Archaeologies: Journal of the World Archaeological Congress (© 2018)
https://doi.org/10.1007/s11759-018-9351-0

RESEARCH

Damaged Burials or *Reliquiae Cogotenses?* On the Accompanying Human Bones in Burial Pits Belonging to the Iberian Bronze Age

Ángel Esparza-Arroyo, GIR PrehUSAL, Department of Prehistory, Ancient History and Archaeology, University of Salamanca, 37071, Salamanca, Spain
E-mail: esparza@usal.es

Alejandra Sánchez-Polo, GIR PrehUSAL, Department of Prehistory, Ancient History and Archaeology, University of Salamanca, 37071, Salamanca, Spain
E-mail: asanpol@usal.es

Javier Velasco-Vázquez, Department of Historical Sciences, University of Las Palmas de Gran Canaria, 35071, Las Palmas de Gran Canaria, Spain
E-mail: javier.velasco@ulpgc.es

ABSTRACT

Social Sciences and Humanities are increasingly interested in the relationship between society and material culture, and archaeology can provide, among other contributions, its chronological depth and the variability and certain regularities in mortuary rituals. In this respect, archaeological literature frequently cites cases of a few human bones redeposited at mortuary sites, often burials of adults accompanied by some bones of an infant, but without a clear pattern being discernable. In contrast, research on the Bronze Age Cogotas I archaeological culture in the Iberian Peninsula (MBA and LBA, ca. 1800–1100 cal BC) has identified what seems to be an emerging pattern: primary burials of very young children accompanied by the bone of an adult, possibly female, who had died before, even long before, as the statistical analysis of the radiocarbon dates of the individuals involved appears to corroborate. This may therefore be a ritualised mortuary practice that included bone relics, but its explanation is not simple, due to the polysemic nature of such relics. The creation and maintenance of real or fictitious kinship ties, a special protection for dead infants, possible gender aspects, ideas about fertility and renewal, strengthening interpersonal relationships, legitimisation of emerging inequality, etc., are some of the possible components of this social practice

which was until now unknown in the Iberian prehistory, but also little known in other areas in European prehistory.

Résumé: Les sciences sociales et humaines s'intéressent de plus en plus à la relation qui existe entre la société et la culture matérielle, et l'archéologie peut fournir, parmi autre chose, sa profondeur chronologique et la variabilité et certaines régularités dans le domaine des rites mortuaires. À cet égard, la littérature archéologique mentionne souvent des cas où quelques ossements humains sont déposés dans des sites mortuaires, souvent des sépultures d'adultes accompagnées de quelques os de nourrisson, sans qu'un modèle puisse toutefois être nettement discerné. À l'opposé, des recherches réalisées sur la culture archéologique de Cogotas I de l'âge du bronze, dans la péninsule ibérique (MBA et LBA, vers 1800 à 1100 avant notre ère), ont identifié un modèle apparemment émergent: des sépultures primaires d'enfants très jeunes accompagnées de l'os d'un adulte, possiblement d'une femme, décédée précédemment, voire longtemps avant, si on en croit l'analyse statistique des datations au radiocarbone des individus impliqués. Il pourrait donc s'agir d'une pratique mortuaire symbolique impliquant des reliques ossuaires, dont l'explication n'est cependant pas simple en raison de la nature polysémique desdites reliques. La création et le maintien de liens de parenté réels ou fictifs, une protection spéciale pour les nourrissons décédés, des aspects possiblement reliés au genre du défunt, des idées sur la fertilité et le renouveau, le renforcement de relations interpersonnelles, la légitimation d'inégalité en émergence, voilà quelques éléments possibles de cette pratique sociale jusqu'ici inconnue dans la préhistoire ibérique, mais aussi très peu réputée dans d'autres sphères de la préhistoire européenne.

Resumen: Las ciencias sociales y las humanidades están cada vez más interesadas en la relación entre la sociedad y la cultura material, y la arqueología puede proporcionar, entre otras contribuciones, su profundidad cronológica, y la variabilidad y ciertas regularidades en los ritos funerarios. En este sentido, frecuentemente la literatura arqueológica cita casos de algunos huesos humanos que han sido redepositados en sitios mortuorios, a menudo entierros de adultos acompañados por algunos huesos de un niño, pero sin que se pueda discernir un patrón claro. En contraste, la investigación sobre la cultura arqueológica de Cogotas I en la Península Ibérica (Bronce Medio y Tardío, ca. 1800–1100 cal AC) ha identificado lo que parece ser un patrón emergente: entierros primarios de niños muy pequeños acompañados hueso de un adulto, posiblemente de un una mujer, que había muerto antes, incluso mucho antes, como parece corroborar el análisis estadístico de las fechas de radiocarbono de los

individuos involucrados. Por lo tanto, esta puede ser una práctica mortuoria ritualizada que incluye reliquias óseas, pero su explicación no es simple, debido a la naturaleza polisémica de tales reliquias. La creación y mantenimiento de vínculos de parentesco reales o ficticios, una protección especial para infantes muertos, posibles aspectos de género, ideas sobre fertilidad y renovación, fortalecimiento de las relaciones interpersonales, legitimación de la desigualdad emergente… son algunos de los posibles componentes de esta práctica social que hasta ahora era desconocida en la prehistoria ibérica, pero también poco conocida en otras áreas de la prehistoria europea.

KEY WORDS

Mortuary practices, Bone relic, Enchainment, Good and bad death, Iberian Bronze Age

Introduction

Understanding mortuary behaviour of prehistoric populations is an objective of indisputable importance, as the deposition of human remains, full of symbolism, is related to the cosmovision of a society. However, the heterogeneity of mortuary practices, including cremation and exposure, and above all burial, at times primary and other times secondary, individual, multiple or collective, with removal, reuse and circulation of bones, etc., hinders their interpretation. Despite this, some repetitions are known that can help to advance in research. Thus, in locations where secondary remains are important, the emphasis often falls on the skull of certain individuals, which may have received a particular treatment, deposition in a special place, inside habitation structures, etc., eg. in the PPNB Cayönu Tepesi (Croucher 2012: 111, 222–3) or in the Maya site of Tikal (Weiss-Krejci 2011b: 87–8). In contrast, the combination of primary burials and a bone selected from another individual, as in the examples presented here, corresponding to the Bronze Age in the interior of the Iberian Peninsula, is less common. As the single bone must be older than the primary burial, it may be considered a relic.

The term relic is used here either in the broad sense of ‘‘an object invested with interest by reason of its antiquity or associations with the past’’, or the more specific meaning of ‘‘a part of a deceased holy person’s

body or belongings kept as an object of reverence'' (OED). However, above all it is used in the sense taken from anthropology (Metcalf and Huntington 1991: 97) and increasingly common in specialised research in the study of death from the Mesolithic to the Bronze Age in the British Isles (eg. Bradley 1998: 53; Fowler 2004: 42, 74; Brück 2006a: 80; Conneler 2011: 362) and also in Scandinavia (eg. Andersson et al. 2004: 203): more precisely, *relics* are curated human bones that participate in complex processes of dispersion, circulation and re-burial, related to social strategies. This concept has even been proposed for the Upper Palaeolithic by Pettit (2011: 8): ''Corpses and body parts may be accorded social agency and used accordingly, in which case they can be defined as relics''.

Also studied by ethnoarchaeological (eg. Insoll 2015a, b) and historical research (Walsham 2010), relics usually play a major role in the construction of identities and social memory and can function as instruments of legitimisation, incarnation of authority, symbolic capital, etc., while also being objects that are susceptible to accumulation, exhibition and circulation (Borić 2003; Lillios 1999; Weiss-Krejci (2011b: 78).

In short, relics may be viewed as materialisations of remembrance, as a direct but very complex expression of the connection between past and present, between the worlds of the dead and the living (Walsham 2010). With the identification of this possible pattern of the preservation and use of relics, this paper is a contribution to a comparative morphology of mortuary rites seeking also evidence of differentiation by age or gender or according to status. All these ideological manifestations seem crucial for the understanding of the prehistoric society. Additionally, by enlarging knowledge of the variability of prehistoric mortuary practices, this case study may be of interest for Social Sciences and Humanities studying the social role of material culture.

However, a discussion of relics and their use as accompanying objects in prehistoric society is not a methodologically simple task. In the archaeological aspect, it is necessary to present well-documented examples and situate them in a context with sufficient information. Above all, it should be borne in mind that these objects are not intrinsically relics, but become relics through a social and cognitive process (Walsham 2010: 14). For this reason, a relic is not an object with its own codified meaning and which can appear in different situations for diverse purposes; on the contrary, separated from its context it is scarcely intelligible and difficult to explain (ibid.)

Consequently, the proposal of the use of relics in Cogotas I mortuary deposits does not consist solely of the observation of a repeated pattern, its archaeological expression, but also of its appraisal within the framework of the social practices in that culture. As this framework is still not fully understood, the proposal will be tentative and ethnographic and ethnoar-

chaeological studies will be referenced not in a search for analogies but to open new paths to possible hypotheses.

