

## New Developments and New Dates within the Sanctuary of Apollo at Pompeii

James G. Cooper – John J. Dobbins

*The Pompeii Forum Project presents four previously unreported design features within the Sanctuary of Apollo at Pompeii that contribute to a fuller understanding of the sanctuary's architectural history. These are (1) a precise design relationship between the pier wall that marks the eastern temenos of the sanctuary, and the colonnade within the sanctuary; (2) differences in construction technique, materials, and alignment between the two southernmost piers of the pier wall and the rest of the series (the third from the south is anomalous and is treated separately); (3) evidence indicating that the exterior of the present temple podium wraps around and conceals an earlier podium, now encased within the present structure; and (4) details of the form of the encapsulated temple can be reconstructed on the basis of the cella's pilasters. Points 3 and 4 are discussed below under the subheading A New Phase of the Temple of Apollo.*

*These four different architectural conditions dovetail perfectly with each other and with the ceramic evidence from the excavations by the Pompeii Forum Project that date the sanctuary's monumentalization, including the pier wall, to the Augustan period<sup>1</sup>. The Pompeii Forum Project remains grateful to the Soprintendenza speciale per i beni archeologici di Pompei, Ercolano e Stabia and to the Direzione degli Scavi for facilitating our research. The authors are grateful for the assistance and observations of Zach Jones.*

### Introduction

The Sanctuary of Apollo is a complicated, challenging monument, but it is slowly revealing some of its secrets through our detailed research (fig. 1)<sup>2</sup>. Its importance as a cult center, architectural monument, and participant in the ensemble that created the monumentalized forum goes without saying. Its eastern side, which we call the pier wall, defines the west edge of the forum, serving as a party wall with the forum, and linking the sanctuary and forum to each other in important chronological, structural, and urbanistic ways. The structural function of the pier wall is a key point in the analysis of the sanctuary and the forum. The pier wall had to be robust because it carried the beams of both the east colonnade of the sanctuary and the west colonnade of the forum, including their upper galleries. The pier wall thus plays a critical role in interpreting the urban development and architectural history of both the forum and the sanctuary (fig. 2)<sup>3</sup>.

<sup>1</sup> James Cooper and John Dobbins are currently writing a comprehensive account of these discoveries. The present report serves as an official announcement of our work. For several years we have been sharing this information with colleagues and students on site in the Sanctuary of Apollo, in university seminars, in public lectures, and in papers at the Annual Meetings of the Archaeological Institute of America, e.g., J.J. Dobbins, L.F. Ball, "The Pompeii Forum Project Assesses the Lucius Mummius Pedestal in the Sanctuary of Apollo at Pompeii," Chicago, January, 2014. With the present publication we seek to inform a wider audience of Pompeianists.

<sup>2</sup> I would like to take the opportunity to underscore the central role that Project Architect and Architectural Historian, James G. Cooper, has played in the discoveries within the Sanctuary of Apollo. Especially significant was our 2011 discussion on the temple podium when it appeared that an earlier podium was concealed within the current one. As an architect, Cooper immediately seized upon the implications of the cella's pilaster dimensions. Within a few hours he had reconstructed the earlier temple phase that we present below. John J. Dobbins, Director, Pompeii Forum Project.

<sup>3</sup> The forum colonnade consisted of two complete covered storeys - the preserved upper Ionic colonnade argues for that. Elsewhere we will discuss our reasons for restoring only a single order, with an upper unroofed gallery to the Sanctuary of Apollo.



Fig. 1. Sanctuary of Apollo, Pompeii. Overview from southeast interior corner. Pompeii Forum Project image.

