaller size (Cardoso et al. 1996: 172 fig. 44, 10, 12), and can likely be identified as specialised goldsmith’s rather than general metalworking implements.

1 Some of the items provisionally classified as cushion stones on that occasion now will probably have to be excluded from this count. Among these is the implement from the collective burial at Través and probably also that from tholos 1 at the Loma de Belmonte, both of which are more likely whetstones (cf. Armbruster 2001: 12–13; 2006a: 173–174; 2006b: 327–328). As had already been stressed then, the alleged cushion stone from the well-known Atios single grave has to be struck from the list of early metalworking implements altogether (Brandherm 2000a: 244–245).

2 An updated inventory of cushion stones and stone hammers, as well as some other metalworking implements from Iberia can be found in Brandherm (forthcoming).

3 Risch 2002; Armbruster 2006a; Delgado-Raack/Risch 2006; 2008; Delgado-Raack forthcoming.

4 Cf. footnote 1.
As in all of these cases we are not dealing with closed assemblages, it is rather difficult to determine the social status of particular individuals within the respective tombs. However, for the São Pedro do Estoril hypogeum and the Orca de Seixas passage grave at least the original excavation reports, published in the Leisners’ monumental corpus of megalithic tombs, provide some information on the distribution of the individual items within the respective monuments.

The two cushion stones from hypogeum 1 at São Pedro do Estoril were found next to each other in the eastern half of the chamber, near the original entrance and in the uppermost stratum of the excavation. From the same area two or three human skulls, two copper daggers, two ‘archers wristguards’, two limestone cylinders, a small flint blade, a Bell Beaker and a number of undecorated pottery vessels were recovered (fig. 2). Not all of these items have been preserved, and in some cases where similar objects were found in other parts of the chamber, it is no longer possible today to identify exactly which is which. Also, as the entrance section had been destroyed by erosion prior to the excavation, we do not know if further items from this part of the chamber had fallen down the cliff on which this tomb is located.

Similar to the situation encountered at São Pedro do Estoril, also at the Orca da Seixas passage grave the metalworking tools were found in the corridor, near the entrance to the chamber (fig. 3). Both of the stone hammers and polished pebbles that Armbruster (2006a: fig. 5) identified as metalworking implements come from this section of the corridor, which among other objects also has produced two Bell Beaker vessels and a Palmela point (fig. 3, 1. 2. 9). The exact find-spot of the cushion stone recovered from this passage grave during the Leisners’ excavations remains unknown (fig. 3, 11); a small copper axe was found outside the entrance, likely having been displaced by earlier looting activities (fig. 3, 10).

By contrast, in the Tituaria tholos tomb the respective items seem not to have been concentrated in a specific location, but not all of them had their original position recorded, and particularly some of the smaller items might have suffered from secondary dislocation within the burial chamber (cf. Cardoso et al. 1996: fig. 1–7). Also at both São Pedro do Estoril and the Orca de Seixas some items from the original assemblages may have been lost to erosion or looting. In the case of the collective burial from Travês we positively know that part of the grave goods is missing, and for the Loma de Belmonte tholos, too, there is no way to be certain that we are dealing with a complete assemblage. These uncertainties notwithstanding, it would seem that metalworking tools in most of these graves were associated to comparatively rich Bell Beaker assemblages.

Also, it is significant that these assemblages usually do not contain individual implements, but com-
Fig. 2: São Pedro do Estoril, hypogeum 1, cushion stones and other finds from the uppermost stratum, recovered near the entrance (after Leisner 1965: pl. 84, Nível 1.15–0.76 m; 85.2, 1. 2. 5. 6. 8; 88, 88. 99; 90, 137; 91, 155). 1–4, 6–10 scale 1:3; 5 scale 1:40.
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Fig. 3: Orca de Seixas passage grave, stone hammers and Beaker material from the corridor (after Leisner 1998: fig. 1 pl. 1. 3. 5. 12. 13. 30. 31; s. 69. 70). 1. 2. 4–11 scale 1:3; 3 scale 1:60.

Complete tool sets, at least where cushion stones and stone hammers are concerned. The only exception from this rule are whetstones which, however, are not necessarily specialized metalworkers’ tools, employed in the production of metal artefacts, but may be related to the maintenance of such artefacts by non-specialists. While the actual degree of technical specialization and of the social division of labour in Beaker society remains open to debate, in those cases where a community chose to bury any of their de-
ceased with a complete set of special-purpose tools, it seems legitimate to infer that we are dealing with the burials of specialized craftsmen.

With the transition to ‘classical’ Early Bronze Age cultures, things in this respect begin to change, as complete tool sets among grave goods now become the exception rather than the rule. Except for grave 3 from Los Cipreses, discussed in more detail further below, in burials of the El Argar culture, metalworking tools clearly related to the manufacturing process are not usually found in complete sets, but as individual pars-pro-toto elements. Where encountered as part of exceptionally rich grave assemblages, they thus signal perhaps no longer the direct involvement of the deceased in the production process, but rather may be taken to indicate ‘political’ control over the production of metal items (cf. Delgado-Raack/Risch 2006: 40–42).

