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In copertina: il mare e il nome di Aristonothos
Le 'o' sono scritte come i cerchi puntinati che compaiono sul cratere

Questa rivista vuole celebrare il mare Mediterraneo e contribuire a sviluppare temi, studi e immaginario che il cratere firmato dal greco Aristonothos ancora oggi evoca. Deposto nella tomba di un etrusco, racconta di storie e relazioni fra culture diverse che si svolgono in questo mare e sulle terre che unisce

SOMMARIO

The Altar and the Tumulus:
Ritual and Visuality at Grotta Porcina

L'altare e il tumulo: pratiche rituali e percezione visiva a Grotta Porcina

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Riassunto: L'articolo analizza i due principali monumenti della necropoli di Grotta Porcina (Vetralla, VT): un tumulo monumentale e un basamento circolare, quest'ultimo interpretato come una replica in scala del primo. Obiettivo della ricerca è chiarire ruolo e funzione di questa miniaturizzazione architettonica nel contesto del culto funerario. L'analisi, basata su confronti con modelli ceretani e tarquiniesi, mostra che la riduzione di scala consentiva un controllo visivo più efficace dei rituali e una partecipazione più diretta dei membri della comunità, senza alterare il valore simbolico della struttura.

Parole chiave: Architettura funeraria; Miniaturizzazione; Ritualità; Percezione visiva; Altari etruschi

Abstract: This paper studies the two main monuments of the Grotta Porcina necropolis (Vetralla, VT): a monumental tumulus and a circular base, the latter interpreted as a scaled-down replica of the former. The aim is to clarify the role and function of this architectural miniaturization within the context of funerary cult practices. The analysis, supported by comparisons with Ceretan and Tarquinian models, shows that the reduction in scale enhanced visual control over ritual actions and enabled more direct participation by members of the community, without diminishing the symbolic value of the structure.

Keywords: Funerary architecture; Miniaturization; Rituality; Visuality; Etruscan altars

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In order to investigate the dynamics of interaction and perception related to scale and proportion[1], this paper compares the two principal structures of the necropolis of Grotta Porcina (Vetralla, VT), where a circular base, interpreted by most scholars as a funerary altar, appears to be a small scale reproduction of a nearby monumental tumulus (Fig. 1), locally called 'Grande Ruota' or 'Castelluzzo'[2]. Through comparison with structures at Tarquinia and Cerveteri, I argue that the reduction in size from the monumental tumulus to the small scale altar at Grotta Porcina served to improve visual control of the rituals and ceremonies performed on top of the altar. This reduction raises questions about the adaptation and intentional use of scale in ritual performance. One answer may be suggested by the orientation of the theatriform structure surrounding the altar, which could be related to the need for illumination, likely connected with the performance of divinatory rituals requiring a view toward the southern part of the sky and the motion of the sun during the daylight hours[3]. These divinatory

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[1] This paper is a revised, updated and expanded version of the talk *The Altar of Grotta Porcina and the Visual Control of Rituals* given at the *AIA/SCS Joint Annual Meeting* (January 5-8, 2022), during the session *Dynamics of Scale: Manipulation, Perception, and Agency in Pre-Roman Italy* (Organizers: Laurel Taylor, Jacqueline Ortoleva; Discussant: Greg Warden).

[2] For the topographical and chronological framework of the Grotta Porcina site, see PERNIGOTTI 2022 with previous bibliography. For research and excavations at Grotta Porcina, see: ROSI 1925; COLONNA 1965; COLONNA 1967; QUILICI GIGLI 1978, pp. 43-49; COLONNA DI PAOLO 1978, p. 34; COLONNA 1985, p. 16; ROMANELLI 1986, pp. 29-31; COLONNA 1993; NASO 1996, pp. 154-164; BARBIERI 1998; SANTELLA 1999; TREFNÝ – CIHLA – VÁCLAVÍK 2022, pp. 18-24, 53, 86. The Grotta Porcina site is currently the subject of a new development project promoted by the Soprintendenza Archeologia, Belle Arti e Paesaggio per la Provincia di Viterbo e per l'Etruria meridionale. The investigations, conducted by Giuseppe Borzillo and Beatrice Casocavallo, include surveys, cleaning and diagnostic analyses aimed at ensuring the conservation, enjoyment and cultural promotion of the site.

[3] On the orientation of Etruscan sacred buildings and the division of the sky for divinatory purposes in the Etruscan world, see PERNIGOTTI 2019, PERNIGOTTI 2021a and PERNIGOTTI 2021b, with previous bibliography.

rituals recall the Latin concept of *templum*, which in the definition of Festus (Paulus, *Gloss. Lat.* 34) is a place visible from every part and from which every part is visible, making the need to keep the altar visible to all participants in the rituals fully understandable.