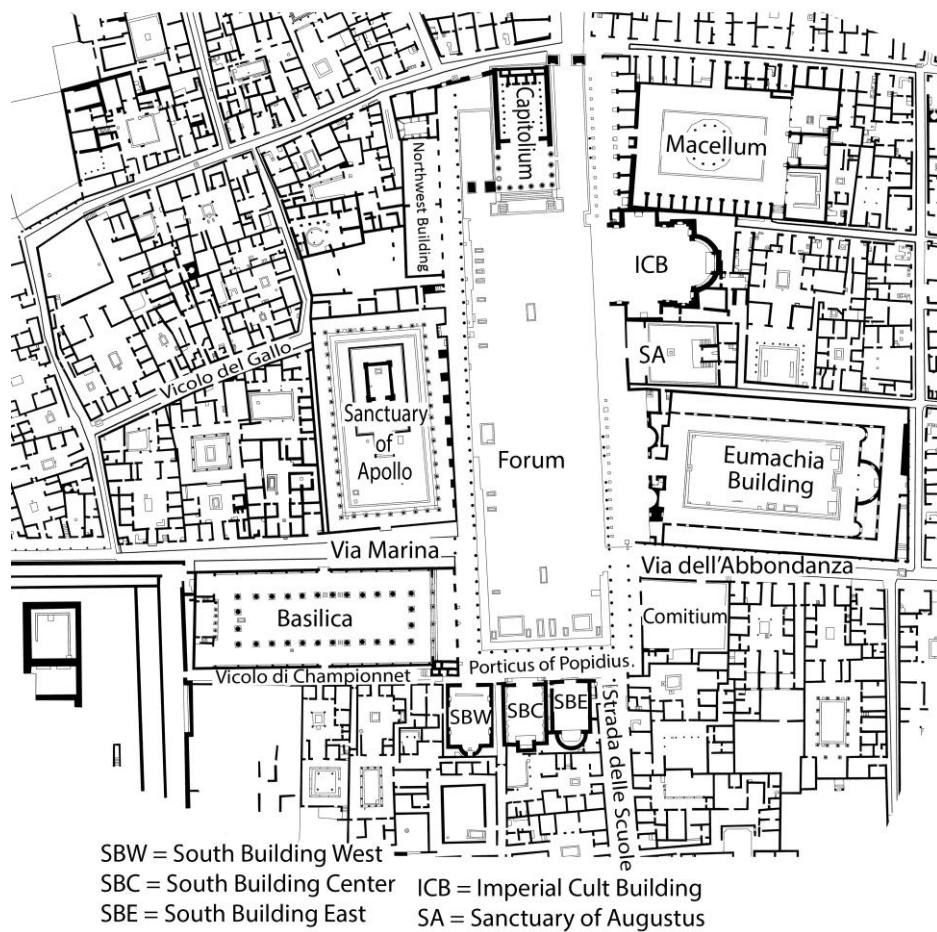


Fig. 2. Pompeii forum area with key buildings and streets labeled.

### A Precise Design Relationship

The precision of the design relationship between the pier wall and the sanctuary colonnade is noteworthy. The edges of the columns of the sanctuary colonnade align precisely with the edges of the piers. The intercolumniations of the columns are 6 Roman feet; their interaxials are 8 Roman feet; the distance between the outer edges of any pair of columns is 10 Roman feet and that dimension established the interpier distance at 10 Roman feet as well. Every other intercolumniation aligns with a pier. The length of a pier is 6 Roman feet as is each intercolumniation. To our knowledge, no previously published plan of the sanctuary accurately documents these relationships (fig. 3)<sup>4</sup>.

These precise relationships argue that the colonnade and pier wall were constructed as elements of the same project and designed by a single architect. The Roman foot module alone argues that the project should be assigned a Roman date.

If the colonnade and pier wall are, indeed, components of the same design project, then dating one dates the other. The Pompeii Forum Project is able to date each component independently. Our stratigraphic excavations date both the sanctuary colonnade and the pier wall to the Augustan period. This is invaluable because two types of evidence corroborate each other. The argument from design recognizes a single project that produced both components. The context pottery from the excavations corroborates the observation that the two components are contemporary by dating both to the Augustan period<sup>5</sup>.

The larger architectural projects to which the colonnade and pier wall belong should be kept in mind even as we discuss here the more limited issues that this article treats. One of those larger projects was, of course, a major monumentalization of the Sanctuary of Apollo itself that transformed it from a relatively humble Samnite cult place into a grand Roman sanctuary<sup>6</sup>. Another was a contemporary monumentalization of the forum that completed the Sullan colonnade scheme and added components by private individuals<sup>7</sup>. Such additions were designed as integral components of the regularizing system that the forum colonnade had established.

