

is also interesting to note that as wide a range of vessel types were found here as in the settlement site of Catignano in Abruzzo (where a typo-chronologically comparable assemblage has been excavated), suggesting that the ceramics deposited in the lower chamber were not specially produced for use in ritual. Much less can be made of the lithic, bone, and shell assemblages, due to loss of their contextual data. However, it may be significant that the majority of the chipped stone artefacts were found outside the cave, hinting at some distinct activities being practiced there.

On the basis of new stable isotope data, Neolithic Scaloria cave is interpreted as a special gathering place, journeyed to by people based especially at the ditched agricultural villages of the Tavoliere, where people of heterogeneous origins were buried (as opposed to the dead of a single local community). A few further attempts are made to contextualize the human occupations of Grotta Scaloria. For example, we learn from the charcoal analysis that, in the Neolithic, fuel was initially obtained from a mixed forest of deciduous trees but over time from a wider catchment characterized by the presence of watercourses. However, surprisingly little attempt is made to connect the radiocarbon chronology, cultural sequence, and

portable material culture of the cave to the archaeology of the adjacent, extensively settled and studied, Tavoliere Plain. As a consequence, this volume does not change the current picture of Neolithic Apulia, although it does add some useful details.

The conclusion to the volume acknowledges that there remain a series of unanswered questions—questions one would expect to be answered by any modern cave archaeology project. What was the original configuration of the cave? Were the various uses of the cave contemporary? How and why did the dark zone of the cave become ritualized? Did the funerary deposition in the upper chamber occur in a limited number of episodes or more continuously? What was the place of Scaloria in the context of the Neolithic cultural landscape of the Tavoliere? With these questions in mind, one cannot help but think that, with the old archaeological excavation backlog now cleared, the modern scientific work of researching Grotta Scaloria's prehistory has only just begun.

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Álvaro Fernández Flores, Leonardo García Sanjuán and Marta Díaz-Zorita Bonilla, eds. *Montelirio. Un gran monumento megalítico de la Edad del Cobre* (Arqueología Monografías. Sevilla: Consejería de Cultura, Junta de Andalucía, 2016, 553pp., 365 illustr., 339 in colour, 57 tables, pbk, ISBN 978-84-9959-236-7)

The monumental *tholos* of Montelirio, one of the many mortuary features in the 400 ha Copper Age mega-site of Valencina de la Concepción (Seville, Spain), is indisputably a groundbreaking discovery in European prehistoric archaeology.

Montelirio was built sometime between 2875 and 2700 BC. At that point, Valencina had already experienced 300 years of human activity. The *tholos* was placed on a slightly flat knoll, visually dominating the Guadalquivir estuary and

the foothills of the Sierra Morena mountains. The dimensions and elaboration of the burial ground and the highly structured funerary rituals practiced there lack any local or regional precedent, and certainly represented a milestone in the history of the communities that inhabited the surrounding area. Montelirio was a conspicuous monument with highly elaborate mortuary rituals, which incorporated exotic and well-crafted artefacts in gold, amber, ivory, and rock crystal. The authors of this excellent monograph suggest that such objects were collectively linked to a group of high social status individuals.

Montelirio was likely the first large mortuary monument ever erected at Valencina: a 2.75 m high, 75 m in diameter mound covering an almost 44 m long *tholos*. The narrow passage, 39 m long and oriented towards the sunrise, was painted with intense white and red pigments and paved with colourful beaten earth floors. It was roofed with forty-two slabs made of non-local sandstone, shale, and granite. This corridor led to two consecutive circular chambers, with shale slabs abundantly decorated with white, red, and black pigments. All walls were densely decorated with schematic depictions, in a chromatic contrast with the sun-dried black clay domes that roofed both chambers.

The small side chamber (5.7 square metres), one of the few of its kind documented in Iberia, was significantly altered during historical times. Nevertheless, the remains of two adult individuals—a probable male and a female—were recovered together with a fragmented 4.5 kg *Elephas antiquus* tusk, ostrich eggshells, gold sheets, shell and amber beads, red pigments, and some pottery and flint remains.