The site of Grotta Porcina

The site of Grotta Porcina is located in Southern Etruria, between Blera and Norchia (Fig. 2), in an area situated at the border between the countryside of Cerveteri and that of Tarquinia, usually placed on the axis, perpendicular to the coast, defined by the Monti della Tolfa[4]. Its position is strategic: it commands a key ford on the Grignano River, enabling passage across the valley between the Monti Cimini and the Monti della Tolfa. This corridor formed an important route linking Rome and Veii to Vulci and its territory, whose importance is shown by its use in Roman times as the course of the Via Clodia[5].

The site is characterized by a monumental tumulus, 28 meters in diameter and 3.5 meters in height (Fig. 3). It was cut directly into the rock, leaving a bridge that allowed access to the top of the monument, as in certain Ceretan Orientalizing tumuli that preserve a ramp with the same function (Fig. 4)[6]. Near this bridge, on the upper portion of the tumulus base, the only well-preserved molding survives: a torus flanked by two bands, an architectural and decorative solution typical of Orientalizing Ceretan tombs[7].

The tumulus contains a single grave, although its structure is hard to reconstruct because it was converted in modern times into an animal

[4] On the *Caere*-Tarquinia border, see: COLONNA 1967; RENDELI 1993, pp. 221 ss.; ZIFFERERO 1995; CERASUOLO 2012, pp. 150-153; PEREGO 2012; PULCINELLI 2016, pp. 205-206, 357-369, 392-395.

[5] For the reconstruction of these routes, see: COLONNA 1967; QUILICI GIGLI 1978, pp. 43-49; RENDELI 1993, pp. 350-356; ZIFFERERO 1995; COLONNA 2019.

[6] PRAYON 1975, pp. 81-85.

[7] COLONNA 1986, pp. 397-398.

shelter[8]. Even so, traces on the walls, floor and ceiling allow the main features to be read: a two-chamber tomb aligned on an axis, with a small atrium and a short south-facing dromos at the entrance[9].

Furthermore, some architectural and decorative characteristics, still discernible on the structure, seem to be of particular interest:

- The doorway separating the atrium from the first chamber with a relief Doric cornice painted red (Fig. 5);

- Two pillars between half-pilasters dividing the two rooms;

- Ceilings with relief decoration reproducing roof architecture, namely the central *columen*, the *cantherii* and the *templa* (Fig. 6).

These features suggest a date at the end of the Orientalizing period, in the first two decades of the sixth century B.C.[10] The tumulus and its grave find close parallels in, for example, the first tomb at Valle Cappellana, the fourth tumulus of Casale Vignale at S. Giovenale, and the tumulus of Caiolo at S. Giuliano, all datable between the late seventh and the early sixth century BC[11].

The altar of Grotta Porcina

About 80 meters from the tumulus, at the foot of the slope and very near the Grignano River, stands the altar that is the subject of this paper (Fig. 7). It is a cylindrical base, completely cut from the rock like the tumulus[12], set within a roughly 12-by-15-meter rectangular area bounded on three sides by steps that create a theatriform arrangement (Fig. 8). The base, set slightly to the north within the rectangular area, measures 6.20 meters in diameter at the bottom and

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[8] NASO 1996, p. 155.

[9] ROMANELLI 1986, p. 29; NASO 1996, pp. 160-164; BARBIERI 1998, pp. 56-58.

[10] COLONNA DI PAOLO 1978, p. 34; ROMANELLI 1986, p. 29; COLONNA 1986, pp. 445-446.

[11] Cfr. PRAYON 1975; COLONNA DI PAOLO 1978; ROMANELLI 1986; COLONNA 1986.

[12] On the excavations at the area of the cylindrical base and the stepped structure, see: COLONNA 1965; COLONNA 1993, pp. 331-337.

is linked to the eastern steps by a rock-cut bridge, just as in the nearby tumulus.

Both the profile of the base and the bridge have a relief decoration with a frieze representing an animal procession, unfortunately in a very bad state of conservation. Nevertheless, Giovanni Colonna was able to identify on it figures of felines, bovines and perhaps equines, separated by small trees resembling palm branches, and to date the carving to the same years as the tumulus or slightly later, still within the first half of the sixth century B.C.[13]

Since its discovery, the base has generally been interpreted as a funerary altar connected to the cult and rituals in honor of the deceased[14]. Later, it has also been read as a monumental stone-holder, based on comparisons with structures serving that purpose elsewhere in southern Etruria. In particular, Colonna compared it to the rectangular area southeast of the Cima tumulus at S. Giuliano, where seventeen stones were set in two rows and a circular hole at the center of the southern row likely held a small altar[15].

