The Early Bronze Age Funerary Landscape of Calicantone (Sicily): Internal Planning and Visual Features

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Abstract Archaeological research carried out at the Early Bronze Age (c. 2200–1450 BCE) rockcut chamber tomb necropolis at Calicantone, in southeastern Sicily, unveiled an extraordinary plurality of grave forms and categories of external tomb decoration within a single prehistoric cemetery, as well as the presence of rock-cut infrastructure that facilitated access to the individual tomb clusters. Each sepulchral group presented a different level of elaboration with respect to the tombs' facades and forecourts, while the appearance of small artificial cavities recurred in several sectors of the funerary area. The repeated combination of certain chosen elements within the multileveled cemetery of Calicantone implies that this necropolis was a well-organized complex, characterized by 1) careful planning of its internal infrastructure and 2) a well-ordered system of differentiating tombs. The latter is articulated through a) their location and b) a set of external architectonic features that serve to enhance or diminish the visibility of particular elements and sections of the funerary area.

Introduction

The site of Calicantone is situated in the province of Ragusa, on the western side of the Cava Ispica gorge, c. 8km north of the city of Ispica in the Hyblaean Mountains of southeastern Sicily (Fig. 1). The Early Bronze Age (hereafter EBA; c. 2200–1450 BCE) site consists of 1) a settlement area located on a plateau c. 370 m above sea level (hereafter a.s.l.); 2) a sprawling necropolis spread over several rocky terraces located below the plateau and also

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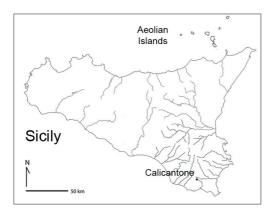


Fig. 1 Sicily: location of the site of Calicantone.

along the edge of the gorge's wall, occupying an area of at least 20,000 m² (c. 100 × 200 m); and 3) an isolated bi-apsidal hut discovered in 2012 between the settlement and funerary zones (Fig. 2).² Traces of the prehistoric village (lt: *villaggio-officina*) and its necropolis had been already identified in the 1970s by a local archaeologist, who recognized approximately 80 rock-cut tombs in the area.³ The necropolis is, in fact, composed of several tomb clusters dispersed along the calcareous cliffs of Cava Ispica and also Piccolo Lavinaro, a smaller gorge located on the northern side of the promontory. Four consecutive archaeological campaigns carried out between 2012 and 2015 resulted in the cataloging of 93 rock-cut chamber tombs



Fig. 2 Plan of the site (courtesy of the Calicantone archaeological mission).

² Occhipinti 2013; Militello and Sammito 2014, 2015, 2016, (forthcoming a, forthcoming b); Militello 2015, (forthcoming); Messina 2016; Messina et al. (forthcoming); Militello et al. 2018a, 2018b.

³ Picone 1975.

in total, of which 37 have been excavated.⁴ The structures located along the steep southern and northern walls of Piccolo Lavinaro (c. 40 tombs) are currently inaccessible. The main part of the sepulchral area lies southeast of the bi-apsidal hut, in a rocky hollow created by curved terraced ledges, and can be easily reached (Fig. 3). Here, the tombs are clustered

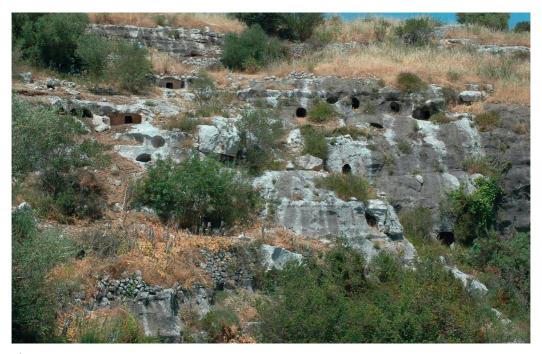


Fig. 3 Detail of the necropolis at Calicantone (by the author).

in smaller groups spread over 14 rocky ridges, each one comprising two to eleven funerary units. This article aims to reconstruct the visual structure, or "vision-scape," of the prehistoric funerary landscape of Calicantone. After summarizing the preliminary results of the aforementioned archaeological research, the spatial and visual features of the various components of the necropolis are discussed. Special consideration will be given to the external architectural decoration of the tombs' facades and courtyards in the central part of the pre-

⁴ This research was conducted by Prof. Pietro Maria Militello, from the University of Catania, and Dr Anna Maria Sammito, from the Superintendence of Cultural and Archaeological Heritage of Ragusa. Twenty-four tombs were examined in 2012 and 2013, three in 2014, and ten in 2015.