The Archaeological Context: The Cogotas I Culture

The "archaeological culture" of Cogotas I—sometimes named "archaeological group" to avoid ethnic connotations—is one of the most distinctive entities of the Bronze Age in the Iberian Peninsula (Figure 1). Partly coincident with other archaeological groups internationally better known as the Argaric culture, the Cogotas I culture spans a wide spatial and time frame, developed for most of the Bronze Ages in Iberian Central Plateau.

Its definition, formally established in the first half of the 20th century, especially for his distinctive pottery production, has gone consolidating later in other aspects, such as settlements, economic bases, the metallurgical activity, etc. (Abarquero Moras 2005; Rodríguez-Marcos and Fernández-Manzano 2012; Blanco-González 2014b, 2018; in english: Harrison 1994; Arnáiz Alonso and Montero Gutiérrez 2011; Abarquero Moras et al.

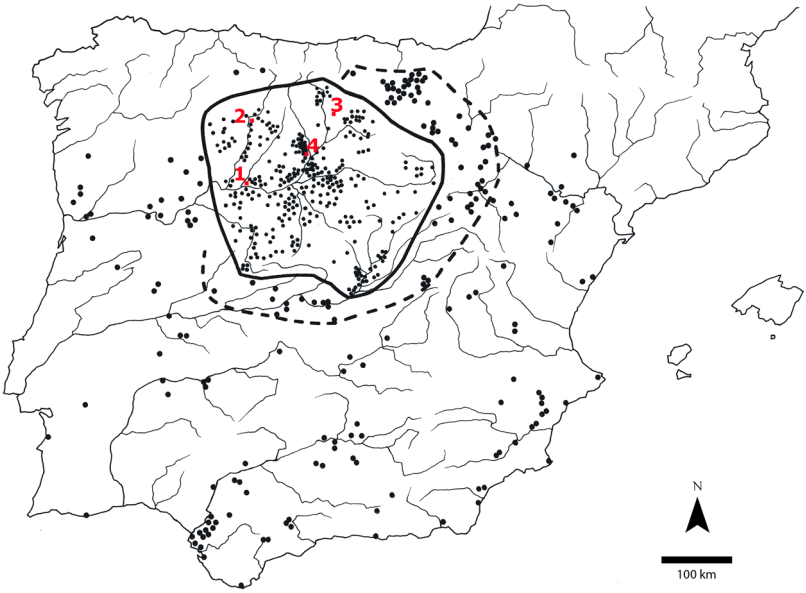

Figure 1. Map of the Iberian Peninsula showing the Cogotas I core area (in dotted line). In dashed line is the contact area. The remaining points are the sites with ceramics of Cogotas I style beyond the area. Sites analysed in the text: 1. Plaza de la Catedral, Zamora; 2. Las Vegas, Jabares de los Oteros; 3. Tres Chopos/Abarre, Villegas; 4. Pico Castro, Dueñas (modified and redrawn from Abarquero Moras 2005)

2013). On the other hand, the funerary sphere, that should have been basic for the culture definition, has struggled with many problems and difficulties, particularly because of the low frequency of burials discovered.

Currently, two subphases may be distinguished, Formative and Mature, respectively, known as ''Proto-Cogotas I'' and ''Full Cogotas I'', corresponding to the Middle Bronze Age and Late Bronze Age (no Final) in the regional sequence, between ca. 1800–1450 cal BC and 1450–1100 cal BC each one, according to the radiocarbon dates results.

The increase in the excavations has given the possibility of knowing a large number of archaeological sites, mostly of the ''pit field'' type, composed of numerous excavated structures, some of which have evidence of a previous use as silos, but finally were ended up filling in with detritus materials, as a garbage dumps. In fact, these pit sites are the result of post-depositional processes, mainly the cereal extensive agriculture, practised for many centuries in the little developed soils of the region, which has largely devastated those that in origin were small settlements of vegetal huts, barnyards or different areas of activity. As a result, it has survived little and fragmentary remains, except for those underground structures referred above.

The pit sites appear with a certain density, sometimes quite close together along of small valleys, perhaps related with the successive phenomena of abandons and re-occupations. The small communities that occupied those lands, adapted to very xerothermic conditions, practised a mixed economy, combining cereal agriculture, the breeding of cattle, pigs, sheep and goats and a complementary hunting activity.

There are also some sites quite different, in high locations, where the visual control seems to be a key factor, although they also have silos. Traditionally, it has supposed the existence of a kind of hierarchical relation between both archaeological models. Nevertheless, there is still no clear evidence to prove that these sites were supplied from the others, nor that they carried out specialised functions such as manufacturing and redistribution of grindstones or metal artefacts. In contrast, these sites are providing a wide range of evidence related with ''special deposits'' that contain complete ceramic vessels, human bones, etc., pointing towards the implementation of ritual activities, maybe originate on the occasion of aggregation ceremonies.

Among the archaeological remains, it is well known the pottery assemblage. The pottery vessel most common do not differ of the oldest traditions, but what is novel are the decorating techniques. In the Formative subphase are remarkable the dishes and plates with marked carinations, with a simple geometric decoration, by incised or impressed zigzags, triangles and herringbone patterns. In the Mature subphase, new profiles appear, like truncated cone vessels and the ornamental techniques are

diversified and become much more overelaborated, using both the *Boquique* (a *stab-und-drag* ornamentation) and the excised techniques. The decorated vessels from this culture reached a great diffusion around the Iberian Peninsula, appearing in very distant regions from where certain materials arrive to the Plateau, particularly metallic ones.

The lithic implements are representative too. We find products made from blades such as flint arrows, scrappers, burins and above all flakes, some of them used as sickle teeth. This wide range of products may be an outcome of the still limited metal working.

The metallurgy, known through certain deposits and above all by the remains found in the settlements (crucibles, moulds, metal drops, etc.) does not undergo great changes in comparison with the Early Bronze Age, from which most the types (awls, flat axes, arrowheads) are inherited. In additions, the use of the binary alloys of Cu–As remains, although there is a progressive incorporation of Sn. It also appears Atlantic or Argaric items such as *palstaves*, riveted daggers, some swords, etc., and even the operational metallurgic chains become more complex. Already in the Full Cogotas I, the typological schemes of the Atlantic area are incorporated, and the lead alloys are frequently employed.

Regarding the social organisation, the data are somewhat contradictory(Blanco-González 2018: 308): the small size of the communities and other evidences point to segmentary societies with little hierarchy (Arnáiz Alonso and Montero Gutiérrez 2011), although some objects such as swords and daggers, or the very few gold jewels could indicate the existence of prominent individuals, of whom there is no other evidence in the archaeological record, being completely absent from the funerary record. The lack of grave goods in burials would apparently indicate a homogeneous and rather poor society. However, compared to traditional approaches that propose a direct social interpretation of funerary record, the new archaeological evidences suggest very complex mortuary behaviours (Esparza Arroyo et al. 2012a).

In fact, the number of burials is quite low, too small for such archaeological entity so persistent and extensive. Thus, for example, in the sector of the North Sub-Plateau, only 30 mortuary sites with a total of 46 burial pits are known (Figure 2). Some human skeletons appear into the settlements, buried inside the pits: either refuse pits or pits dug ad hoc. These burial pits have commonly one individual, but there is a significant number of cases with three bodies simultaneously—apparently of relatives who suffered accidental deaths, although this question needs to be studied in greater depth (Esparza et al. 2017)—and at least one quadruple inhumation—in that case of subadults who were victims of lethal violence (Velasco Vázquez and Esparza Arroyo 2016)—as well as secondary burials. A difference was noted between two types of burial: those in which the deceased

