

New research on the megalithic necropolis of La Lentejuela (Teba, Málaga)

Novedades en la investigación de la necrópolis megalítica de La Lentejuela (Teba, Málaga)

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Abstract: This study presents the archaeological work carried out in the megalithic necropolis of La Lentejuela (Málaga, Spain) between 2021 and 2022. This involved a systematic archaeological survey, including the photogrammetric and laser scanning recording of all identified megalithic structures, as well as the excavation of two tombs. The results have significantly increased the number of known megaliths and improved our understanding of construction techniques. They have also provided the site with updated, high-resolution data. The proximity of La Lentejuela to the notable megalithic clusters of Ronda and Antequera – the latter being the most remarkable assemblage of megalithic tombs on the Iberian Peninsula – will contribute to a deeper insight into the megalithic phenomenon in southern Europe.

Keywords: megalithism; dolmens; menhirs; southern Iberia; Late Prehistory; archaeological survey.

Resumen: Este estudio presenta los trabajos arqueológicos realizados en la necrópolis megalítica de La Lentejuela (Málaga, España), entre 2021 y 2022. Estos han consistido en una prospección arqueológica sistemática, con registro fotogramétrico y de escaneo láser de todas las estructuras megalíticas identificadas, y en la excavación de dos tumbas. Los resultados han permitido aumentar sustancialmente el número de megalitos conocidos, comprender mejor las técnicas constructivas y disponer de datos actualizados de alta resolución del yacimiento. La proximidad de La Lentejuela a los importantes conjuntos megalíticos de Ronda y Antequera, este último el conjunto de tumbas megalíticas más significativo de la península ibérica, permitirá un mejor conocimiento del fenómeno megalítico en el sur de Europa.

Palabras clave: megalitismo; dólmenes; menhires; sur de Iberia; Prehistoria Reciente; prospección arqueológica.

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1. INTRODUCTION AND AIMS

The megalithic necropolis of La Lentejuela is an exceptional site located in the municipality of Teba, Málaga (Andalusia, Spain). It was discovered in the early 1990s by the *Servicio de Arqueología de la Diputación de Málaga* (Recio, 1993). Initially, only one megalithic burial (current Dolmen 7), was identified, but it had been significantly altered by the construction of a road and the cultivation of olive groves. Between 2005 and 2008, a series of archaeological interventions were carried out under the direction of Ana Baldomero and J. Enrique Ferrer (University of Málaga), and José Berdugo (Hisn Atiba Association). These interventions included the exploration of the site and the excavation of tomb 4 (Baldomero *et al.*, 2005; Baldomero and Berdugo, 2010), contributing to raising public awareness of, and protection for, the necropolis, as well as expanding the number of documented megalithic structures.

In July 2021, a research team from the University of Cádiz's PAI HUM 440 in collaboration with the City Council of Teba, undertook a ground survey and produced new graphic records of the megaliths. The main objective was to update the existing data on the necropolis through non-invasive digital documentation techniques, and spatial analysis. This initiative preceded the submission of a general research project, which was eventually approved by the *Consejería de Cultura, Junta de Andalucía* under the title *Monumentalidad, Tiempo y Sociedad. El fenómeno megalítico en la necrópolis de La Lentejuela (Teba, Málaga)* for the 2022-2027 period.

The aim of this work is to present the preliminary results and to emphasize the potential of the megalithic site of La Lentejuela in terms of the distribution of megaliths at the site, architectural variety (e.g. dolmens, stone circles and menhirs), and their state of preservation. The site's location, situated a mere 40 km away from the *Conjunto Arqueológico de los Dólmenes de Antequera* and the megalithic monuments of the Serranía de Ronda, serves to further underscore its significance.

2. LOCATION AND TERRITORIAL CONTEXT

La Lentejuela is located approximately 5 km from the town centre, at the foothills of the Sierra de la Lentejuela, more precisely in an area known as La Patrana. These mountains rise to a maximum altitude of 729 masl. They represent the highest point in the central area of the Guadalteba valley, a zone traversed by the homonymous river and delimited by mountains whose altitudes range from 600 to 900 masl. The area exhibits a well-defined historical identity, situated between the plain of Antequera and the Serranía de Ronda, thereby establishing the connection between the Andalusian interior and the Mediterranean coast (Fig. 1). In geological terms, the site is located on a limestone massif of the Inner Subbaetic, surrounded by clays and sandstones from the *Campo de Gibraltar Complex*, as well as by post-orogenic materials (Cruz, 1990). The slopes of Lentejuela and the summit of La Patrana have historically been exploited as quarries, likely altering/destroying some megalithic features.

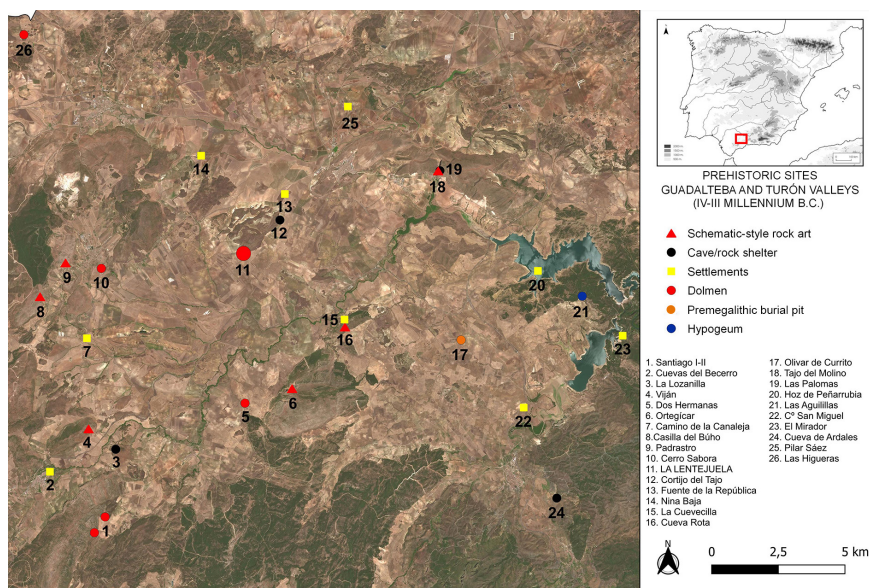


Fig. 1. Location of the main Late Prehistory sites in the Guadalteba and Turón valleys mentioned in the text. Orthophotos from Spain, image PNOA Iberpix 4, <http://www.ign.es/iberpix2/visor/> (accessed 20-09-2023).