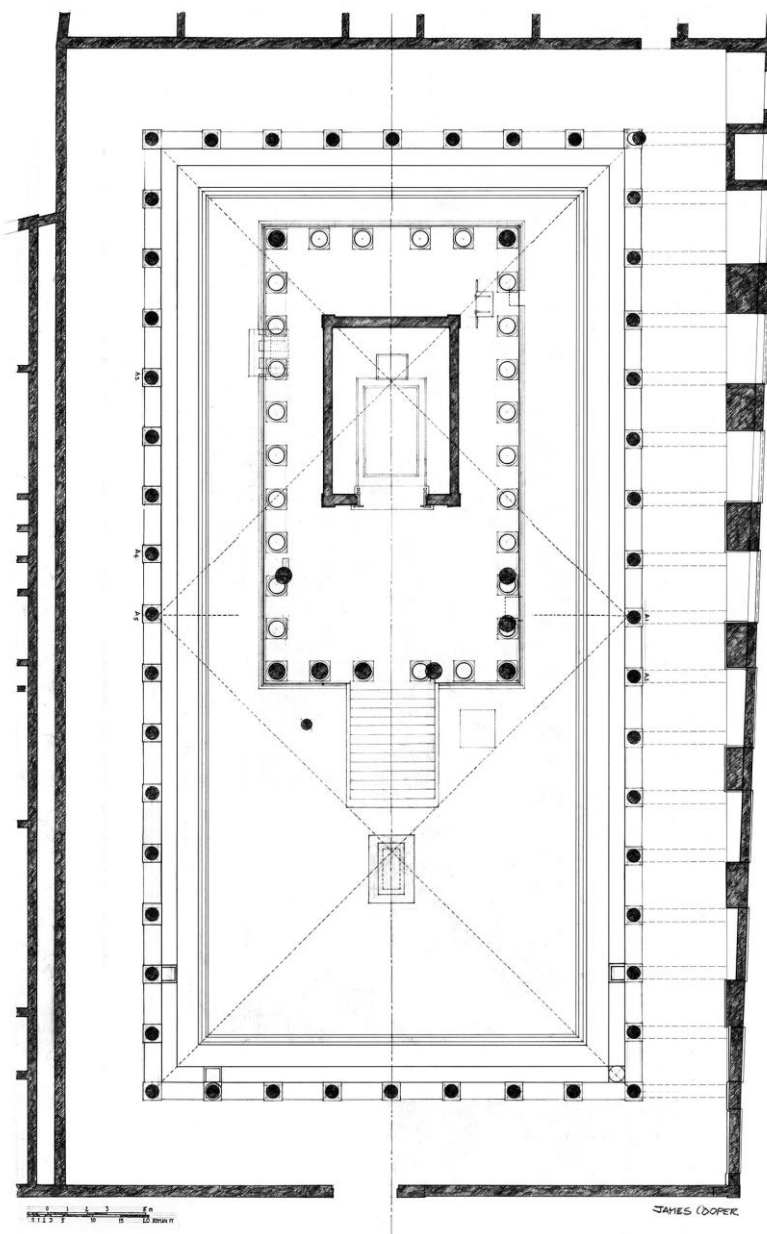


Fig. 3. Sanctuary of Apollo, Pompeii. Actual state plan. Plan by James G. Cooper.

<sup>4</sup> For example, RICHARDSON 1988: 90; *Pompeii Pitture e Mosaici*: 286; WOLF 1997: 221-355 (see p. 280).

<sup>5</sup> The dating of the colonnade to the Augustan period has already been published: DOBBINS *et al.* 1998: 739-56. In that article we posited a Sullan date for the pier wall. Based on a full analysis of the pottery by Archer Martin that date must be modified to the Augustan period. In a forthcoming publication Larry F. Ball, John J. Dobbins, and Archer Martin will present that information in detail. Not all scholars follow our dating. D'ALESSIO 2009: 15-19, with citations of earlier literature, is a relatively recent example of those who adhere to the traditional second-century-B.C. date. For a fuller discussion of the lingering trend to adhere to a second-century BC date for the monumentalizing of the forum area see BALL, DOBBINS 2013: 461-92, especially 462-4 and 487-90.

<sup>6</sup> DOBBINS *et al.* 1998 documents the efforts involved in modifying the urban plan, including adjacent houses, to achieve the desired result.

<sup>7</sup> BALL, DOBBINS 2013: 480-7.

### *The Pier Wall: Two Phases*

Differences in construction technique, materials, and western alignment that exist between the two southernmost piers of the pier wall and the rest of the piers in the series point to a two-phase construction history. The two southernmost piers are solid ashlar construction in tuff. Their western faces align with each other, but not with the piers to the north (the third pier is anomalous in construction and alignment, and is treated separately below). The southernmost pier is simultaneously the southeast corner of the Sanctuary of Apollo; its exterior corner consists of a pilaster wrapping the corner with two complete faces, one oriented south and the other east. The south face responds to the two tuff columns that mark the east end of via Marina and to a similar north-facing tuff pilaster on the northeast corner of the basilica. The two southernmost sanctuary piers belong to the tuff ensemble of the forum (basilica chalcidicum, the Porticus of Popidius and the comitium) in material, function, and date. That relationship should be clear no matter what one's opinion is on the absolute date of the tuff ensemble. For the Pompeii Forum Project that date is the Sullan Period<sup>8</sup>.

The piers to the north, however, with their slightly different alignment, grow increasingly wider as they progress north. Their significant depth meant that it was not necessary to construct them of solid tuff ashlar for stability. Instead, these piers contain rubble cores with exterior frames of tuff and Sarno limestone. This two-part scheme of the pier wall becomes clear when we recognize that the tuff project that links the Sanctuary of Apollo, basilica, and Porticus of Popidius may not have included a colonnade extending further north than the second pier of the sanctuary's pier wall (although it was undoubtedly designed to do so). This project was completed in the Augustan period when the full pier wall was constructed<sup>9</sup>.