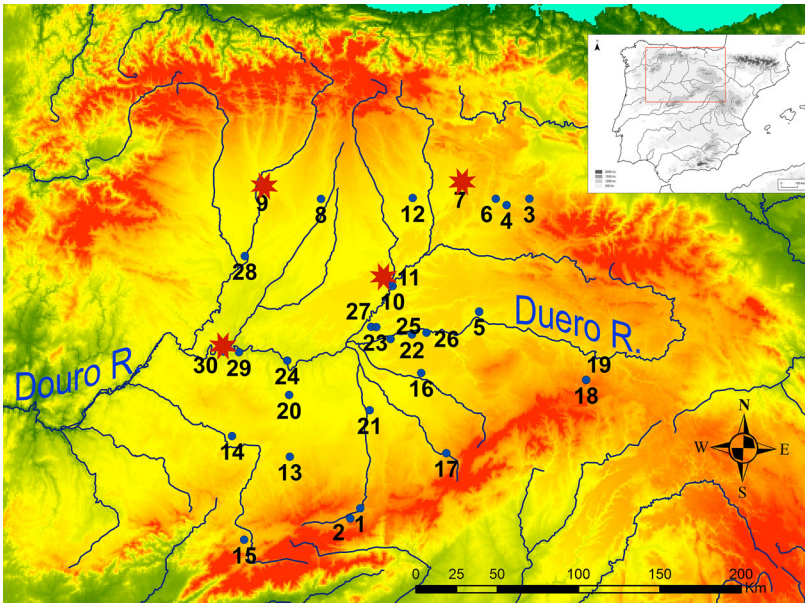

Figure 2. Sites with human remains in the North sub-Plateau sector of Cogotas I archaeological culture (**bold**/red stars = sites presented). Prov. Ávila: 1. Cerro de la Cabeza (Ávila); 2. El Morcuero (Gemuño). Prov. Burgos: 3. Cueva de La Revilla (Atapuerca); 4. Las Veguillas (Burgos); 5. El Cerro (La Horra); 6. Los Rompizales (Quintanadueñas); 7. **Tres Chopos-Abarre (Villegas)**. Prov León: 8. Canto Blanco (Calzada del Coto); 9. **Las Vegas (Jabares de los Oteros).** Prov. Palencia: 10. La Huelga (Dueñas); 11. **Pico Castro (Dueñas)**; 12. Carrelasvegas (Santillana de Campos). Prov. Salamanca: 13. Tordillos. (Aldeaseca de la Frontera); 14. El Castro (Castellanos de Villiquera); 15. El Berrueco (El Tejado). Prov. Segovia: 16. Barco de Los Habares (Cuéllar); 17. Las Zumaqueras/Mirador (La Lastrilla). Prov. Soria: 18 & 19: Los Tolmos A y B (Caracena). Prov. Valladolid: 20. El Tablón (Alaejos); 21. La Calzadilla (Almenara); 22. El Cementerio (Quintanilla de O.); 23. El Soto (Renedo); 24. La Requejada (San Román de Hornija); 25. Soto Tovilla II (Tudela de Duero; 26. San Bernardo (Valbuena de Duero); 27. Fuente de la Mora (Valladolid). Prov. Zamora: 28. Las Cañamonas (S. Cristóbal Entreviñas); 29. El Juncal (Villaralbo); 30. **Plaza de la Catedral (Zamora)** (Color figure online)

was carefully placed, in flexed lateral decubitus position with a certain tendency towards a different position for each sex, with male individuals predominately placed on their right side and female ones on their left side, while in others burials skeletons do not appear in the standard position, but sprawling and prone. In any case, beyond the respect shown with some and absent in others, the burials lack grave goods.

The repetition in the burials, in which only the gender seems to be stressed (by means of lateral decubitus), and above all this absence of grave goods, seem to indicate that identity was relational, limited to kinship: the most important point was not the individual, his or her status or belonging to a class, but the relationship between the living and the dead (Brück 2004). A society based on kinship, which is the most plausible assumption, is also supported by the first archaeo-genetic results, which indicate mother–child or sibling relationships in triple burials (Esparza Arroyo et al. 2012a; Esparza et al. 2017).

Another striking aspect is the demographic structure, as the study of the life tables reveals that the buried assemblage is not representative of a natural population, but a segment recruited for some powerful socio-cultural reason. The ensemble includes babies, children, youth, adults and elderly individuals, of both sexes, but in proportion that rule out the possibility of attritional mortality.

Apart from the palaeodemographic structure, the unusual nature of the population buried is supported also by other evidences: the uncommon frequency of triple graves and the fact that everybody is buried in the same way, including the little children, whereas in prehistoric times they are often excluded from the general funerary customs. Also by the fact that both the respectfully buried and carelessly trown are inhumed in the same grave type (burial pits). If all the burials that have been found are the exception, which is the ordinary practice? We have recently proposed (Esparza Arroyo et al. 2012b), based on the recognition of canid teeth marks and other post-depositional details on the remains of some individuals, a general hypothesis that can explain this striking funerary pattern. In this sense, the exposure of bodies would have been the usual ritual, leaving no remains in the archaeological record. In contrast, for certain individuals whose type of death (“bad death”) did not allow them full social recognition or even justify public disapproval, communities resorted to this formula of pit burial, with either careful treatment (people deceased very young, in certain accidents, females dead in pregnancy, etc.) or clear rejection (people who had behaved wrongly in some way), depending on each case.

This funerary behaviour that distinguishes between “good death” and “bad death”, well known in anthropological literature (*cf.* Thomas 1982: 101ss; Insoll 2015b: 155), and other mortuary practices must be related with a complex ideology to serve the configuration and maintenance of social order. Effectively, as noted above, it has been found recurring features such as deposits of faunal remains (Liesau et al. 2014b), complete animals, vessels (Blanco-González 2013), grindstones, etc. These statements could join other evidence like the symbolic death of certain arte-

facts, such as pottery or some huts (Sánchez-Polo y Blanco-González 2014).

In such a complex mortuary record, the proportion of secondary burials, sometimes represented by a single bone, is noteworthy, as it reaches 38.5% in the North Sub-Plateau (Esparza Arroyo et al. 2012a) and 34.6% in the South Sub-Plateau (Barroso et al. 2014: 124–6). It is also striking that primary and more or less complete secondary burials were often associated intentionally in the same pit.

The heterogeneity in mortuary formulae resembles the situation in other parts of Europe, such as the Gotlandic Middle Neolithic Pitted Ware Culture, in which five variations of mortuary practices have been observed and described, and whose interpretation still requires precise chronological determinations (Wallin 2015). In the case of the Cogotas I culture, we are still in the phase of detecting possible variations, one of which is described here. While the entire varied casuistry requires an explanation, the present paper will focus on a few particular cases that appear to define a specific mortuary pattern: child burials associated with the presence of some bone of an adult. This behaviour has been observed at several sites, which has suggested the hypothesis that the burial of the infant was deliberately accompanied by an ancient adult bone, which would have been a relic.

The Archaeological Evidence of Accompaniment

An Intriguing Damaged Tomb (Cathedral Square, Zamora)

The first case arose out of the reappraisal of a double burial in the city of Zamora (Alacet Arqueólogos 2005; Caro Dobón and Fernández Suárez 2007). A preventive excavation in the Cathedral Square, in the vicinity of the Romanesque church, uncovered the remains of a pit complex with materials that belonged to Cogotas I. The site had experienced a long use that reached the Middle Ages, when numerous silos had been dug there, and some of these cut through prehistoric levels and structures.

In the deepest part of the archaeological excavation, a pit (327) was found with fill including Cogotas I pottery fragments and, at its base, a primary burial in which the anatomical connections had been maintained absolutely. The individual was a child, about 9 months old[1]. A practically whole cranium (frontal, and most of both parietals and occipital) belonging to a female with an age at death of between 20 and 30 years was found in the same structure.

Owing to the lack of collagen, the remains could not be dated, but a result was obtained for charred material in the level (Poz 26264: 3085 ± 35 B.P.; 1430–1261 cal BC) supporting the attribution of the subphase Full Cogotas I (ca.1450–1150 cal BC) for the pit.

The excavators of the site (Alacet Arqueólogos 2005) proposed the hypothesis that the adult remains might have belonged to a primary burial that was almost completely destroyed when an underground structure was dug during the Middle Ages. However, a careful examination does not support that argument, above all because the outline of the pit can be reconstructed with a degree of certainty (Figure 3) and there was not enough space in the destroyed part for an adult skeleton, even if it was flexed. Additionally, the cranium, placed in the centre of the pit, was not strictly on the edge of the medieval pit that cut through the prehistoric burial pit. Finally, the extreme anatomical under-representation of the adult individual was limited to the neurocranium, without any post-cranial bones at all.

As it proved impossible to date the two individuals by radiocarbon, the temporal connection between them cannot be determined, and therefore, the connection between the infant and the adult cranium is strictly archaeological. However, there is an interesting point: the reuse of a burial pit has not been observed at any Cogotas I site. There is no evidence of pits being reopened, disturbing previous burials, for a new inhumation. The formation of the fill containing human remains, and other particular materials, is the result of a single action that, with a longer or shorter duration and complexity, formed the deposit.

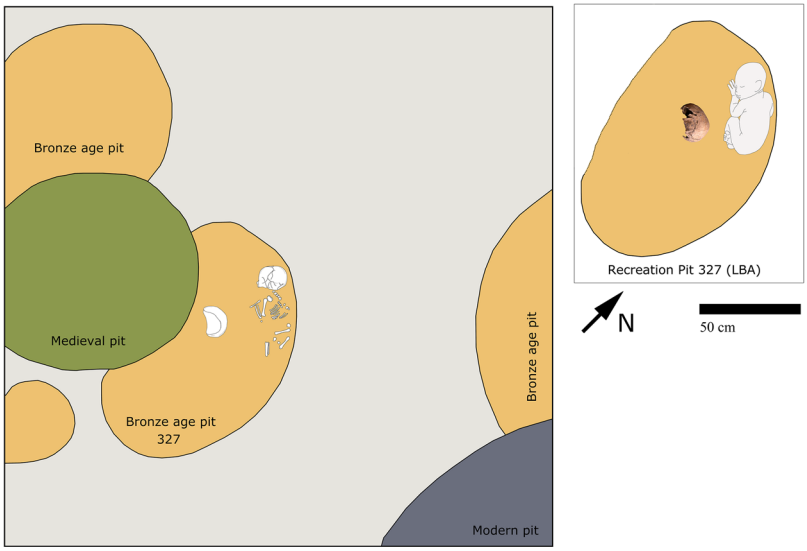

Figure 3. Plan of the excavation in Cathedral Square (Zamora), showing the Bronze Age pits cut through by recent structures (modified and redrawn from Alacet Arqueólogos 2005). Right: Recreation of the burial in Pit 327 (JVV)

Two Clear Cases of Relics: "Tres Chopos-Abarre" and "Las Vegas" (Figures 1, 2)

These two archaeological sites, located, respectively, in Villegas (prov. Burgos) and Jabares de los Oteros (prov. León) are, like the deposit in the city of Zamora, "pit sites", where numerous pits were dug in the sub-soil, many of which must originally have been silos. Additionally in these cases where the fill is indicative of the Initial or Formative phase, that is Proto-Cogotas I (Middle Bronze Age, MBA). This attribution has been supported by AMS radiocarbon determinations at the laboratory in Poznan, for both the primary remains and the accompanying bones.