The Guadalteba and Turón valleys host a significant number of sites dated to Late Prehistory (Fig. 1), including several open-air Neolithic and early Chalcolithic settlements, as well as pit sites located on the fertile farmland, such as Hoz de Peñarubia (Morgado and Martínez, 2005), Fuente de la República (García *et al.*, 1995), Cortijo San Miguel (Fernández *et al.*, 1995-1996) and Cuevas del Becerro (Becerra, 2019). These are complemented by temporary occupations in rock-shelters, such as Cortijo del Tajo (García *et al.*, 1995; Becerra, 2019), and caves, including Las Palomas (Aguado and Baldomero, 1979; Ferrer and Fernández, 1987) and Ardales (Ramos and Weniger, 2023), which are situated in the rocky scarps surrounding the valley. Several megalithic monuments have been discovered in association with these settlements, for example the dolmens of Santiago I and II (Serrato), Cerro Sabora, Dos Hermanas, and Las Higueras (Cañete la Real) (Recio, 2013-2014). Schematic rock paintings have been identified at Casilla del Búho, Cueva Rota, and Tajo del Molino (Teba), among which anthropomorphic figures are particularly notable, some of which resemble those found in the hypogea of Las Aguilillas (Campillos) and the dolmens of La Giganta and La Planilla in Ronda (Cabello *et al.*, 2013). The schematic painting sites and the megalithic monuments probably played a role function in the organisation of the territory (Cantalejo *et al.*, 2006). Some of the symbolic manifestations located in the caves are associated with some burial practices inside them, for instance in the cave of Tajo del Molino (Morales and Márquez, 1984).

3. THE MEGALITHIC NECROPOLIS OF LA LENTEJUELA

The megalithic site of La Lentejuela presents a wide variety of features (e. g. dolmens, stone circles and menhirs) which are in an excellent state of preservation. The results presented in this work must be regarded as merely preliminary. Future research will hopefully allow for a better understanding of the evolution of the settlement.

Until 2021, seven dolmens (nos. 1-7), distributed over an area of 7.5 ha, and an isolated menhir-stele (no. 14) had been documented (Baldomero *et al.*, 2005; Baldomero and Berdugo, 2010). Currently, ten dolmens (nos. 1-8, 12 and 13), one group of menhir-steles (nos. 11 and 14), and two indeterminate megalithic structures (nos. 9 and 10) are known. These fourteen megalithic structures form three distinct clusters within the site (Fig. 2).

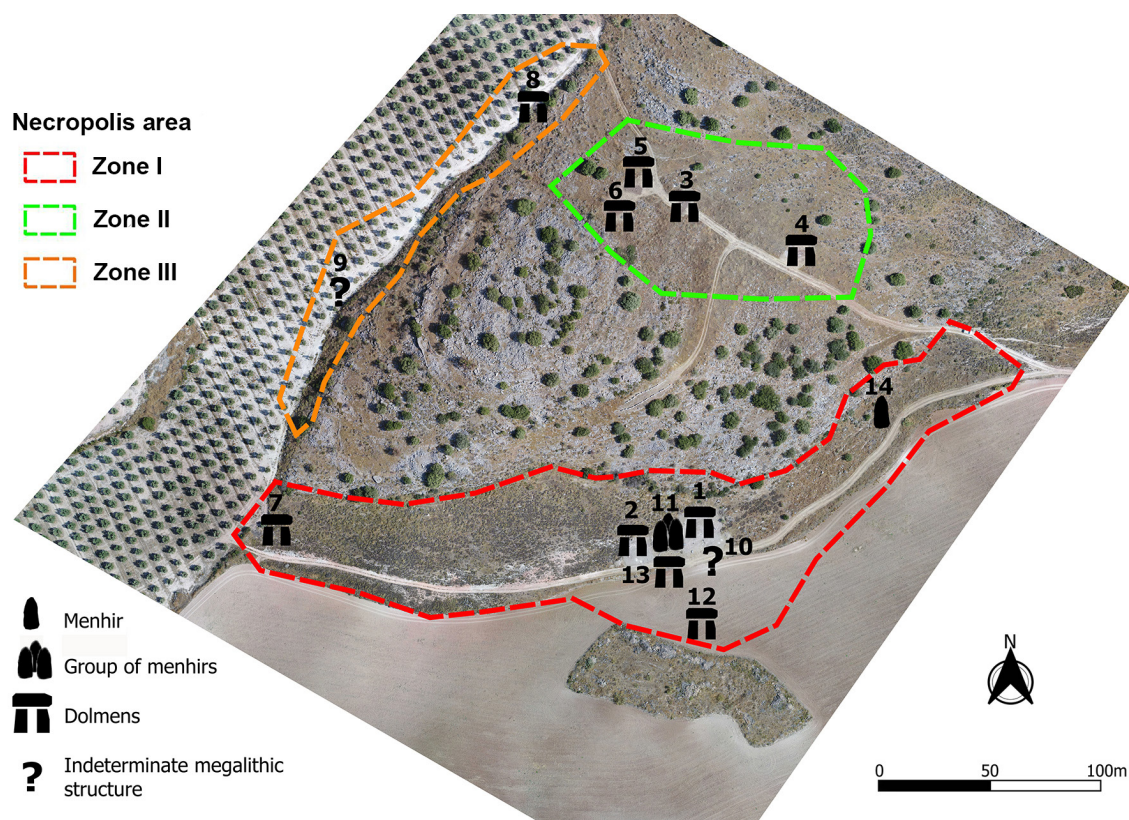


Fig. 2. Zones and distribution of megalithic structures in the necropolis of La Lentejuela (Teba, Málaga). Orthomosaic made from drone-taken images by the research team.

Zone I is located on the southern slope, extending up to a rocky outcrop. It is over 300 m long and 50 m wide. This is the most monumental area in the necropolis, with the largest and most complex constructions, as well as an important series of menhirs and associated stelae. Dolmens 1 and 7 were excavated here by our team at the University of Cádiz between 2021 and 2022.

This zone is distinguished by two complex megalithic structures (nos. 1 and 2), both featuring a double peristaltic ring, a mound, and a dolmen burial inside (Fig. 3). Dolmen 2 is approximately 20 m west of Dolmen 1.