In this regard, it is worth noting the small hole at the center of the top of the Grotta Porcina base (Fig. 9)[16], which may be related either to chthonic rites involving libations and offerings of sacrificial

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[13] COLONNA 1993, p. 331. See also: COLONNA 1965; QUILICI GIGLI 1978, pp. 46-47; COLONNA DI PAOLO 1978, p. 34; STEINGRÄBER 1982, pp. 103-104; EDLUND 1987, pp. 71-72; COLONNA 1993, p. 331; COMELLA 2005, p. 324; STEINGRÄBER 1997, p. 100; MENICHELLI 2014, pp. 175-176.

[14] The first to propose such a solution, now accepted by most scholars, was G. Colonna through the comparison with the shape of Ceretan tumuli with an access ramp to the top, see: COLONNA 1965; COLONNA 1985, p. 116.

[15] After having interpreted the circular base of Grotta Porcina as a funerary altar, G. Colonna revisited its function in 1993, proposing a new interpretation as a monumental stone holder, see COLONNA 1993, pp. 331-337.

[16] The hole is still visible today and has already been reported in BAGNASCO GIANNI 2016, p. 35, n. 111.

blood[17], or to the installation of an upright stone at the center of the structure[18].

A place for the funerary cult: between Ceretan and Tarquinian ritual models

Focusing on the analysis of scale dynamics, it may be observed that the circular outline of the base, together with the presence of the bridge, appears to replicate, at a reduced scale, the shape of the nearby tumulus. Starting from this consideration, it is interesting to note that, in Cerveteri, tumuli had a double function[19]: they protected and marked the grave(s) within, and they also provided a platform for funerary rituals, accessible in some cases by a ramp along the tumulus profile.

This second function persisted in numerous sixth-century B.C tombs, both at Cerveteri and in the necropoleis of inland southern Etruria, where staircases led to the tops of structures often decorated with moldings very similar to those of contemporary altars and temple bases[20].

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[17] On chthonic-type rituals and on altars with cavities connected to these rituals, see: STEINGRÄBER – MENICHELLI 2010, pp. 56-58. On sacrifice in Etruria and, in particular, the offering of liquid and solid substances, and on the killing of sacrificial victims, see: RAFANELLI 2004, in part. pp. 179-180.

[18] A useful comparison can be made with the small holes found within a circular structure discovered at the top of the Tumulo del Terrone in Blera, see: RICCIARDI 1990, p. 151.

[19] On the function and role of tumuli in Etruria and particularly in Cerveteri, see: COLONNA 1986, pp. 394-431; ZIFFERERO 1991; ZIFFERERO 2006; NASO 2011.

[20] On the altar function performed by the top of some tombs in Cerveteri and in the rupestrian necropolises of inner Southern Etruria, see: COLONNA DI PAOLO 1978; COLONNA 1986, pp. 431-459. Interesting comparisons can also be made with the tombs from the archaic period of the Crocifisso del Tufo necropolis in Orvieto, cfr. BRUSCHETTI 2012; BINACO 2019. Finally, for a synthesis of the *sepulcrum* in Etruria as a possible cult place, see: COMELLA 2005.

Returning to Grotta Porcina, if the base reproduces the tumulus at a reduced scale, then at least some functions of the tumulus may have been transferred to it: there is no grave, so the tomb function is excluded, but it is still possible to suggest the one as a platform for funerary ceremonies in honor of the deceased.

Furthermore, as mentioned before, a theatriform structure surrounds the base. This stepped structure has parallels in the open-air vestibules characterizing some of the most important Orientalizing tumuli in the necropolis of Tarquinia[21]. The Luzi tumulus, for example, has a staircase composed of a 3.50-meter-wide central ramp, with smaller, staggered ramps on both sides, creating multiple viewing positions (Fig. 10). Scholars interpret these Tarquinian vestibules, like the tops of Ceretan tumuli, as settings for funerary ceremonies, with stepped seating from which members of the *gens* owning the tumulus could participate[22].

On the basis of these comparisons, it is possible to suggest that the cylindrical base of Grotta Porcina may really represent a place dedicated to the funerary cult, but with new characteristics born of both Ceretan and Tarquinian influence, fitting for a site on the border between the two centers. From Cerveteri it adopted the practice of locating funerary rituals atop the tumulus, here transposed to a base/altar that reproduces the tumulus's form and bridge at a reduced scale. From Tarquinia it adopted the placement of the cult within a stepped area, where members of the *gens* could assemble to attend the funerary rituals in honor of the deceased.

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[21] On Tarquinian tumuli with an open-air vestibule from Orientalizing period, see: CATALDI 1986; MANDOLESI 2008; CATALDI – MANDOLESI 2010; MANDOLESI – LUCIDI 2015-2016. On the theatriform structures in Etruria, with a special focus on the Orientalizing tumuli of Tarquinia and the monument of Grotta Porcina, see: COLONNA 1993.

[22] COLONNA 1986, p. 421; COLONNA 1993; STEINGRÄBER 1997, p. 100.