At the first site, "Tres Chopos-Abarre" (Villegas) (Arnáiz Alonso and Montero Gutiérrez 2008), Pit No. 1 contained the primary burial of a 3- or 4-year-old individual, and also a fragment of an adult mandible, probably belonging to a female about 35–45 years of age. At the second site, "Las Vegas" (Jabares de los Oteros) (Rodríguez-Marcos et al. 1999), Pit AN-17 held a primary burial of a 9–12-month-old subadult together with the third right metacarpal of an adult, probably a female.

At first sight, the radiocarbon dates indicate that, in both cases, the date of the infant individual is more recent than that of the adult remains. In statistical terms, this is only certain in the case of the burials at Villegas, where the difference is clearly significant, whereas at Jabares de los Oteros, the proximity of the dates would weaken the argument. In this case, the date of the adult bone (3260 ± 30 B.P.) may at first sight seem to be older than the date of the infantile skeleton (3250 ± 35 B.P.), but the great coincidence in the calibration intervals of the two dates, as seen in Table 1, and a simple statistic calculation with the *t* test, shows that these samples are statistically the same. However, although a firm conclusion cannot be reached, the Bayesian approach to the question of whether one of the two mortuary events is older than the other indicates (Table 2) that the death of the adult before the infant is slightly more probable (0.5737) than the contrary (0.4263), which in any case would be illogical. It should also be recalled that, in bioarchaeological terms, the adult's bone must have been dry and it displays no evidence (cut marks) that it was separated from the rest of the skeleton while still fresh. No archaeological evidence has been found suggesting that it was buried after the inhumation of the infant. On the contrary, the available information indicates that they formed part of the same deposit. It would therefore almost certainly correspond to an individual who had died before the infant. In sum, the appearance of the bone and the radiocarbon dating at least suggest that, as at Jabares, the adult bone comes from an individual who had died earlier.

Table 1 AMS Radiocarbon dates of the skeletons sampled

Site (locality, province)	Feature	Sample	Laboratory Reference	Radiocarbon Age	Calendar Age Intervals 2 σ (p)	Burial type Individual age (yo/mo) Sex	Statistical difference
Tres Chopos-Abarre (Villegas, Burgos)	Pit 1	TCV-02	Poz-24346	3280 ± 30 B.P.	[cal BC 1630–cal BC 1497] (95.4%)	Primary Infant (3–4 yo) Indet.	Samples are significantly different at 95% level statistic T Xi2(.05) d.o.f. 6.125 3.84 1
		TCV-03	Poz-48613	3605 ± 35 B.P.	[cal BC 2118–cal BC 2097] (2.5%) [cal BC 2040–cal BC 1883] (92.9%)	Secondary (jaw fragment): Adult (35–45 yo) Female?	
Las Vegas (Jabares de los Oteros, León)	Pit AN-17	JAB-04b	Poz-23445	3250 ± 35 B.P.	[cal BC 1615–cal BC 1444] (95.4%)	Primary Infant (9–12 mo) Indet.	Samples are statistically the same at 95% level statistic T Xi2(.05) d.o.f. 0.0470588 3.84 1[a]
		JAB-04c	Poz-48609	3260 ± 30 B.P.	[cal BC 1617–cal BC 1493] (88,2%) [cal BC 1481–cal BC 1455] (7.2%)	Secondary (metatarsal bone): Adult Female?	
Pico Castro (Dueñas, Palencia)	Pit S-39	DUE-03	Poz-16555	3015 ± 35 B.P.	[cal BC 1392–cal BC 1337] (17.1%) [cal BC 1323–cal BC 1156] (74.1%) [cal BC 1147–cal BC 1128] (4.2%)	Secondary (cranium fragments): Infant (9–12 mo) Indet.	Samples are significantly different at 95% level statistic T Xi2(.05) d.o.f. 16.36283 3.84 1
		DUE-02	Poz-16513	3230 ± 40 B.P.	[cal BC 1611–cal BC 1430] (95.4%)	Secondary (tibia fragments) Adult Female	

Calibrated using OxCal v.4.2, and the IntCal13 curve (Bronk Ramsey 2009; Reimer et al. 2013). The statistical combination of dates, performed with the Calib 3.0 program (Stuiver and Reimer 1993)

[a]See also Table 2

Table 2 Radiocarbon dates of the human remains buried in Jabares de los Oteros Pit AN-17: Probability that one event is older than another performed with the OxCal v.4.2 "Order" function

Probability $t_1 < t_2$		
t_1	t_2	
	Adult JAB 04c Poz-48609	Infantil JAB 04b Poz-23445
Adult JAB 04c Poz-48609	0	0.5737
Infantil JAB 04b Poz-23445	0.4263	0

Pico Castro: A Particular Case

Table 1 also contains a slightly different case, in which the old bone of an adult accompanied, not a primary child's burial, but the secondary remains of a child. Although it equally attests the same phenomenon of the manipulation and circulation of bones, which would have been facilitated by the practice of exposure of cadavers, it is clearly not a burial with an added bone. However, it indicates the gathering-up of two bones of different chronologies and in that respect, the circumstances approximate the funerary behaviour being studied here. The find took place in another pit field, at Pico Castro (Dueñas, Province of Palencia) in Pit S-39 (Crespo et al. 2005). The fill contained potsherds belonging to Full Cogotas I (Late Bronze Age, LBA), as well as a very fragmented cranial portion from a very young infant (impossible to determine its biological sex) and the shaft of the left femur of an adult female. As can be seen in Table 1, the radiocarbon determination of the infant corroborates the chronology of the fill in the pit (LBA) whereas the femur corresponds to the formative Proto-Cogotas I (MBA).

Discussion

With the reservations due to the number of cases and the limited archaeological information, the observations can be summarised thus: these subadults interred in burial pits, within a dwelling area, seem to have been placed deliberately in lateral decubitus, not in the centre of the pit but next to its wall. In short, they follow the general pattern in Cogotas I for adults buried in pits. Like them, they also lack grave goods and the few objects found in the fill (some potsherds, a few animal bones, fragments of charcoal, etc.) appear to be irrelevant elements that had been thrown away and disposed as waste. Indeed, the same explanation for the isolated adult bones cannot be totally ruled out but, unlike the other remains in the fill,

they display no sign of erosion, trampling, polish, etc. (Lyman and Fox 1997; Domínguez-Rodrigo et al. 2009). Additionally, the isolated nature of the bones and their absence in the large number of pits that have been excavated and studied by archaeozoologists—as well as belonging to females if that can be confirmed—at least suggest the hypothesis that they were intentionally selected placed as a relic to accompany the infant burial. Furthermore, this occurred in a context like Cogotas I in which other proof of the circulation of human bones and their abandonment in non-mortuary deposits has been found, and where some pits have been associated with highly structured and repeated social practices with no functional purpose (Blanco-González 2014a, b). So, if this hypothesis is accepted, what was the reason for these accompanying bones?

Ancestral Rites

The adult bones accompanying the buried children may have been regarded as the remains of ancestors. It is true that belief in ancestors is not universal, but it has been pointed out that, for example in the case of sub-Saharan societies, this belief is closely linked with the use of the concepts of "good" versus "bad" death (Thomas 1982: 101ss; Insoll 2015b: 154–5). As noted above, such a concept has also been proposed for the Cogotas I mortuary realm. The special case of Pico Castro (Dueñas) appears to have a relatively simple explanation, according to recent research at other European prehistoric sites, which has approached similar archaeological evidence from new perspectives. Thus, Brück (2006a) noted that the manipulation, exhibition and deposition of human remains, in the same way as artefacts, may have been a practice connected to the construction of interpersonal relationships. As some authors have stressed, these bones would no longer belong to particular individuals but the community, whose immortality they represented (Larsson 2009: 125), and Fowler (2004: 75) states very precisely: "Fragments of a body need no commemorate individuals; the same is true for relic remains of old objects, which may be inalienable from the community and offered to the dead". In this respect, the two bones of different chronology found together in the fill of Pit S-39 at Pico Castro may well have been deposited in a community event, such as public ritual activity or a feast. Other pits at the same site seem to indicate that ritualised events were held there; for example, one contained a ceramic recipient and five complete granite grindstones, while another held "an extraordinary and bewildering deposit" of pottery "that had been used together at a communal feast" (Blanco-González 2014a: 445). These practices of creation and maintenance of social relationships must have been especially important for a society like Cogotas I that

appears to have been characterised by dispersed population and a degree of mobility over a large territory. In such a situation, the construction of social memory by establishing links with ancestors (Van Dyke and Alcock 2003), materialised through the circulation and use of relics, would become especially meaningful.