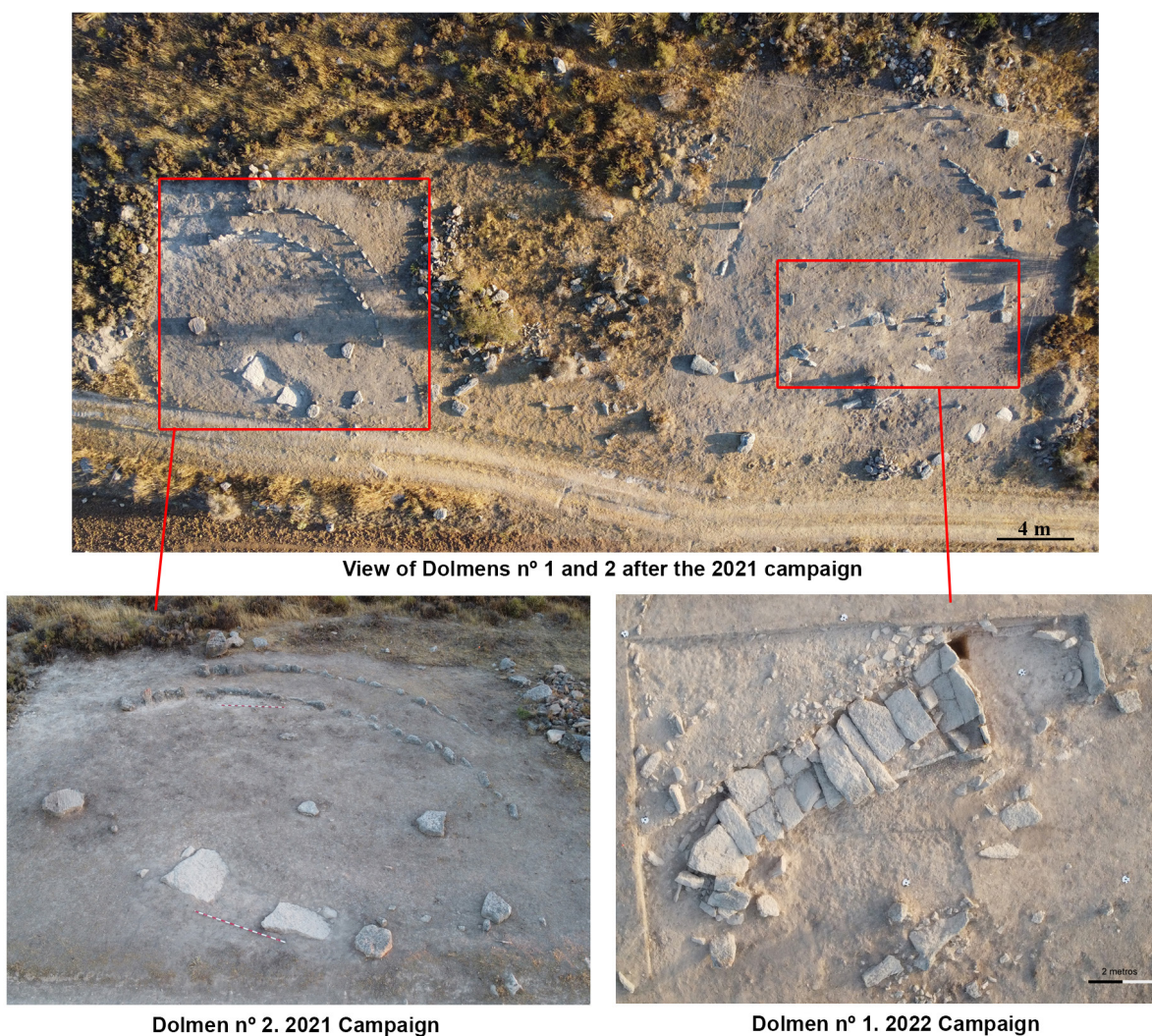


Fig. 3. Dolmens 1 and 2 in the necropolis of La Lentejuela (Teba, Málaga), with peristaltic rings and interior burial. Images taken by drone during the 2021 and 2022 seasons.

Megalithic structure no. 10 is located next to Dolmen 1. It is built with large limestone stones. However, with the available evidence, it cannot currently be defined as a burial structure. A large group of menhirs, along with a section of a third stone circle (structure no. 11), has been identified between Dolmens 1 and 2. This stone circle comprises six large trapezoidal stones, similar to those used in the construction of the peristaltic rings previously noted and which are still *in situ*. Their lengths range from 1 m to 0.5 m, with a height of less than 60 cm. Their arrangement strongly suggests that they were part of a wider circle, which has since been largely dismantled. This is further supported by the nearby scatter of stone slabs and menhirs. In this area, 14 menhirs have been documented, including ovoid (the least common), trapezoidal and rectangular shapes (the most abundant). Their sizes range from 0.8 m to 1.5 m, with the exception of a fallen stele that measures almost 2 m in length (Fig. 4) (SF1).

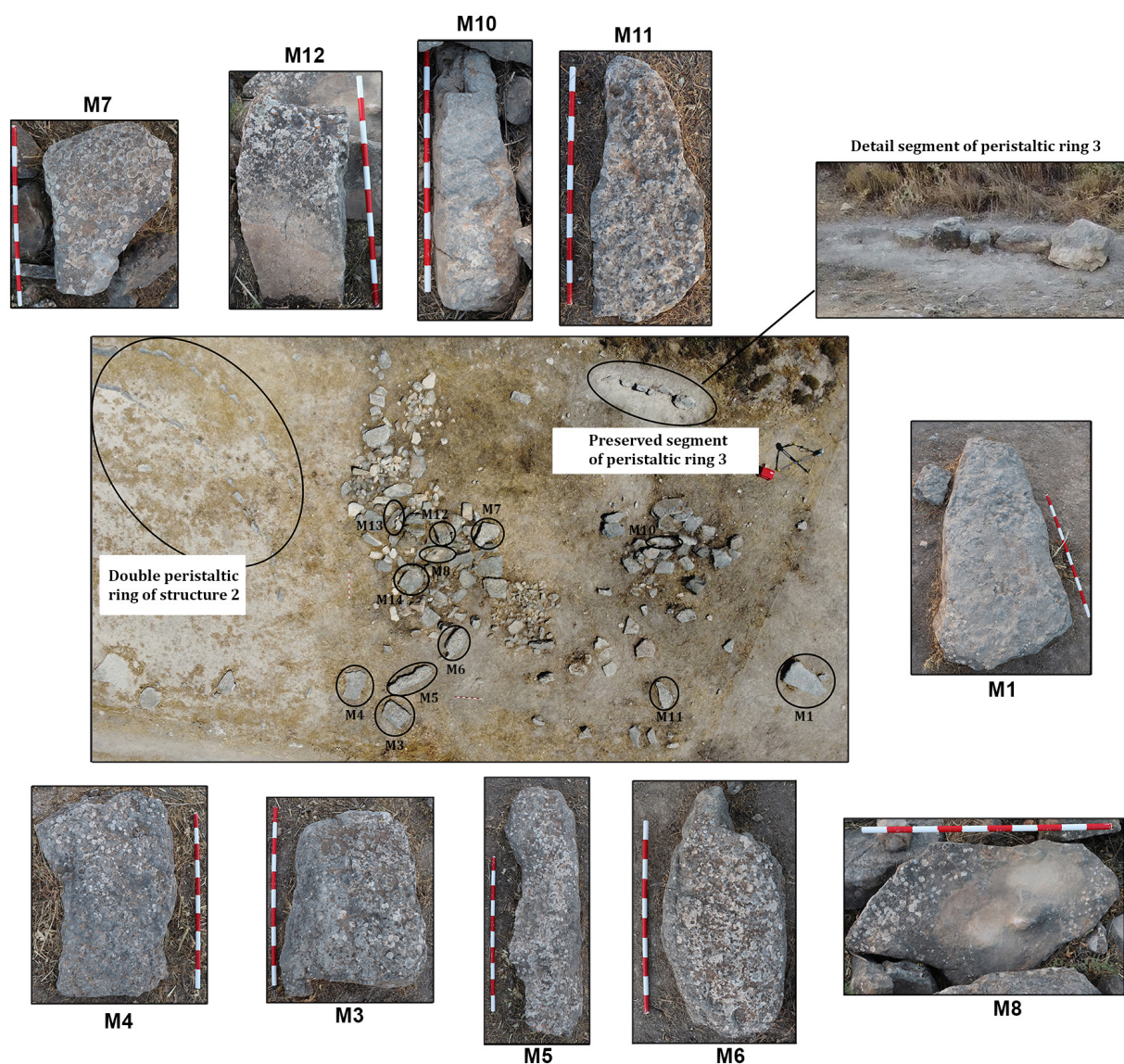


Fig. 4. Menhirs and section of a third circle of standing stones (structure no. 11) in the necropolis of La Lentejuela (Teba, Málaga).