A matter of scale: the visual control of rituals

To conclude, it is relevant to focus on the dynamics of interaction and perception related to the topic of scale and on how these can affect the structures from a functional point of view. The two structures of Grotta Porcina share an identical shape, but they differ in scale and dimensions. As we have seen, this formal identity allows us to suggest a transfer, onto the base/altar, of the functions associated with the tumulus in the funerary cult. What we must now understand is the reason for the change in scale.

One explanation lies in the need to fit the base within the theatriform structure. Since the monumental dimensions of the tumulus, particularly useful for covering the grave and proclaiming the family's dominance over the territory, were not necessary for the new base, the operation to insert it inside the theatriform structure had to be much easier to reach with a 6.20-meter-wide base than with a monumental tumulus of 28 meters of diameter.

Nevertheless, from a visual and symbolic point of view it seems possible to suggest that this change in scale did not modify the meaning and role of the structure[23]. For a viewer seated on the western staircase, perspective would make the base appear as large as the tumulus behind it, allowing the two to be visually identified (Fig. 11).

A second explanation derives from the participants' need for better visual control over rituals and ceremonies performed on the base, easier to achieve here than atop a tumulus more than 3.5 meters high. In Tarquinia, Hellenistic tombs, like the Orientalizing tumuli, also created a focal point for the participants' gaze, with sarcophagi set on large steps along the interior walls. This is especially clear in the so-called Tomba del Tifone, where steps cut along the side walls served both as supports for sarcophagi and as architectural elements establishing the room's visual axis. The tomb's theatriform spatial arrangement cast the walls as a theatrical backdrop oriented toward

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[23] For some interesting considerations on the scale differences in cult buildings in Etruria and archaic central Italy, with a focus on their symbolic and ideological meaning, see POTTS 2022.

the center, which became the focal point for both visual attention and ritual activity[24].

The Grotta Porcina base/altar likely served as such a focal point, drawing the gaze of those attending the rites. As the animal-procession frieze suggests, these rites may have included animal sacrifice, with victims led onto the altar via the rock-cut bridge. The reduced size of the base/altar, compared to the monumental tumulus, would have brought spectators seated on the steps into closer contact with the sacrifices and increased their involvement in the rites[25].

Scale is therefore perceived not only in geometric or proportional terms but also through what we may define as spatial visuality. Scale is perceived bodily, through the somatic experience of participants who perform or observe the ritual. In this sense, the structure operates at the intersection of visuality, somatics, and performance. This approach invites further investigation across Etruria, where architectural elements may function mimetically and impose a kind of visual control on the viewer. It raises questions about architectural miniaturization and re-scaling, not only from large altars to smaller ones, as at Grotta Porcina, but also toward miniature or portable altars and the mimetic qualities of so-called temple models[26]. Such structures may be interpreted as resized ritual architectures that evoke full-scale ceremonial spaces in reduced formats while remaining fully effective in symbolic and performative terms.

Finally, it is worth noting that the theatriform structure surrounding the Grotta Porcina base/altar was open to the south, with an orientation similar to that of most Etruscan temples[27]. I have recently suggested that such temple orientation, toward the sky arch where the sun passes

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[24] Focal point where we can find an altar and a pillar with the representation of two anguiped monsters and a female figure, see: BAGNASCO GIANNI 2016, pp. 32-38; MARZULLO 2017, pp. 186-187.

[25] On rituals and sacrifices in honour of deceased, see: TORELLI 1997; BARTOLONI 2000, pp. 165-168; RAFANELLI 2004, pp. 161-162; COMELLA 2005; SANNIBALE 2012.

[26] Temple models currently being reexamined by C. Potts (2022).

[27] On the orientation of Etruscan temples, see: PERNIGOTTI 2021a, with previous bibliography.

every day for multiple hours a day, was intended to illuminate the *pars antica* of Etruscan sacred buildings, an area that may be interpreted as a possible stage for priestly performance, much as the altar of Grotta Porcina[28]. In addition to practical reasons, this orientation may be connected to the possibility of performing rituals, given the importance of the southward alignment and of the sun motion in divinatory practices within the *Etrusca Disciplina*[29]. All these features remind to the Latin concept of *templum*, interpreted as a divinatory space, a *locus designatus in äere* (Servius, *Ad Aen*. I 92) *ab auspiciis* (Varr., *De Ling. Lat.* VII 6-9), which Festus (Paulus, *Gloss. Lat.* 34) describes as a place visible from every part and from which every part is visible[30]. This definition perfectly fits the theatriform arrangement at Grotta Porcina, with the base/altar at its center. The base's smaller dimensions, compared to those of the tumulus, made it fully visible from every part of the stepped structure, clarifying the rationale for the change in scale.