The main chamber (18 square metres) was substantially better preserved, and contained twenty adult primary burials that were either simultaneous depositions

or the result of several depositions in a short period of time: twelve female, three possible female, and five of indeterminate sex. A green clay *stela* that was plastered white and decorated stood facing the passage entrance, together with a handful of sophisticated objects, such as a 16.5 cm long bifacial flint dagger and an ivory comb displayed over a shell bead cloth. A set of eight ceramic dishes, which likely served different types of perishable offerings, were placed in the middle of the chamber. Twenty bodies were displayed around these objects. All of the bodies were located in the southern half of the chamber except for two, one of which was arranged with both arms stretched symmetrically upwards in an *orant* posture. Seven of the burials had highly elaborated mortuary garments made out of shell, bone, and amber beads, most likely crafted by skilled local artisans for the funerary ritual. Díaz-Guardamino and colleagues (Ch. 14) estimate that about one million shell beads, 4–5 mm long and 1–2 mm thick, were used to produce these ceremonial garments: more than one hundred persons working full time for over one year.

The monument was finally sealed with one final elaborate mortuary ritual, carried out in the middle section of the corridor. The sequence of events began with the placement of an adult primary burial holding a small ceramic vessel on the floor of the corridor. A small pit containing a secondary male burial was placed further east, followed by two cylindrical red clay altars, one of which was covered with several thin layers of ash, green clay, and red pigments and topped with a cache of over ninety exquisitely crafted flint arrowheads. Another small pit was then dug next to them, and a secondary female burial was placed inside. Finally, a 51 cm high and 66 cm wide storage container was placed 5 m from the entrance, an

event that permanently blocked the access to the monument.

The scale and expertise of the human labour deployed in the making of this monument is overwhelming. The quantity, quality, variety, exoticism, and sumptuousness of its crafts are unparalleled in third millennium BC Europe. Its wealth is breathtaking: eighteen gold plaques, some with exquisite *repoussé* decorations, over 250 Sicilian amber beads and pendants, 173 unique and artistically knapped flint and rock crystal arrowheads, over eighty elaborated ivory ornaments, ostrich eggshells, and seven ostentatious bead garments were among the objects recovered from inside the tomb.

It should be noted that although the monument was discovered in 1998, the main extensive excavations were only accomplished by 2009–2010. These were carried out with impeccable accuracy following high technical standards, and this excellent 553 page monograph—produced by forty-five experts affiliated to twenty-one EU and US institutions—has been published in record time. The formal presentation of the archaeological data is admirable: all descriptions are rich, dense, and supported by an extraordinary graphic display of 339 colour illustrations, balancing key quantitative information with profuse qualitative details, a combination that persuasively demonstrates the exceptional character of the monument.

The book consists of twenty-two chapters organized in five sections. Part One (*Introducción y Contextualización*) includes a comprehensive description of the complex life-history of the monument since its discovery (Ch. 1, by Fernández Flórez), a palaeoenvironmental history of Valencina de la Concepción during the Holocene that highlights the important role of sea level changes in its configuration (Ch. 2, by Borja Barrera & Borja Barrera), and the results of a geophysical

survey revealing the existence of over one hundred unexplored features on and around the burial mound (Ch. 1, by Meyer & Goossens).

The four chapters of Part Two (*Arquitectura*) describe the architecture, construction, and sequence of use of the monument. Chapter 4 (by Fernández Flórez & García Sanjuán) is a major descriptive and interpretative contribution to the book, providing information on the building techniques and the distribution of human deposits and grave goods. Other chapters report lithological and petrographic details regarding the local origin of the construction materials, all obtained from a 15 km catchment zone (Ch. 5, by Borja Barrera & Borja Barrera); the astronomical orientation of Montelirio and other monuments from Valencina (Ch. 7, by Esteban López); and the architectural analysis of the dry clay domes covering both chambers (Ch. 6, by Segovia Verjel et al.). Importantly, this roof solution could not just explain how Montelirio was built, but may also clarify the construction of many other funerary monuments in Iberia which lack stone evidence.

Part Three (*Cultura Material*) includes six descriptive and analytical chapters on the recovered artefacts: pottery (Ch. 8, by Vázquez Paz), lithics (Ch. 9, by García Sanjuán et al.), objects made of ivory (Ch. 10, by Luciañez Triviño & García Sanjuán), bone (Ch. 11, by Altamirano García & Luciañez Triviño), gold and amber (Chs 12 and 13, by Murillo Barroso), and beaded textiles (Ch. 14, by Díaz-Guardamino et al.). Most objects involved in these mortuary rituals are unique, could not have been used in everyday subsistence and existence practices, and are striking in their rarity and aesthetic. Their formal characteristics suggest that they were produced by highly skilled artisans, who were able to select distinctive exotic materials and transform them into

delicately crafted objects. Because of the diversity of provenance of their raw materials, and the variability in their shape and texture, there is no unified system with which to compare and evaluate these objects (Risch, 2016: 41). They are incomparably precious objects, sacred perhaps: the luxury of variety is the prerogative of the elites, to use deFrance's (2014) apposite words. The section is closed by Chapter 15 (Bueno et al.), a key contribution on the aesthetic qualities of the monument and the paramount role played by the selected stones, textures, colours, pigments, decorations, and artefacts in the staging of a highly structured mortuary rite. As the authors appropriately highlight, all the composite elements of this rite are rooted in previous Neolithic and megalithic traditions. Certainly, the complex rite is pervaded by the communal ideology of ancestry and kinship.