A few metres to the south of Dolmen 2, two new funerary structures have been identified (Dolmens 12 and 13), which have undergone significant deterioration due to their location in an agricultural area (Fig. 2). The visible orthostates suggest that these are simple-gallery dolmens.

A little further away, within Zone I, a simple-gallery structure has been identified (Dolmen 7) (Fig. 5). Its position, near the path that encircles La Patrana and an area of agricultural land, including a recently planted olive grove, has resulted in alterations to its structure and stratigraphic sequence. The construction, which was fully excavated in July 2022, preserves 4 large orthostates, 1 on the right side, 2 on the left, and a closing slab. Some of these stones appear to have been sectioned and have lost some of their original volume (SF1).

An isolated menhir is located approximately 100 m to the east of Dolmens 1 and 2 (Fig. 6). It is the only menhir found in a vertical position, along with the one that marks the entrance to Dolmen 1.

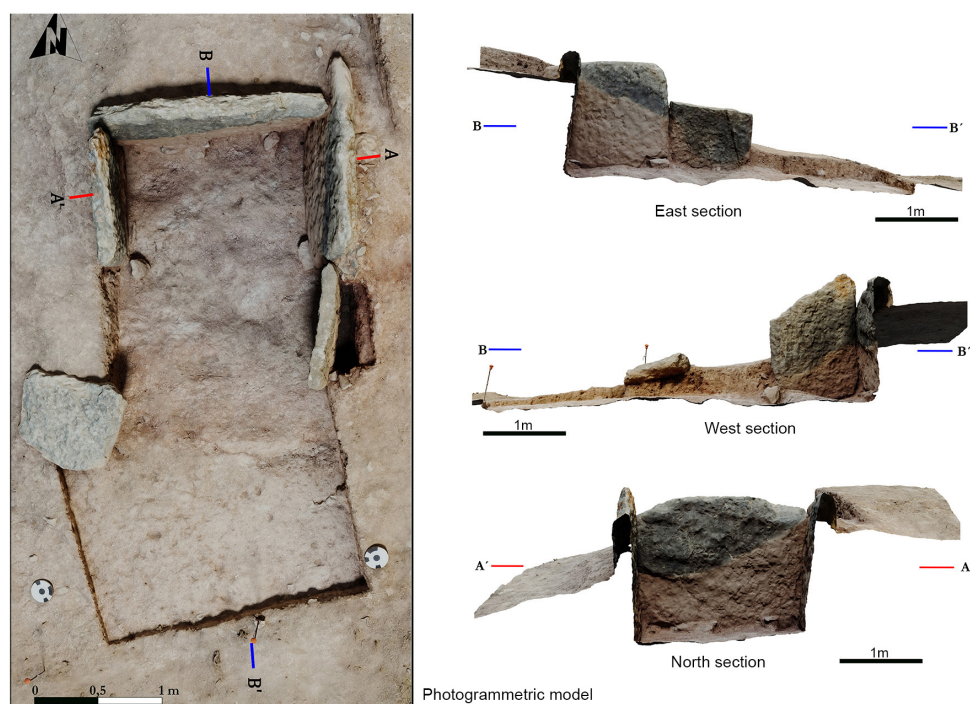


Fig. 5. Floor plan and sections of Dolmen 7 in the necropolis of La Lentejuela (Teba, Málaga). Three-dimensional model generated through the combination of photogrammetry and 3D scanning.

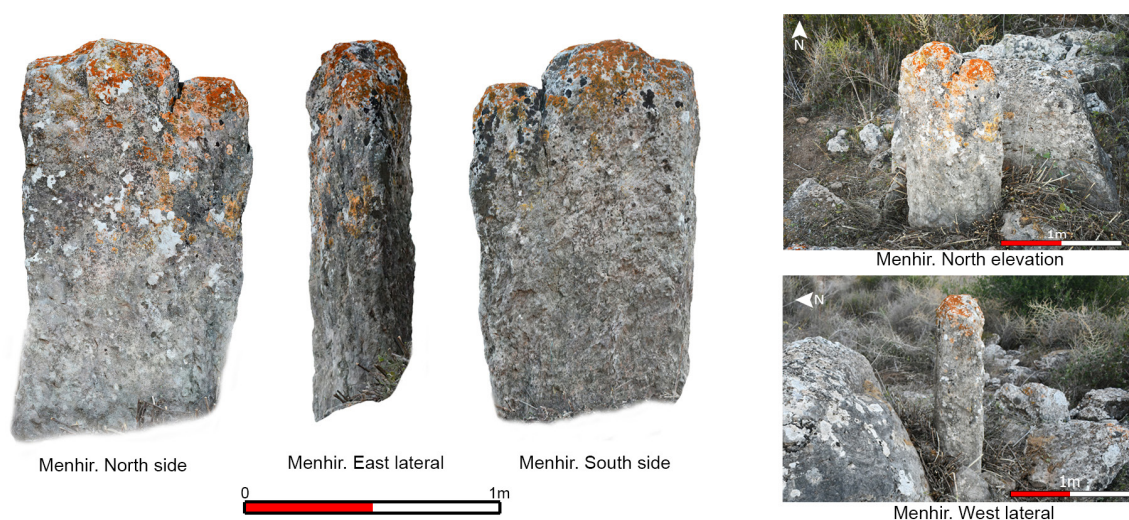


Fig. 6. Menhir in Zone I of La Lentejuela (Teba, Málaga). Photographs and photogrammetric model.

Zone II comprises the megalithic tombs on the summit of La Patrana (*ca.* 614 masl), an area that has been heavily affected by quarrying. The four dolmens in this zone (nos. 3 to 6) are spread over an area 0.3 ha. They are gallery dolmens (with rectangular plans), and they are smaller and less complex than the megalithic structures of Zone I; they are rarely more than 5 m long and lack internal partitions (Fig. 7). This is the most common kind of megalith in the area of Guadalteba and the hill ranges of Ronda and Cádiz (Gutiérrez, 2003). Dolmen 4 was excavated between 2007-2008 by researchers from the University of Málaga (Baldomero and Berdugo, 2010).