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[28] PERNIGOTTI 2021a, pp. 128-130. On the possibility to interpret the *pars antica* of the Etruscan temples as a stage for the priest ritual performances, see: WARDEN 2012.

[29] On the importance of the south orientation and of the Sun motion in the *Etrusca Disciplina*, see PERNIGOTTI 2019.

[30] On the concept of *templum*, see: TORELLI 2005, with previous bibliography. On its application to the Etruscan world, see: MAGGIANI 2009; PERNIGOTTI 2019.

BIBLIOGRAPHY

BAGNASCO GIANNI 2016 = G. BAGNASCO GIANNI, *Fascino etrusco nel primo Novecento. Un gioco di specchi fra arti e storia delle arti*, in "Aristonothos", 11, 2016, pp. 11-46.

BARBIERI 1998 = G. BARBIERI, *Viterbo. Località Grotta Porcina*, in "BA", 51, 1998, pp. 55-70.

BARTOLONI 2000 = G. BARTOLONI, *III. La tomba*, in G. BARTOLONI (a cura di), *Principi etruschi tra Mediterraneo ed Europa*, Venezia 2000, pp. 163-171.

BINACO 2019 = P. BINACO, *Le necropoli orvietane tra VI e V secolo a.C. Qualche considerazione su architettura e ritualità funeraria*, in G. VANNINI (a cura di), *Florentia. Studi di archeologia vol. 4*, Firenze 2019, pp. 125-142.

BRUSCHETTI 2012 = P. BRUSCHETTI, *La necropoli di Crocifisso del Tufo a Orvieto. Contesti tombali*, Pisa-Roma 2012.

CATALDI 1986 = M. CATALDI, *Tarquinia nel Mediterraneo*, in M. BONGHI JOVINO (a cura di), *Gli Etruschi di Tarquinia*, Modena 1986, pp. 203-206.

CATALDI – MANDOLESI 2010 = M. CATALDI, A. MANDOLESI, *Tarquinia. Ripresa delle indagini nell'area dei tumuli monumentali della Doganaccia*, in "AnnFaina", 17, 2010, pp. 215-253.

CERASUOLO 2012 = O. CERASUOLO, *L'organizzazione del territorio di Cerveteri e dei Monti della Tolfa a confronto con l'agro tarquiniese (prima età del Ferro-età alto arcaica)*, in F. CAMBI (a cura di), *Il ruolo degli oppida e la difesa del territorio in Etruria: casi di studio e prospettive di ricerca*, Trento 2012, pp. 121-172.

COLONNA 1965 = G. COLONNA, *Monumenti rupestri e tempietto in loc. Grotta Porcina*, in "BA", 50, 1965, p. 130.

COLONNA 1967 = G. COLONNA, *L'Etruria meridionale interna dal Villanoviano alle tombe rupestri*, in "StEtr", 35, 1967, pp. 3-29.

COLONNA 1985 = G. COLONNA, *I santuari nelle necropoli*, in G. COLONNA (a cura di), *Santuari d'Etruria*, Milano 1985, p. 116.

COLONNA 1986 = G. COLONNA, *Urbanistica e architettura*, in G. PUGLIESE CARRATELLI (a cura di), *Rasenna. Storia e Civiltà degli Etruschi*, Milano 1986, pp. 371-530.

COLONNA 1993 = G. COLONNA, *Strutture teatriformi in Etruria*, in J.P. THUILLIER (a cura di), *Spectacles sportifs et scéniques dans le monde étrusco-italique*, Roma 1993, pp. 321-347.

COLONNA 2019 = G. COLONNA, *L'Etruria meridionale interna nella rete delle grandi vie arcaiche dell'Italia peninsulare*, in *L'Etruria delle necropoli rupestri*, Atti del XXIX Convegno di Studi Etruschi ed Italici, Tuscania-Viterbo, 26-28 ottobre 2017, Roma 2019, pp. 9-12.

COLONNA DI PAOLO 1978 = E. COLONNA DI PAOLO, *Necropoli rupestri del Viterbese*, Novara 1978.

COMELLA 2005 = A. COMELLA, Sepulcrum *(Etruria)*, in *ThesCRA* II (2005), pp. 320-324.

EDLUND 1987 = I.E.M. EDLUND, *The Gods and the Place*, Stockholm 1987.

MAGGIANI 2009 = A. MAGGIANI, Deorum sedes: *divinazione etrusca o dottrina augurale romana?*, in "AnnFaina" 16, 2009, pp. 221-237.

MANDOLESI 2008 = A. MANDOLESI, *Ricerca sui tumuli principeschi orientalizzanti di Tarquinia: prime indagini nell'area della Doganaccia*, in "Orizzonti", 9, 2008, pp. 11-25.

MANDOLESI – LUCIDI 2015-2016 = A. MANDOLESI, M.R. LUCIDI, *Il Tumulo della Regina di Tarquinia e lo spazio scenico per l'immortalità*, in "Mediterranea", 12-13, 2015-2016, pp. 77-115.