Part Four (*Los Depósitos Orgánicos*) covers the analysis of organic remains, the bioarchaeology both of humans (Chs 16–18, by Percero Espín, Fontanals-Coll et al., and Emslie et al., respectively) and of animals (Ch. 19, by Pajuelo Pando), and the analysis of fatty acids recovered from eight ceramic fragments (Ch. 20, by Álvarez Mateos & Durán Barrantes). The evidence indicates that the predominantly female population buried inside the monument enjoyed a relatively healthy and well-fed lifestyle. The palaeopathological analysis suggests the population suffered from conditions common to this period of prehistory, such as osteoarthritis and enamel hypoplasias, of which there is limited evidence. The carbon and nitrogen stable isotope analysis performed on twelve human bone samples points to a diet based on C₃ plants and relatively high levels of meat and dairy products. As with other Iberian Copper Age and Bronze Age seashore communities, the Montelirio group

did not rely on the consumption of aquatic resources.

The fifth and final section (*Interpretación*) includes two key contributions. Chapter 21 (by Bayliss et al.) presents the twenty-two radiocarbon dates obtained for the burials, and discusses alternative scenarios modelled through Bayesian statistics. Their results suggest that either a single event or multiple events within a relatively short time period, such as a few decades, could reasonably explain the observed pattern.

Finally, Chapter 22 (by García Sanjuán et al.) closes the book by giving an overall review of the monument and an interpretation of this exceptional burial in the broader context of Valencina de la Concepción and the Iberian Copper Age. This chapter stands out in its own right as a major contribution to the debate on the nature of prehistoric elites in late prehistoric Iberia and the underlying social organization suggested by the mortuary and domestic evidence. Certainly, the dimensions, monumentality, and dazzling wealth of Valencina de la Concepción are not explicable without taking into account its location along the coast, in one of the most fertile and well-connected ecotones in the Iberian Peninsula. As the authors suggest, the combination of an affluent staple economy and access to exotic material exchange networks were the means mobilized to sustain these communities and create a collective sense of identity.

From what we know of the late fourth millennium BC in Iberia, the aggregation of previously autonomous social groups, such as those that presumably created Valencina de la Concepción, required a collective social arrangement that could assure 'mutually acknowledged privileges and obligations that are essential for effective collective action', a social contract that would inevitably have become

vulnerable over time (Brown & Kelly, 2015: 224). Indeed, kinship societies cope with conflicts and contradictions either through fission or by displacing them onto the supernatural realm (Wolf, 2001: 348). Though we are barely scratching the surface of an incredibly complex site, the exceptional evidence displayed in this monograph strongly suggests that—at the peak period of collective action—the inhabitants of Valencina de la Concepción were exploring elaborate ritual pathways to mediate these contradictions.

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Roland Gauß. *Zambujal und die Anfänge der Metallurgie in der Estremadura (Portugal). Technologie der Kupfergewinnung, Herkunft des Metalls und soziokulturelle Bedeutung der Innovation*. Früher Bergbau und Metallurgie auf der Iberischen Halbinsel, Faszikel 1. (Iberia Archaeologica 15. Früher Bergbau und Metallurgie auf der Iberischen Halbinsel, Faszikel 1. Tübingen: Wasmuth Verlag, 2016, 332 pp., 111 figs, 39 plates, hbk, ISBN 978-3-8030-0241-9)

The Copper Age settlement of Zambujal (Torres Vedras, Portugal) stands out as one of the best explored prehistoric sites in Iberia, both in terms of the scale of the excavations carried out by the German Archaeological Institute since 1964 (Sangmeister & Schubart, 1981) and the quality and number of publications generated by an on-going interdisciplinary research project. This prominent hill-top site of c. 6 ha in size, with up to four

stone-built lines of fortification, is located next to the now totally filled in estuary of the Sizandro river, a few kilometres from the Atlantic coast, in central Portugal. The settlement's sequence can be divided into four Copper Age phases dated between c. 2850 and 2200/2000 BCE and one Bronze Age phase, when the fortification system already seems to have been abandoned.

This volume, which corresponds to the PhD thesis presented by the author at the