Fig. 7. Gallery dolmens in the necropolis of La Lentejuela (Teba, Málaga). Zone II: A) Dolmen 3; B) Dolmens 5 and 6; C) Dolmen 4; Zone III: D) Dolmen 8.

Zone III is located on the north-western slope, at the boundary of the rocky outcrops and the adjacent agricultural land. The two structures in this area were documented in 2021. Dolmen 8 presents 4 orthostates and has a recorded length of 1.90 m (Fig. 7). Dolmen 9 is in a very poor state of preservation, having been adversely affected by slope erosion dynamics. Consequently, its morphology is difficult to discern.

4. METHODOLOGY

During the first campaign (2021), digital recording techniques were employed and a surface archaeological survey was conducted (Trinks *et al.*, 2012; Cerrillo-Cuenca *et al.*, 2019; Muñoz *et al.*, 2023). The process began with a review of existing documentation and cartographic sources of the area through repositories and cartographic viewers such as Idemap, Rediam, and the photo archive of the National Centre for Geographic Information. Following this preparatory phase, a survey and digital recording strategy was designed as a preliminary step towards the preparation of a general research project (*Junta de Andalucía*) aimed at the excavation of the megalithic structures.

The ground survey covered an area of 400 ha. Linear parallel transects were surveyed over some 48 ha by ten surveyors in 5 m intervals, while a lower resolution survey (10 m intervals) was undertaken in the remaining area (352 ha). The high-resolution survey focused on the significant dense concentration of features in the main area of the necropolis, whereas the rougher terrain appeared less suitable for the construction of megalithic structures. The megaliths identified during the survey were georeferenced using a Leica GS18T GPS. In accordance with Andalusian regulations, the spatial reference system used for recording spatial data was ETRS89; the province of Málaga falls within ZONE 30N-EPSS 25830.

One of the objectives of the project was the documentation of megalithic structures in 3D (SF1). In order to achieve this, the vegetation in the surrounding area of the features that could hinder the process was first removed. A Leica RTC 360 was used, providing a large volume of high-precision data (dimensions, sections, floor plans, etc.). This method was complemented by terrestrial and aerial photogrammetry. The data were subsequently imported into and organised in a Geographic Information System (GIS) using the open-source software QGIS. This software was employed to create a customised database and map. These sources proved instrumental in facilitating the visualisation and acquisition of a comprehensive understanding of the architectural structures, as well as in creating high-fidelity 3D models intended for heritage dissemination and public engagement. Furthermore, updated graphic documentation of Dolmen 4 was produced. Following the requisite authorisation, the general research project excavations started in July 2022, with a focus on the partial excavation of the tumulus of Dolmen 1 and the complete excavation of Dolmen 7. In both instances, a grid system was established, and sediments removal was carried out according to stratigraphic criteria (Harris, 1991; Carandini, 1997). Archaeological materials were georeferenced using a total station, resulting in the acquisition of absolute UTM coordinates, which were then integrated into a purpose-built database.

5. RESULTS

The archaeological work carried out yielded valuable information for a better understanding of the site. During the ground survey, new megalithic structures were located (Dolmens 8, 12, 13, and structures nos. 9 to 11), thereby increasing the number of known constructions from eight to fourteen. This makes the necropolis of La Lentejuela the greatest concentration of megalithic tombs in the province of Málaga, especially considering the relatively small size of the site (7.5 ha). The ground survey also enabled the re-definition of some of the megalithic features previously identified by the University of Málaga. For instance, Dolmen 2 was initially described as a double peristaltic ring without a funerary structure, with a ritual or ceremonial function (Baldomero *et al.*, 2005; Baldomero and Berdugo, 2010). The superficial clearing conducted by our team revealed the roof of a new dolmen within this double ring, composed of stone slabs measuring over 1 m in length and 1.5 m in width. It is very likely that these roof slabs are supported by orthostates. Fifteen slabs of the outer circle and 24 of the inner circle remain in their original position. They are clearly smaller than those used in Dolmen 1. The southern sector of Dolmen 1 has been affected by road construction and erosion processes.

Dolmen 7 is defined by a rectangular plan measuring 2 m in length and 1.6 m in width, with the lateral walls and the closing slab delineating an internal space of approximately 3 m² (SF1-V). The construction of the dolmen involved the reduction of the slope to accommodate the interior space, followed by the laying out of the large stones that sit on the ground, buttressed with small and medium-sized stones. The space between the cut natural bedrock and the slabs was filled with a layer of small stones (UE7004), which, in addition to providing greater consistency to the structure, facilitated the drainage of water runoff downslope. No foundation trenches were discovered beneath the orthostates. The covering slab was found at a distance of approximately 10 m from the structure. The interior of Dolmen 7 had been extensively modified by erosion and looting activities, necessitating an excavation of the remaining sediment. Despite the absence of human skeletal remains, the basal section of the structure yielded grave goods (UE7003) (SF1-U and V). Specifically, the assemblage includes 2 finned arrowheads with flat covering retouch, a large blade, and 2 perforated *Trivia monacha* shells (Fig. 8). Similar elements, dated to the 3rd and 2nd millennium BC, have been documented in other megaliths in the province of Málaga (Márquez, 2000).

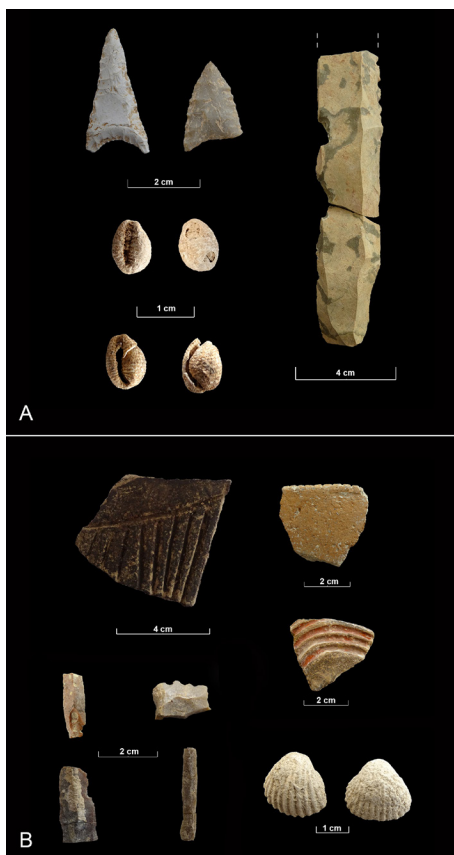


Fig. 8. Grave goods documented in Dolmen 7 (A), and a selection of materials recovered from the burial mound of Dolmen 1 (B).