A Line of Descent

However, if the Pico Castro isolated bones of a child and an adult that had died previously may be interpreted as communal relics of a mythical past, the other three cases, at Jabares, Villegas and Zamora, seems to require a supplementary type of explanation: a primary burial of a child accompanied by an isolated adult bone as possible indicator of a hereditary link.

The addition of an adult bone to the burial of a child cannot have been the general normative practice, as our research project has also identified at least five cases of primary child burials with no other accompanying human—at Las Vegas, pit D-33; El Castro, pit 8; El Tablón, pit 35; Soto de Tovilla II, pit 113; and Fuente la Mora, pit 32 (fig. 2, nos. 9, 14, 20, 25 and 27, respectively). This would therefore have been a very specific practice. Within the abnormal conduct of burial in a pit, which according to our hypothesis would correspond to cases of "bad death", a bone of an adult who had died some time previously was only added on three occasions. What were the reasons for this selective behaviour? Was this simply out of some particular emotion? Perhaps this practice aimed to show that the subadult belonged to a particular genealogical line of descent.

Some antecedents of this conduct are known. In the Copper Age in Andalusia, some practices involving human remains are being recognised which can be related to the maintenance of lineages and inheritance, which would have been important where ranked societies were in the process of being formed (Cámara Serrano et al. 2016). However, it would be more appropriate to cite that, on the inland Plateau of the Iberian Peninsula, some comparable cases have been documented in the Bell Beaker culture: In Yuncos (Toledo), Bueno Ramírez et al. (2005) mentioned finds of secondary remains, generally of older adult individuals that contrasted with the youth of the primary remains, and this phenomenon was described as an "exhibition of the hereditary factor" (*ibid.*: 84). At Camino de las Yeseras (Madrid), the burial of an adult female was accompanied by fragments of a human skull and fibula (Liesau et al. 2014a: 141), and again the expression of lineage was suggested (*ibid.*: 146).

This practice is understandable within the Bell Beaker culture, whose social framework is relatively well known (eg. Case 2014; Turek 2000): a tendency towards the individualisation of the body and appearance of

high-ranking groups where even children inherit that status. However, the social background of the Bronze Age Cogotas I culture seems quite different. Although the mortuary record, in which the scarce pit burials lack grave goods, and the habitat, with pit sites in which hardly any sign of huts can be found, do not help to characterise the social background, the impression is one of predominant homogeneity with absence of ranking. It may have been a segmentary society based on kinship (Arnáiz Alonso and Montero Gutiérrez 2011), while other authors suggest incipient chiefdoms due to finds of a few isolated gold jewels and weapons, like swords and spearheads, in some deposits of bronze objects (Delibes de Castro et al. 1999: 56–57). Therefore, in Cogotas I, how can the existence of these burials that aim to display belonging to certain lineages be justified? To return to the original question, why were some children accompanied by adult bones and others were not? Perhaps because in the social structure, built among other things thanks to an egalitarian ideology that tended to negate inequality, some fissures appeared and signs of a trend towards social inequality emerged such as the gold jewellery and weapons cited above. Thus, the child burials seem to have strictly followed the predominant practice—deposition in a pit, in lateral decubitus, with no grave goods—but in the three examples described here the relatives of the infants who may have recovered or conserved bones of ancestors, added them to accompany the burial. This embodiment of a lineage may thus have represented an "extra benefit" for the deceased and, at least, differentiating behaviour or an act of distinction. In this way, the relics would also be elements legitimising inequality (Lillios 1999). An apotropaic purpose cannot be ruled out in the accompaniment, as the boundary between an identitarian explanation and a protective one is fuzzy. However, the fact that this alleged protection was not generalised, but quite restricted, supports the hypothesis of social differentiation.

An Engendered Regenerative Metaphor?

While this framework of social difference may be convincing, the possibilities of interpretation do not end there, as there may be other factors, such as the age of the individuals involved. For example, out of the child burials that have been documented, in the five cases with no accompanying human remains, four are of children older than three years of age, whereas the practice of adding the bone of an adult seems to have been reserved for the burials of infants of a few months of age. However, the sample is very small.

For the accompanying remains, the important point may not have been the age but the gender. With the due caution needed, as not all the bones

are especially diagnostic for sex determination, it seems that the four adults studied here may all have been females. This suggests, at least provisionally, that the identity of gender, specifically of a woman, was known initially and maintained in the group's memory. As the standard deviation of the radiocarbon calibrations does not allow a precise determination of the difference in time between each pair of individuals, it is meaningless to speculate whether it was motherhood, grandmotherhood or great–great-grandmotherhood that was being stressed, and it may have been simply unspecific ancestry. It is possible that DNAmt results might be obtained, like those that indicate *potential maternal ancestries* (Le Roy et al. 2016), but this has not occurred in the present case and it may even have been a case of "fictive kinship" or "alleged kinship", socially as important as biological kinship or more so. Additionally, beyond from those links, the choice of female bones to express meanings and intervene actively in the social order is not unknown. After studying burial mounds in the British EBA, Brück (2009) envisaged mortuary treatment that differed according to gender, with a tendency of inhumation for males and cremation for females. This treatment is especially suited to the recovery of some bones in order to circulate them as ancestor relics. In this way, the remains of females, who in this case had been cremated, would have played an important part in the reproduction of social order and the maintenance of group relationships.

With anthropological support inspired by Lévi–Strauss's theories, some studies (eg. Brereton 2013: 234) cite certain societies in whose cosmologies children and ancestors meet in an imaginary place socially conceived as *Otherness*. To be more exact, anthropological literature sometimes refers to ancestral bone as a possible source of fertility and renewal (Bloch and Parry 1982: 7; Thomas 1982: 79; Watson 1982; Helms 1998: 27–8; Oosterhout 1998: 136,158; Insoll 2015a: 105,112) and mentions the relationship between the retrieved bones of ancestors and the fertility of their descendants (eg. Bloch and Parry 1982: 23). There are often passages with considerable detail, for example the related to the Fang in Gabon (Nguema-Obam 1984: 42), the Dowayoo in Cameroon (Dumas-Champion 1989) or the Wape in Papua New Guinea (Mitchell 2012: 151). These references find their echo in archaeological literature; thus Tilley, in an interpretation of megalithism, refers to the case of the Merina in Madagascar, where curated bones were transferred to the communal tomb and reunited with ancestors' bones. This re-burial "recharges the fertility of the descent group and re-emphasizes its relationship to land" (Tilley 1996: 238). In turn, Brück (2006a, b) points out the socially active role as a "source of fertility" of bone fragments in the British Bronze Age, as they did "not simply symbolise death but facilitated the regeneration of life".

In the present case, there may be a confluence of different concerns of a cosmological nature: (a) the potential rebirth that was often attributed to children who died very young (Bloch and Parry 1982); (b) the burial in underground features, possibly former storage pits—the pit burial as a "conceptual uterus", sensu Insoll (2015a: 92); and (c) the materiality of some particular women—if confirmed— seen as ancestors, who might symbolise the "long-standing magico-religious association between maternity and fertility of the soil" (Sanday 1981: 114). Therefore, burying the body of a child who had died in the early stages of his or her life, accompanied by a female relic, may have been a practice aimed at the regeneration of the fertility of the land and the community.

An Act of Enchainment?

If we momentarily put aside the question of the gender of the adult and the uncertain terrain of kinship and ancestry—after all, as Weiss-Krejci (2011b : 77) states "relics represent people, but not necessarily ancestors"—it is interesting to recall, following Chapman y Gaydarska (2007: 4), that the intentional fragmentation and the use of fragments in *enchainment* processes could have been used to create and maintain links between people. Specifically, "the materiality of enchained human bones would have created a strong and enduring visual and tactile proof of the links to the deceased" (Chapman 2010: 38).

The association of remains studied here would signify continuity in interpersonal links, from the person who had died some time before to the person who picked out one of the bones, those who had kept it, and those who had finally buried it together with the child. In other words, one of those complex *enchainments* of relationships that have been proposed (*ibid*.: 3) in the prehistory of southeast Europe. Without going any further into the controversial *fragmentation* theory (Chapman 2000: 179), it should be noted here that some interesting evidence is beginning to be found in Cogotas I mortuary practices. Apart from these cases of child burials accompanied by an adult bone, we can mention the variant documented at Pico Castro (Dueñas), where the chain would have existed between fragments of individuals reunited in a special deposit, and even the case of La Requejada (San Román de Hornija, Valladolid), where half a vessel decorated with fingernail impressions was placed next to a triple burial, while other fragments were deposited in the fill in the upper part of the grave and in other places (Esparza Arroyo et al. 2012a: 309).