⁵ Occhipinti 2013.

⁶ Not to be mistaken with "visualscape", a generic term predominantly used within the GIS environment to refer to the visual structure of the landscape. In that context, it is defined as "the spatial representation of any visual property generated by, or associated with, a spatial configuration" (Llobera 2003, 30).

historic cemetery, and its role and meaning in the construction of this funerary landscape, as well as the way in which the internal infrastructure acts to tie the entire area together.

Approaching the funerary landscape of Calicantone

The notion of "landscape" is complex, capable of realizing a wide range of distinct concepts and possible meanings simultaneously. With regard to archaeology, "the source of variation, of course, is the theoretical stance of the archaeologist." In this paper, landscape is interpreted as the external expression of the geographic environment as shaped through the interaction between natural forces and human activity; it is embedded in the natural space but shaped in a cultural context. Human agency is thus a prerequisite for the appropriation of the natural landscape into the cultural landscape, a process that is influenced, guided, and even curtailed by the preexisting characteristics of the natural landscape. Archaeological landscapes explore the relationships between past social aspects and the environment, while archaeological -scapes remain predominantly social constructs. Funerary landscapes are a particular type of archaeological landscape; investigation of them can reveal the potential ways in which past peoples experienced the spatial components of the funerary realm, thus providing a means through which the phenomenological relationship between the death of an individual and the collective memory of the burial within the community involved in the rite of passage can be examined.

Phenomenology is a relatively new methodological approach in landscape studies. ¹² A phenomenological perspective privileges knowledge acquired through the perceptual experience of an individual. ¹³ Such "participant observation" or embodiment requires the observer to be fully immersed into the surrounding landscape. ¹⁴ The key premise of this approach is that landscapes have a certain agency over people. Upon entering an area or visual field, the observer is affected by their perception of its qualities through their body and all of their senses. ¹⁵ Immersion in a landscape elicits a multi-sensory and synesthetic experience; for this reason, landscapes can be simultaneously treated as vision-, touch-, sound-, smell-, and taste-scapes.

⁷ See e.g. Tilley 1994, 22–34; Anschuetz et al. 2001; David and Thomas 2008, 27; Fennell 2010, esp. 1–4.

⁸ Ashmore 2004, 255.

⁹ Bernat and Kałamucka 2008, 21.

¹⁰ Daróczi 2012, 199.

¹¹ Daróczi 2012, 202 and fig. 1.

¹² Thomas 2006, 54; Johnson 2012.

¹³ See e.g. Tilley 1994; 2004b, 1-31; 2005; 2008.

¹⁴ Tilley 2004a.

¹⁵ On the use of senses in archaeological research on landscape, see e.g. Day 2013.

Nevertheless, vision remains the primary descriptive tool used by archaeologists to decipher the material structures associated with cultural landscapes. High Within the very term "landscape" there is a semantic connection to the sense of vision, which emphasizes its visual aspect. Particular visual elements or features of the landscape—perhaps an aesthetically pleasing panorama that comprises prominent landmarks, common natural forms or both, or conversely the lack of any view or the limitation thereof, or then again the play of sunlight and shade, or the open or enclosed nature of the terrain, etc.—can have a strong influence on human emotions. Is

In order to understand how the external appearance of the rock-cut tombs structured the funerary landscape at Calicantone, the landscape was first explored using movement, vision, and the other senses. A thorough examination of the tombs was then carried out with reference to their settings, topographic features, and relations with other funerary structures at the site. Finally, these new findings have been placed in the wider archaeological context of the region.¹⁹

Geographical setting of the necropolis

The necropolis of Calicantone was carved at the edge of Cava Ispica, in the Hyblaean region, an area defined by its unique landform—flat calcareous uplands riven by deep gorges. From a morphological point of view, the Hyblaean Mountains (It: Monti Iblei) form a plateau cut by numerous river valleys, locally denominated as *cave*, running radially from the center towards the coast. The elevation of the plateau does not exceed 1,000 m a.s.l. *Cave* are long, sinuous, deep, and narrow formations bounded by steep rugged slopes; these were generated through erosion and the chemical corrosion of the plateau's main calcareous component, i.e. limestone. Cava Ispica extends for c. 13 km along a north-western/south-eastern axis, between the cities of Modica and Ispica. The gorge varies from 50 to 65 m in depth and 100 to 150 m in width; the landform on both sides does not exceed 300–370 m a.s.l. The gorge is best known for its archaeological heritage, which spans from the prehistoric to the medie-

¹⁶ Llobera 2006, 132; Frieman and Gillings 2007, 8. For a critique of visualism, see e.g. Thomas 2008.