The ground plan and dimensions of Dolmen 1 have been determined following the excavation of a test trench (measuring 70 m² in area and 40 cm deep) in the central area of the stone circle. They are as follows: a length of 11 m and a width that varies from 1.2 m at the entrance to 3 m at the back end. The sides are defined by orthostate walls. The roof preserves 11 original slabs, of which 7 are fractured (Fig. 9). This is likely attributable to the weight of the stone and the earth used in the construction of the mound. The dimensions of the slabs and supports vary, but they are similar in terms of thickness, which ranges from 14 to 23 cm. This variation is presumably due to the geology of the rock source. The orientation of the structure is noteworthy, given that the axis of the gallery extends from west to east; however, a rotation of 45° near the entrance results in the access facade facing south. The plan is not symmetrical, as the south wall is found to be straighter than the north one. The entrance to the site was sealed by a large pile of stones of different sizes, with a menhir-stele positioned on top. Right in front of this structure, another menhir-stele was placed as a marker. Both menhirs were carefully carved into a rounded shape. The dolmen is partially covered by a large mound.

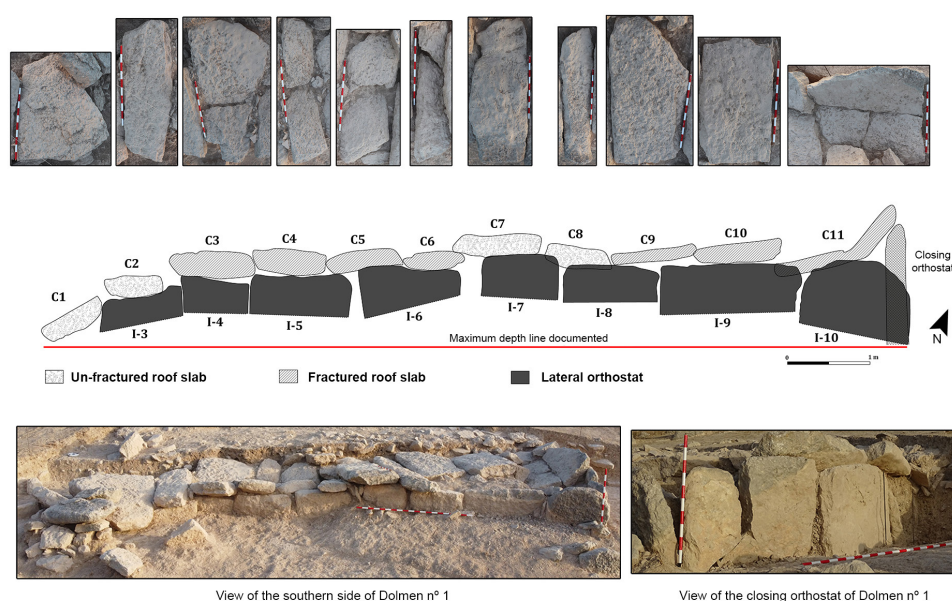


Fig. 9. Section and photographs of structural details of Dolmen 1 in the necropolis of La Lentejuela (Teba, Málaga).

The tumulus has been heavily altered by erosion and human action. The excavation results suggest that the mound comprises multiple layers (SF1-R and SF1-T). The primary layer is constituted of gravel (UE1003/1005), which sits directly over the cover, thus providing protection for the dolmen's sides. This layer is fairly thin in the roof area, but, it becomes considerably thicker along the sides and the rear of the dolmen. The area behind the closing slabs was filled with clayey-sandy soil (UE1006). Another layer (UE1004) of limestone and sandstone slabs of medium size, approximately 30 cm thick, was placed over these closing slabs. Finally, the mound was covered by a layer of soil on which vegetation has grown (UE1002). The estimated diameter of the mound is between 15 and 20 m. The general shape of the feature is roughly circular, as defined by the double ring of peristalses, which, in addition to outlining the mound, serves to emphasise its monumental nature. In the southern sector, these rings are heavily deteriorated. The inner circle, for which 22 slabs of limestone have been attested, has an approximate diameter of 14 m. The outer circle consists of 23 slightly larger slabs and has an approximate diameter of 20 m (SF1).

The available evidence has facilitated the identification of the entrance and the burial chamber; but it has not permitted the precise identification of alterations to the monument subsequent to its original construction. During the excavation of the burial mound (UE1002 and 1004), fragments of pottery, lithic materials, and some remains of marine shells were recovered (Fig. 8). The pottery is very abundant, and two distinct groups have been distinguished. Firstly, Neolithic-tradition wares, which are characterised by incised and *almagra* slip decoration, vertical ribbon handles, and applied cords with impressions. Secondly, wares typologically dated to the Copper Age or the Early Bronze Age include simple or infolding rim bowls, as well as one example of a carinated bowl and piriform vessels with an outlined rim and with a subtle bed lip on the interior. Also, at least one carinated bowl could be dated to the Late Neolithic or the Early Copper Age. Concerning the lithic tools, the assemblage comprises blade cores,

some microblades, and other retouched pieces, as well as other debris. The assemblage is difficult to be assigned chronologically, although the microblades can be dated to the Neolithic. In addition to these, a 20 cm-long fragment of a human femur was found near the orthostates on the north side of the tumulus, next to the entrance area (UE1004) (SF1-R and S). Its state of preservation was fairly poor, and it yielded a radiocarbon date of 3685 ± 30 BP (Tab. 1). The entrance area to the megalithic gallery has been altered by later modifications to the original structure.

Lab code	Context	Material	BP	Method	cal BC 1σ	cal BC 2σ	δ13C (‰)	δ15N (‰)
CIRAM-6483	Dolmen 1, Tumulus UE1004	Human bone, tibia	3685 ± 30	AMS	2136-2028	2196-1961	-19.09	8.65

Tab. 1. BP and cal BC dates from Dolmen 1 at La Lentejuela (Teba, Málaga). Dating calibrated with the OxCal 4.4 software and works with IntCal20 (Reimer *et al.*, 2020).

The work undertaken in Zone II focused on recording the ground plans of the four dolmens in this area. Three-dimensional surveys employing photogrammetry and 3D laser scanners permitted the comparison of the various constructions and the establishment of their architectural similarities. The largest example in Zone II is Dolmen 3, which measures 6.10 m in length and 0.9-1 m in width. Dolmens 5 and 6 have similar lengths, 2.28 m and 3.30 m respectively. Dolmen 4, excavated between 2007 and 2008 and documented with photogrammetry and 3D laser scanner in 2021, is a simple gallery, 3 m long, 0.9-1 m wide. Its maximum depth is 1.30 m, at which point it reaches the natural bedrock. Eleven orthostates have survived, with heights ranging from 0.8 m to 1.3 m. These are buttressed with small stones to give stability to the construction. The entrance to the gallery was sealed with medium-sized stones.

The survey revealed potential areas of stone extraction in the vicinity of the funerary structures. The mountain range of La Lentejuela presents various Jurassic and Cretaceous horizontal limestone outcrops, with an approximate thickness of 20 cm, which are susceptible to quarrying (Fig. 10). Karst dissolution processes facilitate the extraction of stone blocks that are used in the construction of orthostates and menhirs. These outcrops are close to the megaliths, and the slope may facilitate the movement of the stones. The area’s geology, characterized by clays and loams, renders the hill of La Patrana the only potential source of raw materials for the megaliths.