MARZULLO 2017 = M. MARZULLO, *Spazi sepolti e dimensioni dipinte nelle tombe etrusche di Tarquinia*, Milano 2017.

MENICHELLI 2014 = S. MENICHELLI, *Architettura sacra nell'Etruria rupestre. Il caso degli altari*, in S. STEINGRÄBER (a cura di), *L'Etruria meridionale rupestre*, Atti del convegno internazionale "L'Etruria rupestre dalla protostoria al medioevo. Insediamenti, necropoli, monumenti, confronti", Barbarano Romano-Blera, 8-10 ottobre 2010, Roma 2014, pp. 168-183.

NASO 1996 = A. NASO, *Architetture dipinte. Decorazioni parietali non figurate nelle tombe a camera dell'Etruria Meridionale (VII-V sec. a. C.)*, Roma 1996.

NASO 2011 = A. NASO, *L'Etruria meridionale*, in A. NASO (a cura di), *Tumuli e sepolture monumentali nella protostoria europea*, Atti del convegno internazionale, Celano, 21-24 settembre 2000, Mainz 2011, pp. 115-130.

PEREGO 2012 = L.G. PEREGO, *La "fortificazione" prima degli "oppida". Posizioni territoriali strategiche e controllo del territorio tra fase protostorica e periodo orientalizzante*, in F. CAMBI (a cura di), *Il ruolo degli oppida e la difesa del territorio in Etruria: casi di studio e prospettive di ricerca*, Aristonothos 5, Trento 2012, pp. 23-67.

PERNIGOTTI 2019 = A.P. PERNIGOTTI, *Moto diurno e moto annuo: riflessioni sul sistema cosmico degli Etruschi*, in "StEtr" 81, 2019, pp. 183-199.

PERNIGOTTI 2021a = A.P. PERNIGOTTI, *Etruscan Temples and the Sun: an Analysis on the Orientation of Etruscan Sacred Buildings*, in A.C.

GONZÁLEZ-GARCÍA, R.M. FRANK, L.D. SIMS, M.A. RAPPENGLÜCK, G. ZOTTI, J.A. BELMONTE, I. ŠPRAJC (eds), *Beyond Paradigms in Cultural Astronomy*, Proceedings of the 27th SEAC conference held together with the EAA (Bern 4-7 September 2019), Oxford 2021, pp. 125-132.

PERNIGOTTI 2021b = A.P. PERNIGOTTI, *Luci e ombre: orientamento e illuminazione naturale nei templi etruschi*, in L. DONATI, P. BRUSCHETTI, V. MASCELLI (a cura di), *Luci dalle tenebre. Dai lumi degli Etruschi ai bagliori di Pompei*, Catalogo della mostra (Cortona 5 giugno - 12 settembre 2021), Cortona 2021, pp. 116-122.

PERNIGOTTI 2022 = A.P. PERNIGOTTI, *(S)proporzioni etrusche: i monumenti funerari di Grotta Porcina*, in P. PIACENTINI, G. COLZANI, M. LA ROSA, U. MONDINI, I. SOZZI (a cura di), *(S)proporzioni. Taglia e scala tra testo e immagine*, Milano 2022, pp. 33-51.

POTTS 2022 = C.R. POTTS, *The Theology of Scale: Monumental and Miniature Cult Buildings in Archaic Central Italy*, in P. PIACENTINI, G. COLZANI, M. LA ROSA, U. MONDINI, I. SOZZI (a cura di), *(S)proporzioni. Taglia e scala tra testo e immagine*, Milano 2022, pp. 13-32.

PRAYON 1975 = F. PRAYON, *Frühetruskische Grab - und Hausarchitektur*, Kerle 1975.

PULCINELLI 2016 = L. PULCINELLI, *L'Etruria meridionale e Roma. Insediamenti e territorio tra IV e III secolo a.C.*, Roma 2016.

QUILICI GIGLI 1978 = S. QUILICI GIGLI, *La via Clodia nel territorio di Blera*, Roma 1978.

RAFANELLI 2004 = S. RAFANELLI, Sacrifices. *Il sacrificio nel mondo etrusco*, in *ThesCRA*, 1, 2004, pp. 135-182.

Rasenna = G. PUGLIESE CARRATELLI (a cura di), *Rasenna. Storia e civiltà degli Etruschi*, Milano 1986.

RENDELI 1993 = M. RENDELI, *Città aperte. Ambiente e paesaggio rurale organizzato nell'Etruria meridionale costiera durante l'età orientalizzante e arcaica*, Roma 1993.

RICCIARDI 1990 = L. RICCIARDI, *Blera (Viterbo). Le necropoli rupestri della Casetta e del Terrone*, in "BA", 5-6, 1990, pp. 147-154.