¹⁷ According to the Collins English Dictionary, the suffix "-scape" indicates a scene or a view, especially a pictorial representation (e.g. a seascape).

¹⁸ As exemplified by Alberti's (2018) emotional landscapes approach, where she attempted to reconstruct the sensations provoked by the changing scenery of prehistoric funerary landscapes in Knossos, Crete, by using her vision and her ability to move around the built environment for viewing it from multiple directions.

¹⁹ This approach is derived from the method proposed by Llobera (2007, 53) to reconstruct visual landscapes.

val periods and consists of diverse rock-cut structures carved along the walls of the gorge, which served residential, funerary, and ritual purposes.²⁰

Archaeological remains

Very few of the funerary structures at the site yielded archaeological material. The bulk of the tombs were found empty—rather unsurprising, given that their accessibility and marked visibility, due to their exposed exteriors, would have attracted looters. Ceramic finds, such as the small-sized vases typical of the Castelluccio culture (e.g. carinated cups, conical cups, hourglass beakers, and one-handled jars with a roughly biconical body), demonstrate that the necropolis dates back to the middle and final stages of the EBA. Seven of the 21 tombs excavated in 2012 and 2013 contained osteological remains that, in total, represented at least 40 individuals; each tomb held between 4 and 13 deceased. Atomic absorption spectroscopy analyses conducted on multiple samples collected during the excavations revealed that the community's diet was based mainly on red meat and was poor in plant-based foods, cereals, and fish. Only 22% of the skeletal remains preserved in situ belonged to infants.

The architecture of tombs

Most rock-cut tombs at the necropolis consist of a chamber, a single antechamber, and, less frequently, a round or oval courtyard cut into the rock immediately before the tomb's entrance. Chamber plans are mostly circular or semicircular (66%), although some have irregular forms (elliptical: 12%; rectangular: 6%).²³ The majority of tombs have domed ceilings (59%); the remainder have flat (33%) or irregularly shaped (7%) ceilings.²⁴ As for internal furnishings, only 8% of the examined structures were equipped with stone benches (two tombs), carved wall niches (two tombs), or an additional pit sunk into the floor (one tomb). The size of the tombs at Calicantone ranges from 1 to 2 m in length, from 1 to 2 m in width, and from 0.40 to 1 m in height. The entrance shape can be characterized as rectangular-square (87%) or oval (13%).²⁵ Most of the tombs are fitted with a frontal space—a concave courtyard—for the execution of funerary rites.

²⁰ See e.g. Moltisanti 1950; Di Stefano and Belgiorno 1983; Di Stefano 1997; Rizzone et al. 2004; Rizzone and Sammito 2004, 2010; Picone 2006; Sammito 2014, 2015.

²¹ Militello and Sammito 2014, 107; Buscemi and Figuera 2019, 470.

²² Sirugo 2015.

²³ Occhipinti 2013, 97-98.

²⁴ Occhipinti 2013, 98.

²⁵ Occhipinti 2013, 104.

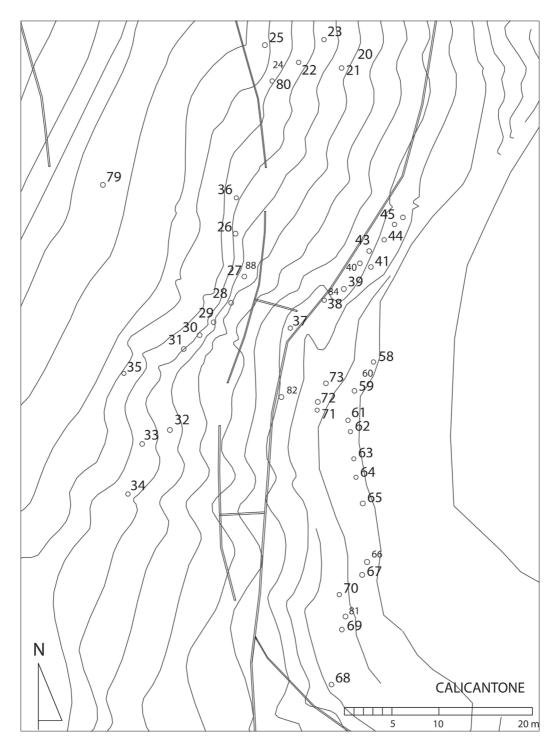


Fig. 4 Plan of the necropolis: distribution of tombs (by the author). In smaller font—niches.