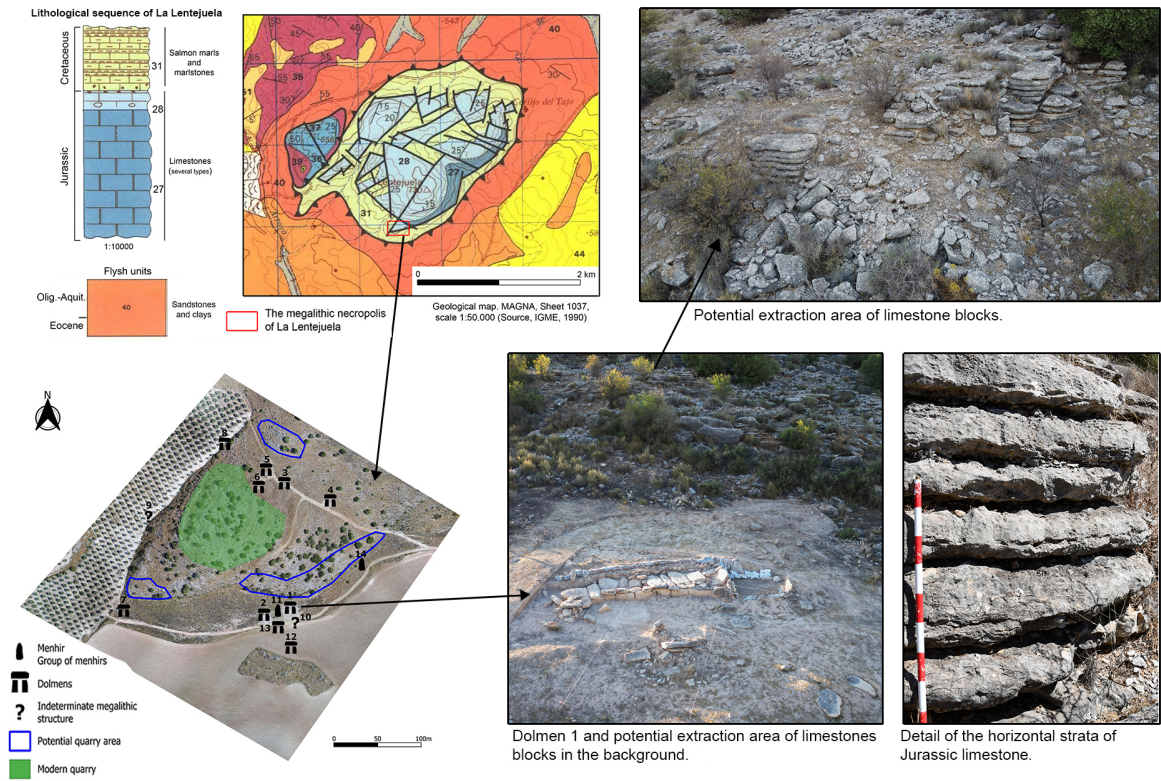


Fig. 10. Geological information of the area around La Lentejuela (Teba, Málaga). Monuments and possible quarries and catchment areas for the construction materials.

Finally, the 3D scanning and photogrammetry of all the structures has enabled the acquisition of valuable graphic documentation. Upon completion of the General Research Project, the information thus obtained will constitute a fundamental resource for the development of detailed studies on the architecture of these monuments. Whilst the majority of excavated structures will be reburied for conservation reasons, the graphic corpus will facilitate precise measurement and mathematical calculation of each stone element comprising the necropolis. This will enable the estimation of volume, analysis of construction techniques and systems employed, and the formulation of hypotheses regarding construction dynamics. Moreover, these techniques establish a basis for comparative analysis with similar structures or earlier phases of the same site. The application of photogrammetry and 3D modelling has facilitated the creation of digital twins, which are of considerable value both for research and heritage dissemination, particularly in the case of buried archaeological structures, where they acquire additional significance. 3D models have been made available to the public on the online repository Sketchfab¹, thus enabling virtual exploration of the structures. In addition, physical models intended for exhibition at the Teba Museum and in future exhibitions have been created, with the aim of making the necropolis accessible to a wider audience (SF1).

6. DISCUSSION

The fieldwork carried out at La Lentejuela site between 2021 and 2022 has enabled the documentation of a broad arrangement of megalithic structures, thereby reaffirming the complexity of the site. These structures are distributed across three distinct sectors of the area known as Cerro de la Patrana. Zone I features highly monumental structures, Zone II comprises medium-sized gallery-type structures, and Zone III includes smaller-scale constructions. At the current stage of research, it remains uncertain whether these architectural differences correspond to socioeconomic distinctions or chronological phases. One of the principal objectives of our General Research Project is to investigate the temporality of the necropolis, which will contribute significantly to a better understanding of its spatial organization.

Zone I was likely the first area to be monumentalised during the early Neolithic (5th millennium BC). The standing and scattered stones which constitute structure no. 11, between Dolmens 1 and 2, were probably dismantled to facilitate the construction of the major dolmens. A solitary menhir is located at a considerable distance within this sector of the site. Recent research suggests that certain architectural elements within the necropolis underwent modifications and a process of resignification. This is evidenced by the placement of stelae-menhirs that may have belonged to structure no. 11 at the entrance of Dolmen 1. The integration and combination of earlier stone elements into new funerary landscapes is a well-documented practice within the context of European megalithism (Bueno *et al.*, 2022; Laporte and Bueno, 2022).

The dolmens in Zone I share some constructive features (see *supra*), and their complex architecture is reminiscent of some of the most monumental and earliest megaliths in the southern Iberian Peninsula, for instance the Dolmen of Alberite (Villamartín, Cádiz). In the necropolis of Villamartín, the presence of dolmens is observed alongside that of standing stones. It is evident that some of these stones were reused by the builders of the Dolmen of Alberite. Also, menhirs were employed to demarcate the access to the dolmen, which itself is encircled by a peristaltic ring (Ramos and Giles, 1996; Bueno *et al.*, 2010).

The 2022 excavation of the mound associated with Dolmen 1 has significantly enhanced our understanding of this type of construction in the southern Iberian Peninsula. Comparable stratigraphic sequences comprising layers of gravel, stones, and earth have been documented in other mounds in the province of Málaga. These include the Dolmen of El Charcón (Montecorto, Málaga) and the Dolmens of Viera and Menga, in Antequera (Ferrer *et al.*, 2004).

In addition, it is important to note that Dolmen 1 was revisited during the Bronze Age, as evidenced by the presence of ceramics from this period and the dating of the human femur fragment recovered from the burial mound. Similar phenomena have been documented in other megaliths in the southern Iberian Peninsula (Lorrio and Montero, 2004; García Sanjuán, 2005), specifically in Málaga, where dolmens containing burials dating to the late 3rd and early 2nd millennium BC have been recorded (Aranda *et al.*, 2021). The reuse of 'old' collective tombs coexists with burials in natural caves, cists, and hypogea (Ramos *et al.*, 1995; Marqués and Aguado, 2012; Aranda *et al.*, 2021), suggesting parallel processes of continuity and transformation within the ideological framework of Early Bronze Age societies.