The Infrequency of This Mortuary Behaviour

It is not easy to find parallels for this pattern that has been detected in the Iberian Bronze Age. Certainly, in many parts of Europe, skeletons have been documented where some bones were removed to be kept, circulated and reburied or redeposited in very different kinds of circumstances (eg. Chapman 2000; Weiss-Krejci 2011a; Gibson 2014; Wallin 2015; Cámara Serrano et al. 2016). In contrast, examples of bones accompanying burials are very scarce, even in specialised studies, and cases in which children are accompanied by an adult bone are particularly unusual. For example, at the Mesolithic/Neolithic site of Lepenski Vir, none of the 40 unborn/newborn children were accompanied by isolated bones, and the addition of an "ancestral" bone was only recorded in Burial 7/1, of an adult (Stefanović and Borić 2008). Similarly, in a pioneering work on the possible use of relics in the British Bronze Age, Brück (2006b: 82–3) cites five surprising cases of burials with accompanying remains, but only one of them, Cist 5 at Barn's Farm in Scotland, was of a subadult with some adult bones. In his studies on the Chalcolithic of Central and South Eastern Europe, Chapman (2010) has found seven graves in which the "addition" of a bone has been recorded, and there are only two cases, Vinitsa grave 3 and Goran-Slatina Barrow 3/Grave 3, in which the bone of an adult accompanies the burial of an infant (*ibid.*: 34, fig. 4.4). Similarly, in the EBA in Bulgarian Thrace, foetuses or perinatal infants were buried in jars together with some bones of a child or adult (McSweeney and Bacvarov 2017: 98). Finally, in a doctoral thesis on the EBA in Scotland, Yorkshire and Wessex (McLaren 2011), with a corpus of up to 500 child burials in the EBA, only one example of a relic of this kind is described, that of an adult tibia accompanying a supposedly infant burial in a cist at Holly Road, near St Andrews (*ibid.*: 56). Unfortunately, this case is somewhat dubious as the discovery of the cist and the recovery of the bones took place in 1944 during deep ploughing (Christie 1949) and in addition to the lack of contextual data (Lewis and Terry 2004: 30 and 44), none of the individuals' remains have been dated.

In all these cases in the archaeological literature, it should be stressed that no particular pattern can be detected (with the exception perhaps of the bulgarian perinatal burials in jars cited above). This is also true of other studies (Blockley 2005; Stutz et al. 2013) where radiocarbon dates would have demonstrated other ways in which human bones of different times were brought together. The present study is therefore of interest as it characterises a new pattern that seems to be emerging. The corpus of evidence is small, although not so small in relation with the total number of known primary individual burials in the Iberian North Sub-Plateau: of the 24 known, there are 8 infantile, of which 3 are accompanied by an adult

bone relic. Indeed, it is large enough to be brought to the attention of prehistoric archaeologists and anthropologists. These extraordinary cases—extraordinary from the Western point of view—of accompanied child burials in the Iberian Bronze Age need to be made known so that the possible existence of analogous manifestations in other regions may be identified.

Concluding Remarks

Rather than interpreting the coincidence of human remains in the same burial as the simple consequence of taphonomic processes, agriculture or building work, removal and random redeposition, the cases presented here are evidence of the intentional burial of a bone of an adult—perhaps female—who had died some time earlier, together with the body of a child.

If the exposure of corpses had been the normative mortuary treatment in the Cogotas I culture, it would have facilitated a very direct relationship with the deceased and easy access to their remains and consequently enabled their participation in the mortuary acts described above. This would constitute an interesting contrast between *good* and *bad death* (*vid.* Insoll 2015b: 155), with the bone of someone would have had a good death and become an ancestor protecting an unfortunate baby who died very young. Certainly, the presence of human remains at several sites (eg. Esparza Arroyo et al. 2012b), where they finally formed part of the fill inside pits and display various kinds of taphonomic impact (modification by atmospheric agents, animals, erosion, etc.), is a clear sign of the general circulation of these *bone relics* and their inclusion in different kinds of social practices, possibly like the one studied in this paper.

Several authors have proposed that these types of practices "facilitated the production of the self and the reproduction of society" (Brück 2006b: 87), and that "the burial of the dead is a powerful arena through which relationships of status, power, and inequality in the living society can be structured" (Tarlow and Nilsson Stutz 2013: 7–8). The examples described here attest a dynamic situation, in which certain practices, such as the case of the relics deposited at Pico Castro, aimed to strengthen the social order, whereas others, such as the practice giving importance to the relic accompanying a child, may have been intended to challenge that order or even question it. However, it is also possible, as explained above, that it may have been aimed at the regeneration of the earth's fertility.

If the specific cases detected here were simply fortuitous in connection with the form of death of a particular individual, research would hardly be able to advance. However, when the mortuary record is examined with the

greatest care it is possible to find a repetition of formalised actions to be unveiled (a "script", sensu Gramsch and Meier 2013: 195).

Studying the social interpretation of these types of practices in greater depth, their possible association with certain sectors of the sites, with occupation phases, with gender identities, etc., is a feasible objective, but the existence of this pattern must be detected and acknowledged as a prior condition. It is vital to be aware of this possibility to approach excavation and documentation in such a way that the simultaneous burial of the remains can be proven and taphonomic or post-depositional processes can be excluded. In this way, an appreciation of variability in mortuary practices, and especially the detection of repeated social actions, such as those involving the inclusion of relics, may have wider repercussions, beyond Prehistory.

To conclude, although knowledge of Bronze Age societies in inland Iberian Peninsula is still very limited, in the present case study a pattern can be glimpsed that may point towards new lines of research and be approached from wider perspectives. For instance, the unusual burials of some children accompanied can be understood as an attempt at individualisation, an escape from the forms of relational identity that were probably predominant at that time. It has also been suggested that this kind of differential behaviour may represent a fissure in a system that had been successfully avoiding the emergence of differences. Additionally, this new variation of mortuary behaviour conjugates primary and secondary burials, a whole body and a fragment, the individual and the group, a given moment in time and the past, death and regeneration. Is all this not of interest for other forms of research into the interaction between society and material culture? In sum, the behaviour presented here, which requires the greater and more abundant evidence that this paper aims to stimulate, could also be relevant for other disciplines in Humanities and Social Sciences.

Acknowledgements

We wish to thank the Spanish Ministry of Economy and Competitiveness for supporting this research financially (Projects HAR2009-10105 and HAR2013-43851-P); the Autonomous Government of Castile and Leon, for the support of our Museum-based research; Prof. Tomasz Goslar (Poznan Radiocarbon Laboratory) for the AMS dating; our friends Dr. Miguel Ángel Arnaiz Alonso (University of Burgos), Javier Quintana López, and Oscar Alonso Gregorio (Alacet), Jesús Misiego Tejeda (Strato) and Manuel Crespo Díez (TeMa) for their generous help with the sites excavated by

them in Villegas, Zamora, Jabares de los Oteros and Dueñas; and Peter Smith for the English version. The authors also want to thank the anonymous reviewers who provided many valuable contribution.

Compliance with Ethical Standards

Conflict of interest No potential conflict of interest was reported by the authors.

Note

1. The estimation of the age of the subadults was based on the stage of formation and eruption of the teeth in both dental arcades (Buikstra and Ubelaker 1994) and, whenever possible, on the measurements of the main long bones (Scheuer and Black 2000). The age and sex of the adults was estimated with greater or lesser certainty. For the cranium from Zamora Cathedral Square, the age at death was estimated from the degree of closure of the cranial sutures (Buikstra and Ubelaker, 1994), and the sex from the morphological characteristics of greatest diagnostic value, according to the same authors—mastoid process, supra-orbital margin, supra-orbital ridge, nuchal crest, size, etc.—which resulted in its classification as belonging to a female individual. For the mandible fragment at Tres Chopos (Villegas), the age at death would be about 35–45 years, according to its morphological characteristics (ibid.) and the dental wear, following the criteria of Brothwell (1989); it would also belong to a female (with a greater degree of uncertainty) due the robustness and thickness of the preserved bone portion and the size of the teeth. Finally, for the third metacarpal from Las Vegas (Jabares) the sex was estimated with the APDPE (antero-posterior diam. proximal epiph.) discriminant function proposed for this bone by Scheuer and Elkington and developed for the Spanish population by Barrio et al. (2006): if ''less than 0, values will correspond to females''. The value calculated for the Las Vegas bone is—1.7315, which would suggest its attribution to a female.

References

Abarquero Moras, F. J.
(2005). *Cogotas I. La difusión de un tipo cerámico durante la Edad del Bronce.* Valladolid: Junta de Castilla y León.

Abarquero Moras, F. J., Blanco-González, A., Esparza Arroyo, A., & Rodríguez Marcos, J. A.
(2013). The Central Iberian Meseta at the time of the Thera eruption: An overview. In H. Meller, F. Bertemes, H. R. Bork, & R. Risch (Eds.), *1600—Kultureller Umbruch im Schatten des Thera-Ausbruchs?* (pp. 315–326). Halle: Mitteldeutscher Archäologentag. (**Tagungen des Landesmuseums für Vorgeschichte Halle 9**).

Alacet Arqueólogos.
(2005). Realización de sondeos arqueológicos previos en el solar de la antigua Residencia de Nuestra Señora de la Paz, en la plaza de la Catedral c.v. a la Calle Obispo Manso (Zamora). Report prepared for the Autonomous Government of Castile and Leon. Valladolid: Consultable in the General Directorate of Cultural Heritage.

Andersson, M., Karsten, D., Knarrström, B., & Svensson, M.
(2004). *Stone Age Scania*. Lund: National Heritage Board.