A number of smaller rock-cut cavities accompanying the funerary structures were also identified within the necropolis (Fig. 4). Almost all sepulchral groups were equipped with at least one niche. In particular, the tomb cluster that consisted of two tombs with decorated facades (T. 69 and T. 70) was separated from the others by a cavity (T. 81), which was adjacent to the structure with a well-preserved triple-framed entrance (T. 69). Yet, the shape and finishing of these hollows do not match those of tombs in an inchoate stage of construction (It. tomba incoativa—an unfinished tomb, a work in progress). These niches could have been used for a votive purpose, e.g. for the storing of ritual vases, plants, or other perishable materials. The deposit found in the aforementioned cavity (T. 81) consisted exclusively of microlithic flint blades. The presence of votive cavities in the bigger sepulchral groups would imply that these were regarded as independent units within the necropolis, and that they may have been reserved for a select group of people or used over different/limited periods of time.

The lack of well-dated contexts makes it impossible to reconstruct the phases of use for individual tombs and tomb complexes, or establish which groups were used simultaneously.

Visual features of the tombs

The decorated facades and elaborated courtyards of rock-cut tomb cemeteries are the most prominent features of EBA funerary landscapes in Sicily, and an important manifestation of the monumentalization of death.²⁶ Thirteen out of the 78 tombs located in the main part of the funerary area are distinguished by the incorporation of monumental architectural elements that were cut into their facades and/or courtyards. The repertoire of these decorative features comprises pillars (as observed in T. 73; Fig. 5), false pilasters (T. 31 and T. 26; Fig. 6), and triple frames (T. 32, T. 69, T. 70; Fig. 7) hewn in the rock around the openings. The space in front of the entrance to certain tombs (T. 12, T. 18, T. 37, T. 43, T. 44, T. 45; Fig. 8) is visually marked by carefully polished rock. The dimensions of the facades, which expand horizontally, are variable (1.5 to over 3 m in width; c. 0.5 to almost 1.5 m in height).²⁷ Decorated facades required more effort in terms of labor expenditure, as opposed to smaller modest units whose execution involved less manual work.

The necropolis also includes a few monumental complexes comprised of several tombs with a shared courtyard. *Tomba del Principe* ("The Prince's Tomb", i.e. T. 73) and the two adjacent funerary structures (T. 71 and T. 72) are situated on the same terrace and share what would normally be considered a large forecourt (Fig. 9). Similar examples of such multi-tomb complexes with a common courtyard are known from other EBA necropolises

²⁶ Crispino and Cultraro 2015, 211; Giannitrapani 2018, 376.

²⁷ Occhipinti 2013.

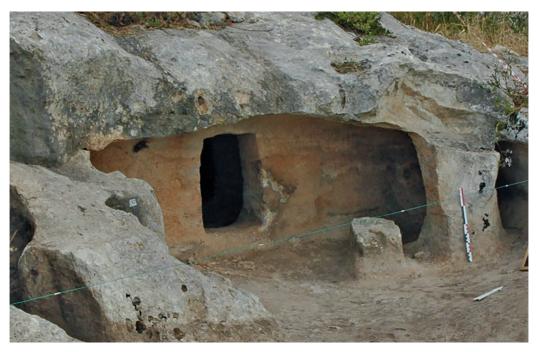


Fig. 5 Tomb T. 73 with pillared courtyard (courtesy of the Calicantone archaeological mission).

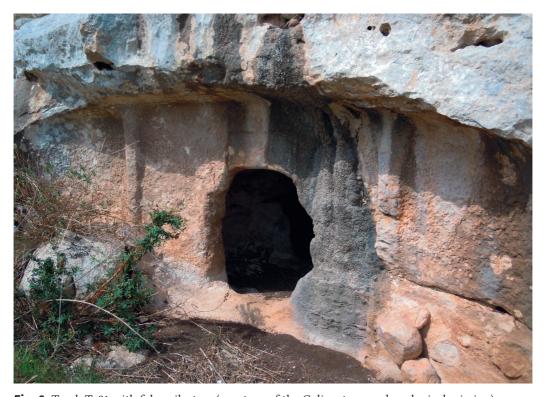


Fig. 6 Tomb T. 31 with false pilasters (courtesy of the Calicantone archaeological mission).