With regard to the Únětice culture of Central Europe, this phenomenon has already been recognized based on the sumptuous assemblage from the Leubingen tumulus, where a cushion stone and a small chisel have been identified as metalworking tools.5 For Iberia, a similar interpretation might be put forward regarding grave 1 from Fuente Álamo, which contains no cushion stone, but a small chisel and a

5 See Bertemes (2004: 148); contra Stig Sørensen (2004: 171) who would identify the respective chisel as a woodworking tool and the stone implement as a whetstone. At least for the latter, a traceological study like that conducted by Delgado-Raack/Risch (2006: 46–49) on the stone implements from Los Cipreses might help to eliminate uncertainties.
punch, more than likely also metalworking imple-
ments (fig. 4, 3, 4).6

Dating to the same chronological phase as grave 1 from Fuente Álamo (IBA A), grave 3 from the site of Los Cipreses so far provides the latest burial assem-
blage in the Iberian Peninsula containing a complete set of metalworking tools, composed of two cushion stones, a large grindstone and an ‘archer’s wrist-
guard’ which apparently had been used as a whet-
stone (fig. 5).7 While in our view the presence of such a comprehensive tool set in this assemblage lends some support to an identification of the deceased as someone directly involved in the production process, it has recently been suggested by Bartelheim (2007: 88) that also the implements from the Los Cipreses burial might be interpreted as symbols for political control over metalworking.

In any case, the assemblages from both grave 1 at Fuente Álamo and grave 3 at Los Cipreses identify the deceased as belonging to the uppermost status group within Argaric society.8 In Los Cipreses, however, there is no massive gold or electrum bracelet like that found in grave 1 from Fuente Álamo, possi-
bly identifying its wearer as holding a special position among the ruling elite. Within the El Argar culture, this peculiar ornament is only found in two burials of Lull’s and Estevez’ social category 1, both of them from Fuente Álamo (Schubart/Arteaga/Pingel 1986: 58–60). So far, such bracelets have never been found in any of the similarly rich graves from smaller settle-
ments in less defensive positions, like e.g. Los Cipre-
es, El Rincón de Almendricos, or Herrerías.9 Thus, in the case of these bracelets we may be dealing with a very specific insigné, which would lend the metal-
working implements from grave 1 at Fuente Álamo even more significance.10

Of course, it cannot be ruled out that already with the earlier Bell Beaker burials, metalworking imple-
ments could have indicated some degree of ‘political’ control over metal production, rather than simply identifying the deceased as a craftsman. Significantly, however, none of the rich single graves with sumptu-
ous Beaker assemblages from the Iberian Peninsula so far has produced any metalworking implements, and the collective burials discussed further above hardly permit any definite conclusions.

As succinctly pointed out by Delgado-Raack/Risch (2006: 41–42), it is interesting to observe that during a later phase of the Early Bronze Age in Iberia, metal-
working tools are no longer found in burials of Lull’s and Estevez’ social category 1. Instead, the only two such burial assemblages dating after c. 1800 cal BC (phase IBA B), pithos graves 580 and 597 from El Ar-
gar, fall in categories 3 and 4a respectively.11 Delgado-
Raack and Risch interpret this observation based on a model of emerging statehood for the El Argar culture, concluding that control over the production of met-
al artefacts at this point had shifted from the ruling elite to members of a lower class. While the sample of burial assemblages with metalworking implements on which any such interpretation may be based is very limited indeed, this notion is perfectly consist-
ent with current interpretive models that try to ex-
plain the development of the social division of labour in the Early Bronze Age of southeast Spain, according to which the upper echelons of society would have established coercive control over parts of the general populace specializing in specific economic activities (cf. Castro et al. 2001: 38–50; Risch 2002: 247–278).

Some uncertainties remain, however, when it comes to the question if metalworking tools as part of burial assemblages in IBA B still share the same symbolic meaning which we have assumed for the chisel and punch from the IBA A grave 1 at Fuente Álamo. After all, we have to consider the possibility that as a consequence of the transition from complete tool sets to pars-pro-toto elements during IBA A, later on also individual metalworking implements in burial assemblages could have come to identify the deceased as a craftsman rather than a person exercis-
ing political control over metalworking.

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6 See Brandherm (2000a: 246; 2003: 347 no. 1292 pl. 182, C. 3. 4). This identification of the two objects kept at the Musées royaux d’Art et d’Histoire in Brussels is based on autopsy by the present author. At the time Schubart and Ulreich com-
piled their corpus of the Siret collection, these pieces could not be located, and only resurfaced some years later during a re-cataloguing of the finds kept in Brussels (cf. Schubart/ Ulreich 1991: 261). Assuming these two pieces lost, based on their depiction in the Sirets’ album, Risch (2002: 275) proposed an identification as bar ingots, also inferring a rela-
tionship of the deceased from this burial with metal produc-
tion. A full publication of the Bronze Age metalwork from the Siret collection kept at the Musées royaux d’Art et d’Histoire is currently under preparation by the present writer.