Arnáiz Alonso, M. A., & Montero Gutiérrez, J.
(2008). El registro funerario de Tres Chopos-Abarre (Villegas, Burgos). Problemática y perspectivas en el estudio de las prácticas rituales de Cogotas I. *Férvedes, 5,* 237–246.
(2011). Funerary expression and ideology in the Cogotas Culture settlements in the northern Meseta of the Iberian Peninsula. In T. Moore & X. L. Armada (Eds.), *Atlantic Europe in the first millennium BC: Crossing the divide* (pp. 558–574). Oxford: Oxford University Press.

Barrio, P. A., Trancho, G. J., & Sánchez, J. A.
(2006). Metacarpal sexual determination in a Spanish population. *Journal of Forensic Sciences, 51*(5), 990–995.

Barroso, R., Bueno, P., González, A., Candelas, N., Rojas, J. M., & López Sáez, J. A.
(2014). Enterramientos de la Edad del Bronce en la Meseta Sur peninsular a partir del Sector 22, Yuncos (Toledo). *Munibe Antropologia-Arkeologia, 65,* 117–136.

Blanco-González, A.
(2014a). Tracking the social lives of things: Biographical insights into Bronze Age pottery in Spain. *Antiquity, 88,* 441–455.
(2014b). Sitios en altura y vasijas rotas: Reconsiderando la etapa de 'plenitud' de Cogotas I (1450–1150 AC) en la Meseta. *Trabajos de Prehistoria, 71*(2), 305–329.
(2018). De cabañas a casas. Estrategias sociales en la Prehistoria final de la Meseta (1400–400 AC). In A. Rodríguez Días, I. Pavón Soldevila, & D. M. Duque Espino (Eds.), *Más allá de las casas Familias, linajes y comunidades en la protohistoria peninsular* (pp. 295–326). Cáceres: Universidad de Extremadura.

Bloch, M., & Parry, J.
(1982). Introduction: Death and the regeneration of life. In M. Bloch & J. Parry (Eds.), *Death and the regeneration of life* (pp. 1–44). Cambridge: Cambridge University Press.

Blockley, S. M.
(2005). Two hiatuses in human bone radiocarbon dates in Britain (17000 to 5000 cal BP). *Antiquity, 79*(305), 505–513.

Borić, D.
(2003). 'Deep time' metaphor: Mnemonic and apotropaic practices at Lepenski Vir. *Journal of Social Archaeology, 3*(1), 46–74.

Bradley, R.
(1998). *The significance of monuments. On the shaping of human experience in Neolithic and Bronze Age Europe*. London: Routledge.

Brereton, G.
(2013). Cultures of infancy and capital accumulation in preurban Mesopotamia. *World Archaeology, 45*(2), 232–251.

Bronk Ramsey, C.
(2009). Bayesian analysis of radiocarbon dates. *Radiocarbon, 51,* 337–360.

Brothwell, D. R.
(1989). The relationship of tooth wear and aging. In M. Y. Iscan (Ed.), *Age markers in the human skeleton* (pp. 303–318). Springfield: Charles Thomas Publisher.

Brück, J.
(2004). Material metaphors. The relational construction of identity in Early Bronze Age burials in Ireland and Britain. *Journal of Social Archaeology, 4*(3), 307–333.
(2006a). Fragmentation, personhood and the social construction of technology in middle and Late Bronze Age Britain. *Cambridge Archaeological Journal, 16*(3), 297–315.
(2006b). Death, exchange and reproduction in the British Bronze Age. *European Journal of Archaeology, 9*(1), 73–101.
(2009). Women, death and social change in the British Bronze Age. *Norwegian Archaeological Review, 42*(1), 1–23.

Bueno Ramírez, P., Barroso Bermejo, R., & de Balbín Berhmann, R.
(2005). Ritual campaniforme, ritual colectivo: La necrópolis de cuevas artificiales del valle de Las Higueras, Huecas (Toledo). *Trabajos de Prehistoria, 62*(2), 67–90.

Buikstra, J. E., & Ubelaker, D. H. (Eds.).
(1994). *Standards for data collection from human skeletal remains*. Fayetteville: Arkansas Archeological Survey. **(Research series, 44)**.

Cámara Serrano, J. A., Sánchez Susí, R., Riquelme Cantal, J. A., Martín Flórez, S., Afonso Marrero, J. A., Pau, C., et al.
(2016). Culte aux ancêtres dans la période chalcolithique de la péninsule ibérique? Le sacrifice d'animaux, la circulation des restes humains et la différence de traitement entre hommes et femmes dans les tombes du site archéologique à «Marroquíes» (Jaén, Espagne) trouvées dans les fouilles de la «Tranche 3» du système du tramway. *L'Anthropologie, 120*(2), 145–174.

Caro Dobón, L., & Fernández Suárez, M. E.
(2007). Enterramiento en fosa del Bronce Final en la ciudad de Zamora. In F. J. Barca Durán & J. Jiménez Ávila (Eds.), *Enfermedad, Muerte y Cultura en las Sociedades del Pasado. Actas del VIII Congreso Nacional de Paleopatología* (pp. 91–100). Cáceres: Fundación Academia Europea de Yuste.

Case, H.
(2014). Beakers and the Beaker culture. In J. Czebreszuk (Ed.), *Similar but different: Bell beakers in Europe* (2nd ed., pp. 11–34). Leiden: Sidestone Press.

Chapman, J.
(2000). *Fragmentation in archaeology. People, places and broken objects in the prehistory of South-Eastern Europe*. London: Routledge.
(2010). 'Deviant' burials in the Neolithic and Chalcolithic of Central and South Eastern Europe. In K. Rebay-Salisbury, M. L. Stig Sørensen, & H. Jessica (Eds.), *Body parts and bodies whole changing relations and meanings* (pp. 30–45). Oxford: Oxbow Books.

Chapman, J., & Gaydarska, B.
(2007). *Parts and wholes: Fragmentation in prehistoric context*. Oxford: Oxbow.

Christie, R. L.
(1949). Short Cist at Durie, Scoonie, Fife. *Proceedings of the Society of Antiquaries of Scotland, 83,* 230–231.

Conneler, Ch.
(2011). The mesolithic. In T. Insoll (Ed.), *The Oxford handbook of the archaeology of ritual and religion* (pp. 358–370). Oxford: Oxford University Press.

Crespo, M., Herrán, J. I., & Puente, M. J.
(2005). Intervención arqueológica en el 'Pico Castro', Dueñas, Palencia. 2a Fase. Octubre–Noviembre de 2005, Report prepared for the Autonomous Government of Castile and Leon. Valladolid: Consultable in the General Directorate of Cultural Heritage.

Croucher, K.
(2012). *Death and dying in the Neolithic Near East*. Oxford: Oxford University Press.

Delibes de Castro, G., Fernández Manzano, J., Fontaneda Pérez, E., & Rovira Llorens, S.
(1999). *Metalurgia de la Edad del Bronce en el piedemonte meridional de la Cordillera Cantábrica: La Colección Fontaneda*. Valladolid: Junta de Castilla y León.

Domínguez-Rodrigo, M., De Juana, S., Galán, A. B., & Rodríguez, M.
(2009). A new protocol to differentiate trampling marks from butchery cut marks. *Journal of Archaeological Science, 36*(12), 2643–2654.

Dumas-Champion, F.
(1989). Le mort circoncis. Le culte des crânes dans les populations de la Haute Bénoué (Cameroun/Nigeria). *Systèmes de pensée en Afrique noire, 9,* 33–74.

Esparza Arroyo, Á., Velasco-Vázquez, J., & Delibes de Castro, G.
(2012a). HUM 2005-00139: Planteamiento y primeros resultados de un proyecto de investigación sobre la muerte en Cogotas. In J. A. Rodríguez-Marcos & J. Fernández-Manzano (Eds.), *Cogotas I. Una cultura de la Edad del Bronce en la Península Ibérica* (pp. 259–320). Valladolid: Universidad de Valladolid.
(2012b). Exposición de cadáveres en el yacimiento de Tordillos (Aldeaseca de la Frontera, Salamanca). Perspectiva bioarqueológica y posibles implicaciones para el estudio del ritual funerario de Cogotas I. *Zephyrus, LXIX,* 95–128.

Esparza, Á., Palomo Díez, S., Velasco Vázquez, J., Delibes, G., Arroyo Pardo, E., & Salazar García, D. C.
(2017). Familiar Kinship? Palaeogenetic and Isotopic Evidence from a Triple Burial of the Cogotas I Archaeological Culture (Bronze Age, Iberian Peninsula). *Oxford Journal of Archaeology, 36,* 223–242.

Fowler, C.
(2004). *The archaeology of personhood. An anthropological approach*. London: Routledge.

Gibson, A.
(2014). Burials and Beakers: Seeing beneath the veneer in Late Neolithic Britain. In J. Czebreszuk (Ed.), *Similar but different: Bell Beakers in Europe* (2nd ed., pp. 173–192). Leiden: Sidestone Press.

Gramsch, A., & Meier, T.
(2013). An archaeological outline of ritual dynamics and social space. In S. Bergerbrant & S. Sabatini (Eds.), *Counterpoint. Essays in Archaeology and Heritage Studies in Honour of Professor Kristian Kristiansen (BAR Int. S. 2508)* (pp. 193–198). Oxford: Archaeopress.