Fig. 7 Tomb T. 69 with triple frame cut around the entrance (courtesy of the Calicantone archaeological mission).



Fig. 8 Tomb T. 37 with polished facade (courtesy of the Calicantone archaeological mission).

in the area, e.g. in Cava Gesira or Cava Ternulla,²⁸ and elsewhere, e.g. in Cava Baratta near Augusta.²⁹ The entrance area of T. 73 is also the only known example of a pillared courtyard in the vicinity of Cava Ispica. Similarly elaborated facades can be found elsewhere, e.g. among the famous tombs of Castelluccio.³⁰ As for the other types of monumental decoration, false-pilasters are known from the northern part of Cava Ispica, from Baravitalla.³¹ In various other cemeteries along the gorge, the tomb entrance may be delineated by a rock-hewn frame, e.g. at the Early to Middle Bronze Age (the MBA extends from c. 1450 to 1250 BCE) necropolis of Scalepiane, situated on the same side of the gorge, c. 2 km south of Calicantone.³²

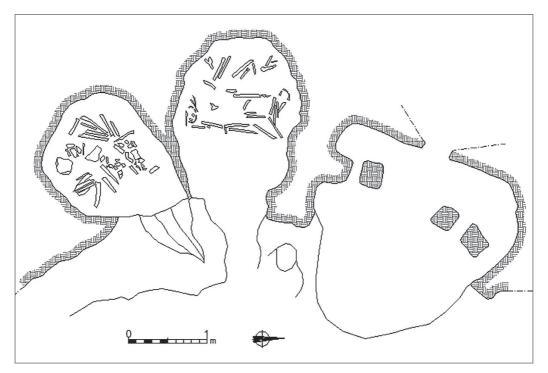


Fig. 9 Plan of *Tomba del Principe* tomb complex (courtesy of F. Buscemi). From the left: T. 71, T. 72, and T. 73.

²⁸ Belluardo and Ciavorella 1999, 26; Rizzone and Sammito 1999, 53.

²⁹ Lanteri 1994, 12.

³⁰ Orsi 1892.

³¹ Di Stefano and Belgiorno 1983, 34-38.

³² Rizzone and Sammito 2002, 140.

Elements of internal infrastructure

The external appearance of the tombs is not the only component of what appears to be a careful planning process. In some groups, traces of rock-cut steps were identified; these are still visible in the rocky slopes.³³ Taking into account the effects of erosion at the site, it cannot be excluded that further infrastructure of this type, e.g. enabling access to particular tombs, may have existed within the boundaries of this prehistoric cemetery. Exceptional is the case of an isolated tomb (T. 12), equipped with a rock-cut corridor and a series of steps facilitating access to its courtyard. In addition, peculiar rock-cut canals were discerned in front of the two tombs within the above-mentioned complex of *Tomba del Principe* (T. 71 and T. 72). Given the degree of erosion and water accumulation in the tombs, there was a clear impetus for the construction of a drainage system at the site.

Discussion

The main part of the cemetery is easily accessible and internally well-connected through a system of stairs and paths running along the terraced slope. A number of smaller tombs with undecorated facades were carved in less "attractive" or less "inviting" locations—along the lowest edges of the main sepulchral area and in a few hard-to-reach spots.

The funerary monuments that were intentionally made to stand out, i.e. those enhanced with decorative facades (T. 26, T. 31, T. 32, T. 37, T. 43, T. 44, T. 45, T. 73), are concentrated in the central area of the main part of the necropolis and spread over three different levels. It seems that particular types of architectural decoration were confined to specific zones within the funerary area: triple-framed entrances occur only in the southernmost clusters (T. 32, T. 69, T. 70); plain facades are restricted to the northeastern group (T. 37, T. 43-45); pilasters appear exclusively on the highest central terrace (T. 26, T. 31), and the pillared court also lies on the central terrace (T. 73). Carved on the same level/terrace at some distance from the pillared court is the tomb complex consisting of two tombs with tripleframed entrances (T. 69 and T. 70) and a niche (T. 81). Thus, many complexes contained one or more visual focal points, most of which were located in the center of the hollow. This section of the necropolis has the strongest visual impact on the observer. The visual focal point was built up in the center of the hollow, around the axis passing through the facades or courtyards of tombs T. 26, T. 37, and T. 73, and was emphasized by the presence of different types of external monumental decoration (from top to bottom: false pilasters, smoothed blank-framed facades sunk into the wall, and the pillared courtyards).