On initial observation, it appears that all the tombs in Zone I are in an excellent state of preservation, with no evidence suggesting recent looting. This is primarily due to the fact that, although the peristaltic rings were partially visible, the dolmen galleries remained fully buried. The sole exception to this is Dolmen 7, a simple gallery structure located in the western part of Zone I, whose structure and stratigraphic sequence have been altered at the upper levels by the presence of an olive grove and a path. The excavation of Dolmen 7 yielded limited data concerning funerary

¹ <https://sketchfab.com/3d-models/necropolis-de-la-lentejuela-estructura-1-20b808da46054d2caa3a481643caad11>.

practices. No human remains were discovered inside (UE7003) (SF1, U-V), although some elements that were tentatively identified as grave goods were found. The presence of a bone in the tumulus of Dolmen 1, along with small human bone fragments recovered from Dolmen 4, suggest that the absence of osteological remains in Dolmen 7 is attributable neither to the action of acid soils at the site nor to looting (in looted tombs, bone remains are typically found scattered). It is possible that any remains deposited subsequent to the construction of the tomb were removed at a later date, a well-documented phenomenon in collective burials (Clop, 2010). The grave goods left in Dolmen 7 may have been either deposited as goods whose utility value had diminished among the living or they may have been left behind when the human remains were extracted. The presence of decorated seashells (*Trivia monacha*) suggests a connection with populations of the Mediterranean coast, this relationship has been observed in other site the Guadalteba and Turón regions during Late Prehistory (Cantillo and Becerra, 2020-2021). The flint tools (arrowheads and large blades) are likely of a local origin (Becerra, 2019). However, the paucity of material culture elements discovered at the site precludes any conclusions being drawn regarding the social structure of the community in question.

Zone II is located at the summit of La Patrana. Four medium-sized dolmens with a rectangular plan and a simple gallery have been documented. Gallery dolmens are common in the eastern sectors of the modern province of Málaga, as well as in the hill ranges of Ronda and Cádiz (Martín and Recio, 1999-2000; Gutiérrez, 2003).

Dolmen 4 is the only dolmen that has been excavated to date in this area. The 2007-2008 excavations yielded limited data regarding funerary practices, although a small assemblage of pottery, stone stools, and a few human remains were recovered (Baldomero and Berdugo, 2010). The re-excavation in 2021 was undertaken with the aim of producing new graphic records, using non-invasive digital techniques. Data from Dolmen 4 and Dolmen 7 have provided a much better understanding of the construction techniques employed in these megalithic structures. It is evident that the construction process began with the excavation of a pit in the ground, the inner edge of which was lined with the orthostates. The large stones were wedged with smaller ones, and the space between the walls of the pit and the outer side of the dolmen was also filled with small pebbles.

The two small structures (Dolmens 8 and 9) documented in 2021 in Zone III are poorly preserved as a result of dynamic processes of slope erosion and the presence of an olive grove, and their size is more similar to megalithic cists than to typical dolmens. We aim to excavate one of these structures, with a view to determining whether large constructions coexist with smaller ones at the site, or whether the megalithic cists belong to different periods.

Evidence suggests that multiple communities across Late Prehistory chose to bury their deceased on the Cerro de La Patrana. The Sierra de la Lentejuela is a prominent feature in the central area of the Guadalteba valley, extending from La Patrana towards the alluvial valley. The erosion-driven formation of the mountain range's karst landscape has led to the emergence of highly distinctive rock formations. These natural formations may have been particularly attractive to the builders of the megaliths, leading to a meaningful territorial and community-relevant cultural scenography, in which monuments and rocky outcrops are closely linked (Richards, 1996; Tilley, 1996; Cummings, 2002; Scarre, 2022).

Furthermore, the site offers easy access to raw materials. During fieldwork, a number of potential sources of limestone stone were identified in the vicinity of the tombs. However, these have been significantly altered by more recent quarrying activities. The physical characteristics of the rock, in conjunction with the action of erosive agents, have shaped stone blocks that might have been used as orthostates. The proximity to rocky outcrops is a constant feature in the megaliths found in the south of the Iberian Peninsula, with notable examples in the necropolis of Panoría (Aranda *et al.*, 2017) and Antequera (Carrión *et al.*, 2009; Lozano *et al.*, 2023). In both instances, the stone sources are located less than 1 km away.

Megalithic necropolises in the province of Málaga, particularly smaller ones, are often located in visually dominant areas, which are typically situated on hilltops (Martín and Recio, 1999-2000). A close relationship with other small megalithic monuments and schematic graphic expressions in Guadalteba seems evident in La Lentejuela.

7. CONCLUSIONS

The necropolis of La Lentejuela is an exceptional megalithic site for Andalusia, not only because of the large number of structures found within it, but also because of their variety and monumentality. Its proximity to the *Conjunto Arqueológico de los Dólmenes de Antequera* (a UNESCO World Heritage Site) and the megalithic monuments in the hill ranges of Málaga and Cádiz opens multiple avenues for future research, which will be explored as recent work has increased the visibility of the site. A further investigation is required into the site's chronology. The materials comprise ceramic and lithic artefacts dated to the 5th millennium BC, but these have only been found in the area of the menhirs. This date aligns with those proposed for other megaliths in the southern

Iberian Peninsula (Schultz-Paulsson, 2017; Laporte and Bueno, 2022; Linares-Catela *et al.*, 2022). Conversely, the monumental nature of Dolmens 1 and 2 bears resemblance to other megalithic monuments in the region, dated to the first half of the 4th millennium BC (Ramos and Giles, 1996; García Sanjuán *et al.*, 2023), and associated with social transformations resulting from the consolidation of productive economic strategies.

Future archaeological excavations will focus on episodes of reuse, in order to understand continuity and change in collective funerary practices, and their relationship with innovations in Bronze Age funerary ritual. The archaeological work scheduled for the coming years will enable the refinement of this chronology and the establishment of construction phases with greater certainty. Likewise, it is expected that the excellent state of preservation of the funerary deposits will enhance our understanding of the lifeways and ritual practices of the human community or communities that formerly utilised the necropolis.

SUPPLEMENTARY FILES

The following supplementary material is available on this journal's website: SF1. Methodology and stratigraphic context.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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AUTHORSHIP CONTRIBUTION STATEMENT

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Eduardo Vijande Vila: conceptualization, formal analysis, funding acquisition, investigation, methodology, project administration, resources, validation, writing – original draft, writing – review & editing.

Alejandro Muñoz Muñoz: data curation, formal analysis, methodology, visualization.

Adolfo Moreno Márquez: formal analysis, investigation, resources, writing – review & editing.

María Leticia Gómez Sánchez: investigation, writing – original draft, writing – review & editing.

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