Harrison, R. J.
(1994). The Bronze Age in Northern and Northeastern Spain 2000–800 BC. In C. Mathers & S. Stoddarts (Eds.), *Development and decline in the Mediterranean Bronze Age* (Vol. 8, pp. 73–97). Sheffield: JR Collins, Sheffield Archaeological Monographs.

Helms, M. W.
(1998). *Access to origins: Affines, ancestors, and aristocrats*. Austin: University of Texas.

Insoll, T.
(2015a). *Material explorations in African archaeology*. Oxford: Oxford University Press.
(2015b). Constructing Ancestors in Sub-Saharan Africa. In C. Renfrew, M. J. Boyd, & I. Morley (Eds.), *Death rituals, social order and the archaeology of immortality in the ancient world: 'Death Shall Have No Dominion'* (pp. 153–167). Cambridge: Cambridge University Press.

Larsson, Å. M.
(2009). Organized chaos. Defleshing, cremation and dispersal of the dead in Pitted Ware Culture. In I. M. Back Danielsson, I. Gustin, A. Larsson, N. Myrberg, & S. Thedéen (Eds.), *Döda personers sällskap: Gravmaterialens identiteter och kulturella uttryck. [On the Threshold: Burial Archaeology in the Twenty-first Century]* (pp. 109–130). Stockholm: Stockholm University. **(Stockholm Studies in Archaeology 47)**.

Le Roy, M., Rivollat, M., Mendisco, F., Pemonge, M. H., Coutelier, C., Couture, C., et al.
(2016). Distinct ancestries for similar funerary practices? A GIS analysis comparing funerary, osteological and aDNA data from the Middle Neolithic necropolis Gurgy "Les Noisats" (Yonne, France. *Journal of Archaeological Science, 73,* 45–54.

Lewis, J., & Terry, J.
(2004). The excavation of an early Bronze Age cemetery at Holly Road, Leven, Fife. *Tayside Fife Archaeological Journal, 10,* 23–53.

Liesau, C., Ríos, P., Vega, J., Menduiña, R., & Blasco, C.
(2014a). Buscando los ancestros: La manipulación de los restos de las tumbas campaniformes en Camino de Las Yeseras (San Fernando de Henares, Madrid). In *Actas de las Novenas Jornadas de Patrimonio Arqueológico. Comunidad de Madrid*, Madrid, pp. 137–148.

Liesau von Lettow-Vorveck, C., Esparza Arroyo, A., & Sánchez Polo, A.
(2014). ¿Huesos en la basura o depósito ritualizado? Los perros descuartizados de La Huelga (Dueñas, Palencia). *Zephyrus, 74,* 89–115.

Lillios, K. T.
(1999). Objects of memory: The ethnography and archaeology of heirlooms. *Journal of Archaeological Method and Theory, 6*(3), 235–262.

Lyman, R., & Fox, G.
(1997). A critical evaluation of bone weathering as an indication of bone assemblage formation. In W. Haglund & M. Sorg (Eds.), *Forensic taphonomy. The postmortem fate of human remains* (pp. 223–247). Boca Raton: CRC Press.

McLaren, D.
(2011). Funerary rites afforded to children in Earlier Bronze Age BritaIn case studies from Scotland, Yorkshire and Wessex (Thesis submitted for the degree of PhD by Research, University of Edinburgh). https://www.era.lib.ed.ac.uk/handle/1842/17600. Accessed 20 May 2018.

McSweeney, K., & Bacvarov, K.
(2017). Processed Babies: Early Bronze Age Infant Burials from Bulgarian Thrace. In E. Murphy & M. Le Roy (Eds.), *Children, death and burial. Archaeological discurses* (pp. 91–106). Oxford: Oxbow.

Metcalf, P., & Huntington, R.
(1991). *Celebrations of death: The anthropology of mortuary ritual*. Cambridge: Cambridge University Press.

Mitchell, W. H.
(2012). *The bamboo fire: Field work with the New Guinea Wape* (2nd ed.). London: Transaction Publishers.

Nguema-Obam, P.
(1984). *Aspects de la religion Fang*. Paris: ACCT-Karthala.

Oosterhout, D.
(1998). Fertility and the mediating body in Inanwatan, south coastal Bird Head's of Irian Jaya. In J. Miendema, et al. (Eds.), *Perspectives on the Bird's Head of Irian laya, Indonesia. Proceedings of the Conference (Leiden 13–17 October 1997)* (pp. 127–162). Amsterdam: Atlanta Rodopi.

Pettit, P.
(2011). *The Palaeolithic origins of human burial*. London: Routledge.

Reimer, P. J., Bard, E., Bayliss, A., Beck, J. W., Blackwell, P. G., Bronk Ramsey, C., et al.
(2013). IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. *Radiocarbon, 55,* 1869–1887.

Rodríguez-Marcos, J. A., & Fernández-Manzano, J. (Eds.).
(2012). *Cogotas I. Una cultura de la Edad del Bronce en la Península Ibérica*. Valladolid: Universidad de Valladolid.

Rodríguez-Marcos, J. A., Marcos, G. J., Martín, M. A., Misiego, J. C., & Sanz, F. J.
(1999). Excavaciones arqueológicas en 'Las Vegas' (Jabares de los Oteros). In J. M. Vidal Encinas (Ed.), *Protección del patrimonio cultural y obras públicas. Actuaciones Arqueológicas en la autopista del Camino de Santiago (1994–1997)* (pp. 48–70). Valladolid: Junta de Castilla y León - GICAL.

Sánchez-Polo, A., & Blanco-González, A.
(2014). Death, Relics, and the Demise of Huts: Patterns of Planned Abandonment in Middle BA Central Iberia. *European Journal of Archaeology, 17*(1), 4–16.

Sanday, P. R.
(1981). *Female power and male dominance: On the origins of sexual inequality*. Cambridge: Cambridge University Press.

Scheuer, L., & Black, S.
(2000). *Developmental juvenile osteology*. London: Elsevier Academic Press.

Stefanović, S., & Borić, D.
(2008). The newborn infant burials from Lepenski Vir: In pursuit of contextual meanings. In C. Bonsall, V. Boroneant, & I. Radovanović (Eds.), *The iron gates in prehistory: New perspectives (BAR Int. Ser.1893)* (pp. 131–169). Oxford: Archaeopress.

Stuiver, M., & Reimer, P. J.
(1993). Extended 14C data base and revised CALIB 3.0 14C Age calibration program. *Radiocarbon, 35*(1), 215–230.

Stutz, L. N., Larsson, L., & Zagorska, I.
(2013). The persistent presence of the dead: Recent excavations at the hunter-gatherer cemetery at Zvejnieki (Latvia). *Antiquity, 87*(338), 1016–1029.

Tarlow, S., & Nilsson Stutz, L. (Eds.).
(2013). *The Oxford handbook of the archaeology of death and burial*. Oxford: Oxford University Press.

Thomas, L.-V.
(1982). *La Mort africaine: Idéologie funéraire en Afrique Noire*. Paris: Payot.

Tilley, C.
(1996). *An ethnography of the Neolithic. Early prehistoric societies in southern Scandinavia*. Cambridge: Cambridge University Press.

Turek, J.
(2000). Being a Beaker child. The position of children in Late Eneolithic society. In I. Pavlů (Ed.), *In memoriam Jan Rulf (Památky archeologické Suppl. 13)* (pp. 424–438). Praha: Archeologický ústav AV ČR.

Van Dyke, R. M., & Alcock, S. E.
(2003). Archaeologies of memory: An introduction. In R. M. Van Dyke & S. E. Alcock (Eds.), *Archaeologies of memory* (pp. 1–13). Oxford: Blackwell.

Velasco Vázquez, J., & Esparza Arroyo, A.
(2016). Muertes ritualizadas en la Edad del Bronce de la Península Ibérica: Un enterramiento inusual en Los Rompizales (Quintanadueñas, Burgos). *Munibe. Antropologia-Arkeologia, 67,* 75–103.

Wallin, P.
(2015). Perfect death: Examples of pitted ware ritualisation of the dead. In: *Ancient death ways: Proceedings of the workshop on archaeology and mortuary practices*. Uppsala, 16–17 May 2013, Uppsala Universitet, Uppsala, pp. 47–64

Walsham, A.
(2010). Introduction: Relics and remains. *Past and Present, 206*(suppl_5), 9–36.

Watson, J.
(1982). Of flesh and bones: The management of death pollution in Cantonese society. In M. Bloch & J. Parry (Eds.), *Death and the regeneration of life* (pp. 155–186). Cambridge: Cambridge University Press.

Weiss-Krejci, E.
(2011a). Changing perspectives on mortuary practices in late Neolithic/Copper Age and early Bronze Age Iberia. In K. T. Lillios (Ed.), *Comparative archaeologies: The American Southwest (AD 900–1600) and the Iberian Peninsula (3000–1500 BC)* (pp. 153–174). Oxford: Oxbow Books.
(2011b). The formation of mortuary deposits. In S. C. Agarwal & B. A. Glencross (Eds.), *Social bioarchaeology* (pp. 68–106). Chichester: Wiley.