ROMANELLI 1986 = R. ROMANELLI, *Necropoli dell'Etruria rupestre. Architettura*, Viterbo 1986.

ROSI 1925 = G. ROSI, *Sepulchral Architecture as Illustrated by the Rock Facades of Central Etruria: Part I*, in "JRS", 15, 1925, pp. 1-59.

SANNIBALE 2012 = M. SANNIBALE, *Riti, simboli e religione. Le aristocrazie etrusche e la comunità dei vivi oltre la vita*, in A. MANDOLESI, M. SANNIBALE (a cura di), *Etruschi. L'ideale eroico e il vino lucente*, Milano 2012, pp. 87-101.

SANTELLA 1999 = L. SANTELLA, *L'area archeologica di Grotta Porcina*, in "La Torretta", 13, 1, 1999, pp. 1-6.

STEINGRÄBER 1982 = S. STEINGRÄBER, *Überlegungen zu etruskischen Altären*, in H. BLANCK, S. STEINGRÄBER (a cura di), *Miscellanea Archeologica Tobias Dohrn*, Roma 1982, pp. 103-116.

STEINGRÄBER 1997 = S. STEINGRÄBER, *Le culte des morts et les monuments de pierre des nécropoles étrusques*, in F. GAULTIER, D. BRIQUEL (a cura di), *Les plus religieux des hommes. État de la recherche sur la religion étrusque*, Actes du colloque international, Galeries nationales du Grand Palais, 17-19 novembre 1992, Paris 1997, pp. 97-116.

STEINGRÄBER – MENICHELLI 2010 = S. STEINGRÄBER, S. MENICHELLI, *Etruscan altars in sanctuaries and necropoleis of the orientalizing, archaic and classical periods*, in L.B. VAN DER MEER (ed.), *Material aspects of Etruscan religion*, Proceedings of the international colloquium, Leiden, 29-30 May 2008, Leuven 2010, pp. 51-74.

TORELLI 1997 = M. TORELLI, *Limina Averni, realtà e rappresentazione nella pittura tarquiniese arcaica*, in "Ostraka" 6, 1997, pp. 63-86.

TORELLI 2005 = M. TORELLI, *Templum*, in *ThesCRA*, 4, 2005, pp. 340-347.

TREFNÝ – CIHLA – VÁCLAVÍK 2022 = M. TREFNÝ, M. CIHLA, F.R. VÁCLAVÍK (eds), *Stoneworking in Etruria. Study on Use of Some Types of Stonemason's Working Tools in Selected Etruscan Sites since Villanovan to the Hellenistic Period*, Ústí nad Labem 2022.

WARDEN 2012 = P.G. WARDEN, *Monumental Embodiment: Somatic Symbolism and the Tuscan Temple*, in M. L. THOMAS, G. MEYERS (eds), *Monumentality in Etruscan and Early Roman Architecture: Ideology and Innovation*, Austin 2012, pp. 82-110.

ZIFFERERO 1991 = A. ZIFFERERO, *Forme di possesso della terra e tumuli orientalizzanti nell'Italia centrale tirrenica*, in E. HERRING, R. WHITEHOUSE, J. WILKINS, *The archaeology of power, 1*, Papers of the Fourth Conference of Italian Archaeology, 1, London, 2-5 January 1990, London 1991, pp. 107-134.

ZIFFERERO 1995 = A. ZIFFERERO, *Economia, divinità e frontiera. Sul ruolo di alcuni santuari di confine in Etruria meridionale*, in "Ostraka", 4, 1995, pp. 333-350.

ZIFFERERO 2006 = A. ZIFFERERO, *Circoli di pietre, tumuli e culto funerario. La formazione dello spazio consacrato in Etruria settentrionale tra età del ferro e alto arcaismo*, in "MEFRA", 118, 2006, pp. 177-213.