7 See Martínez Rodríguez/Ponce García/Ayala Juan (1996: 28–36 fig. 6), Brandherm (2000a: 245–247 fig. 2; 2003: 292 no. 1023 pl. 178, C) and Martínez Rodríguez/Ponce García (2005). For a detailed traceological study and use-wear analysis of the metalworking implements from this tomb see specifically Delgado-Raack/Risch (2006: 26–37 pl. 1–3; 5; 7). For a defini-
tion of the chronological phases (Iberian Bronze Age A and B) employed in the present contribution see Brandherm (1996: 71–74 fig. 1; 2003: 23–25 fig. 2). For a more complex chrono-
logical model see Castro et al. (1993/94: 81–87).

8 For the definition of the different status groups or social cat-

9 For El Rincón de Almendricos see Ayala Juan (1991: 100–101 fig. 36); for Herrerías (Mina iberia) see Brandherm (2000a: 159–161 fig. 3).

10 Already on a previous occasion, attention had been drawn to the structural similarities between this burial and that from the Leubingen tumulus (Brandherm 2003: 394).

11 In the original field diaries, the cushion stones from these two graves were described as “querns” (cf. Schubart/Ulreich 1991: 131, 133 pl. 39, 580; 41, 597). Already the Siret broth-
ers in their original publication, however, identified them as metalworking implements (Siret/Siret 1887: pl. 23; Risch 2002: 103–104 fig. 4:10; Delgado-Raack/Risch 2006: 38 fig. 5). For the distinction between different social categories within Argaric society cf. footnote 8.
As the model employed by Delgado-Raack and Risch does not rely primarily on these interpretable and potentially disputable aspects of the data, but on a more general concept of social value, it would remain largely unaffected by alternative readings of the actual significance of metalworking tools as symbols in the burial record. At any rate, the possibility of chronological and spatial variation in the symbolic meaning attributed to metalworking tools in burial contexts has to be taken into account when comparing evidence from different chronological phases and distant geographical areas.

When comparing the social context of Early Bronze Age metalworking in southeast Spain with the respective situation in Central Europe, other differences also have to be taken into account. While at first glance the similarities seem quite striking, in that also in Central Europe metalworking tools during the later stages of the Early Bronze Age appear in more modest grave assemblages, it must be stressed that after c. 1800 cal BC here no equivalents to the...
earlier sumptuous burials of the Únětice culture are known at all. For several centuries now, there simply are no graves from Central Europe to parallel the sumptuousness of e.g. the Leubingen tumulus. On the other hand, metalworking implements as part of rather modest assemblages in Central Europe are known throughout the entire duration of the Early Bronze Age, not just during its later phases (Bátora 2002: 193–195, 199–207). Unlike with the El Argar culture then, where burial assemblages of the same social category as grave 1 from Fuente Álamo continue to exist throughout the IBA B phase, in Europe north of the Alps the burial record currently does not provide any evidence that would lend support to a notion of political control over metalworking being transferred from the ruling elite to members of a lower class during the course of the Early Bronze Age.

Also within the Iberian Peninsula, regional variation is certainly an issue when trying to discern long-term trends in the development of the social context of metalworking. While most Beaker assemblages containing metalworking tools are from central and northern Portugal, for the later phases of the Early Bronze Age there are essentially no such data from outside the area of the El Argar culture in southeast Spain.

If we turn to evidence other than the burial record, looking at settlement data relevant for determining the social context of metalworking, the emerging picture also is rather ambiguous and mostly inconclusive, in spite of some quite promising approaches that have been developed during recent years (cf. Kunst 1998: 548–549; Bartelheim 2007: 53–56, 98–106; Delgado-Raack/Risch 2008: 244–248). What is needed here for the future, more than anything else, is a better understanding of the social organization of space in settlements with metalworking workshop areas (cf. Risch 2002: 178–227). This of course is easier said than done, and is something that can only be developed in the longer term. In the shorter term, and with regard also to metalworking tools from burials, more, and more systematic use-wear analysis to determine the exact function of individual implements would already go some way to clear up present doubts.

What is already obvious from the evidence at hand, is that with regard to metalworking implements, and apparently also regarding the social context in which these implements were put to use, with the spread of Bell Beakers the Iberian Peninsula became part of a larger European metalworking koiné. For some reason, however, this outward uniformity did not extend to the application of a uniform chaîne opératoire in the production process of otherwise rather similar objects by the metalworkers who employed these implements (cf. Kienlin/Pernicka, this volume). The adoption of cushion stones and other metalworking tools as part of Beaker assemblages then, in some instances at least, might have had even more to do with the symbolic connotations they carried in a specific social context than with the transfer of technological knowledge.

Later on, with the decline of the Bell Beaker and El Argar cultures in Iberia, the former koiné would seem to have disintegrated, and the respective ties with the rest of Europe to have weakened, only to be reestablished with the beginning of the Final Bronze Age, when bronze metalworking tools finally became more common and tin bronze gained acceptance as a standard alloy in all of Iberia (cf. Armbruster 2000: 193; Brandherm 2007: 120–122).

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