³³ Militello and Sammito (forthcoming a).

The cemetery extends over a curved hollow whose terraces form an amphitheatrical setting; however, the orientation of the tombs' entrances and the difference in height between the respective terraces, due to the uneven surface of the slope, makes it impossible for the observer to view all the clusters simultaneously. For instance, a participant in a ceremony carried out in front of the decorated tomb complex T. 69–70 would only be able to see the facades of the above plus the rocky slope in the background (Fig. 10). The multi-terraced



Fig. 10 The view of the southern tomb complex containing, from the left: T. 69 with the adjacent cavity (T. 81) and T. 70 (by the author).

character of the terrain means that the necropolis naturally divides into smaller segments, each with its own visual focal point; therefore, different observation points located at various heights on the terraced slopes offer distinct views of the necropolis and the individual funerary structures. It would also be physically impossible for an observer to gaze over the entire necropolis while moving around it.³⁴ The visual field of the human eye broadens with

³⁴ The visual range is limited to the maximum human visual field, which depends on the structure of the eye and the position of the head (Paliou 2011, 254 and 256, fig. 6 with references).



Fig. 11 Central part of the Calicantone necropolis seen from the south (courtesy of S. Balistri).



Fig. 12 The panoramic view from Calicantone towards the coast (by the author).

increasing distance from the object under observation with a concomitant loss of detail so that, in this case, the elements of the rock-cut architecture would eventually be no longer discernible.³⁵ At Calicantone, the central part of the necropolis is almost completely visible from a distance, e.g. from the southern end of the intermediate terrace (Fig. 11). Particular elements will fill in the spectator's range of vision (which is an elliptical cone), while smaller details will be distinguishable only when the viewer is close enough to observe them.

Recent research has shown that the village and the necropolis were not intervisible, whereas the bi-apsidal hut was visible from both of these vantage points;³⁶ there are reasons to assume that this structure may have been an important symbolic landmark—a reference point in the landscape—or that it may have served to demarcate the world of the dead from the world of the living.³⁷ Both the village and the necropolis offer a similar panoramic view of the landscape, encompassing the gorge, a fragment of the valley, a vast portion of the tableland stretching away on both sides, and—further towards the horizon—the sinuous outlines of Cava Ispica and the sea (Fig. 12).

Concluding remarks

The multileveled EBA sepulchral area of Calicantone consists of the preexisting natural landform and a cultural overlay carved into it by the inhabitants of the prehistoric village. The slope at the edge of the Cava Ispica gorge, characterized by an amphitheatrical setting unfolding across multiple terraced levels and rocky ridges, was appropriated to fulfill the function of a necropolis. The structure of this funerary landscape was thus shaped by two intertwined elements: the natural substrate with its inherent characteristics, and the superimposed architectural layer with its visual features.

In terms of internal planning, the complex was organized around multiple levels of the rocky hollow and equipped with the necessary infrastructure to facilitate movement around the cemetery. Among the amenities was a network of paths and rock-cut steps, which possibly connected consecutive terraces and granted access to individual tombs/groups of tombs.

The introduction of facades and courtyards embellished with different types of monumental decorative elements that were purposefully divided into clusters shaped the visual structure of the local funerary scape. Triple frames and false pilasters carved around the tombs' openings, smoothed facades, and the unique pillared forecourt intensified the visual

³⁵ Concerning the angle of elevation and thresholds of vision, see Letesson and Vansteenhuyse 2006, 93–94 with references.

³⁶ In the case of the necropolis, the hut was visible from its uppermost level at least.

³⁷ Buscemi and Figuera 2019, 477-78, fig. 13.

impact of the tombs on the landscape. Although these visual focal points were dispersed across the necropolis, the disposition of tombs with additional architectural details along a vertical axis in the central part of the hollow indicates centralization; the deliberate accumulation of eye-catching elements on the structures enhanced the visibility of this sector.

The existence of visually differentiated tombs within different clusters of the necropolis might have reflected the social organization of the community. Militello and Sammito estimate that the village comprised around 1120 individuals across a span of c. 300 years, which amounts to 112 people per generation; they inhabited 14 huts, each accommodating 8 individuals (grouped as families, clans, or other?). Thus, the number of tomb clusters would match the number of social groups that formed the prehistoric community of Calicantone.³⁸

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