Fig. 1. Plan showing the relative positions of the tumulus and the circular base (Author's elaboration from Google Earth)
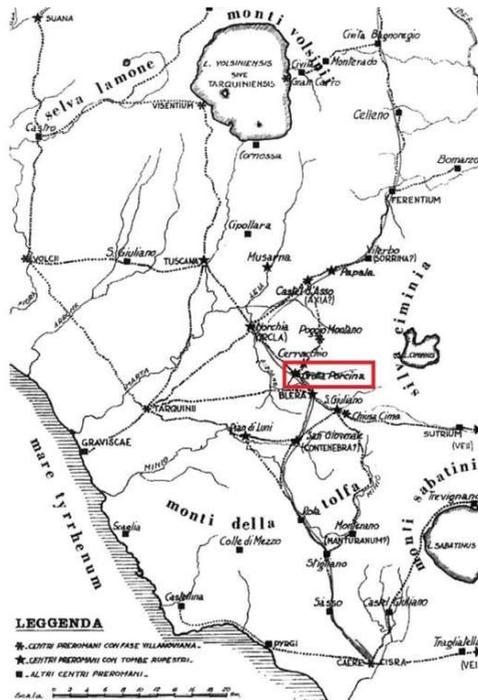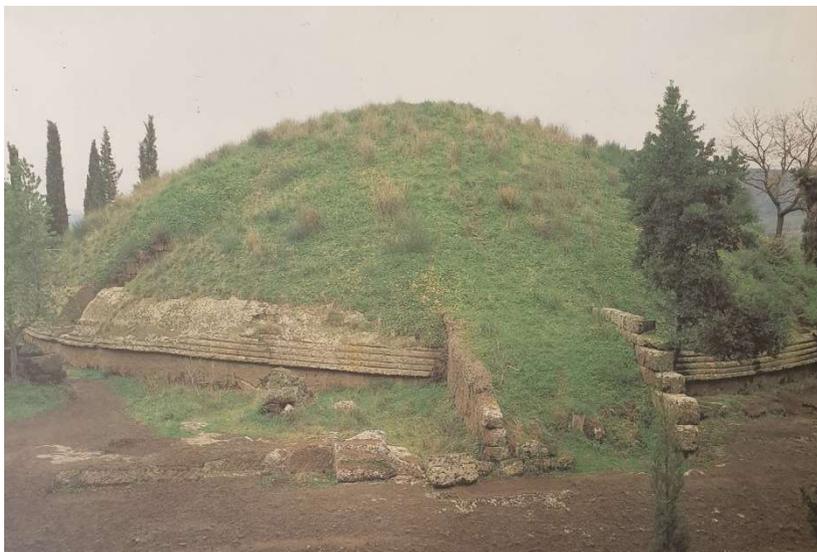

Fig. 2. Grotta Porcina location map (after COLONNA 2019, fig. 1)

Fig. 3. The monumental tumulus of Grotta Porcina
(after PERNIGOTTI 2022, p. 47, fig. 3)

*Fig. 4. Cerveteri, Orientalizing tumulus from the Banditaccia necropolis
with access ramp to the top* (after *Rasenna*, fig. 264)

Fig. 5. Doorway dividing the atrium from the first room, with a relief Doric cornice painted red (after PERNIGOTTI 2022, p. 48, fig. 6)

Fig. 6. Ceiling of the first room with relief decoration reproducing a central columen, cantherii, *and* templa (after PERNIGOTTI 2022, p. 49, fig. 7)

Fig. 7. The Grotta Porcina base/altar, set within a rectangular area surrounded on three sides by steps (after PERNIGOTTI 2022, p. 49, fig. 8)
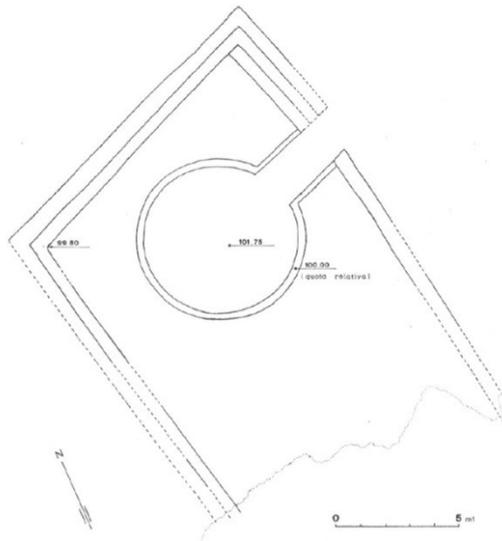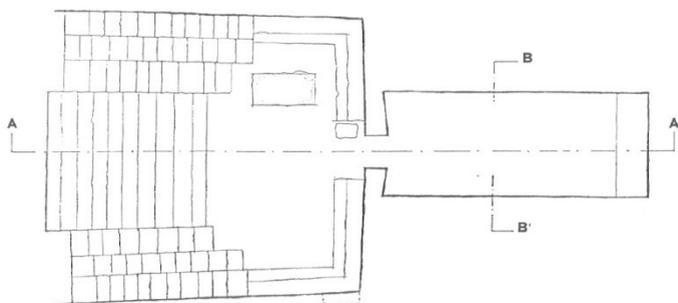

Fig. 8. Plans of the stepped structure delimiting the rectangular area housing the base/altar (after COLONNA 1993, fig. 4)

Fig. 9. Small hole at the center of the top of the Grotta Porcina altar
(photo by the Author)

Fig. 10. Tarquinia, plans of the Luzi tumulus tomb
(after COLONNA 1993, fig. 2)

Fig. 11. The cylindrical base seen from the west staircase, with the tumulus in the background (after COLONNA 1993, p. 333, tav. IV)