In sum, the Augustan date for the piers suggests it clear that the Sullan Porticus of Popidius did not extend the full length of the forum's west side. At this stage of our research it appears that, it terminated at the third pier from the south. With no need for massive piers to support beams from non-existing colonnades, the piers remained unbuilt and the earlier (presumably second-century BC) temenos wall that the Pompeii Forum Project discovered in 1997 endured until the piers replaced it. The beams of the roof/gallery level of the new sanctuary colonnade bore down onto the piers and timber lintels that spanned between them as did the west colonnade of the forum that was also built at this time, or shortly after.

Within the scheme, the third pier from the south is anomalous in several ways. It is built partly of solid ashlar tuff, as the two southern piers (presumably for stability as it is thin), but it aligns neither with them nor with the piers to the north. It is of the same length as the piers to the north and its relationship to the colonnade is equally correct. It appears that the third pier was the last of the southern tuff system, and was partially salvaged and modified in its east-west and north-south dimensions to become the first in the new sequence of piers.

### *A New Phase of the Temple of Apollo*

In 2011 the authors recognized several clues revealing that the current podium of the Temple of Apollo wraps around and conceals an earlier podium now encased within the present structure. Those clues included aspects of the podium's surface and edge, and features on the podium's flanks and surface left open by Amedeo Maiuri during his excavations of the 1930s and 1940s<sup>10</sup>. Most importantly, the relationship between the tuff pilasters at the four corners of the cella and the existing columns on the podium yielded critical information. We will discuss all of the evidence in detail elsewhere, but here we present the most important information that the temple itself reveals to us about its architectural history.

The Temple of Apollo that we know today has a rich and complicated building history. It is far from being a second-century B.C. construction that required almost no change until its demise in A.D. 79<sup>11</sup>. The lower widths of the two tuff pilasters at each of the four corners of the cella are 2 Roman feet-59 cm (fig. 4). This dimension also provides the lower diameter of the columns that were originally associated with them. In contrast, the diameters of the columns on the current podium, at 72 cm (2.4 RF), are too large to be associated with the cella's original pilasters. Moreover, a reconstructed colonnade for the present temple fails to have columns align with the pilasters as they should. The current columns must belong to a later temple.

It is possible to establish the number of columns and intercolumniations of the original colonnade and podium by considering the 2-Roman-foot widths of the cella's corner pilasters and the 24-Roman-foot (8.25 m) length of the east and west cella walls between the pilasters, and then experimenting with standard intercolumniation ratios. The length of the east and west cella walls divides perfectly in this regard, producing an adjacent range of six columns and five intercolumniations of 4 Roman feet, or twice the width of the pilasters and columns. It follows that this di-

<sup>8</sup> Most recently, BALL, DOBBINS 2013: 480-6.

<sup>9</sup> BALL, DOBBINS 2013: 461-92.

<sup>10</sup> DE CARO 1986.

<sup>11</sup> Such an unlikely building history is asserted definitively by PESANDO 2006: 233. D'Alessio takes the same stance (D'ALESSIO 2009: 19).



Fig. 4. Temple of Apollo, podium and east flank of cella; from southeast.

mension for the intercolumniations also determines the distance from the faces of the cella's corner pilasters to the inside edge of the peripteral colonnade on the east, west, and north sides of the podium as well as the intercolumniations of the north and south colonnades (with the exception of the central intercolumniation of the south colonnade, which is slightly wider). As a result, and as expected, the eight faces of the cella's corner pilasters respond to, and align with, eight columns in the peripteral colonnade. The location of the northeast and northwest corner columns is located by simply projecting northward from the columns responding to the east and west faces of the pilasters, and by projecting eastward and westward from the columns responding to the north faces of the pilasters (fig. 5).

The cella appears to be an expansion of an earlier, smaller cella that dates to the second century BC. The Oscan inscription in the border surrounding the trompe l'oeil *opus sectile* cube pavement pattern in the cella floor argues for such a date<sup>12</sup>. An important issue is the date of the Roman expansion of the Samnite-period cella and the creation of a new temple. Our analysis provides no concrete evidence for a specific date within Pompeii's Roman period. The expansion of the sanctuary in the Augustan period when Marcus Holconius Rufus was *duumvir* for the third time (*CIL X, 787*) provides a context for major architectural and urbanistic changes within which the creation of a new temple would be expected<sup>13</sup>. The grandness of the new sanctuary would seem to have called for a new and grander temple too. Moreover, who was playing the role of "Augustus" in Pompeii. The opportunity to construct a temple to Apollo would not have eluded Holconius.

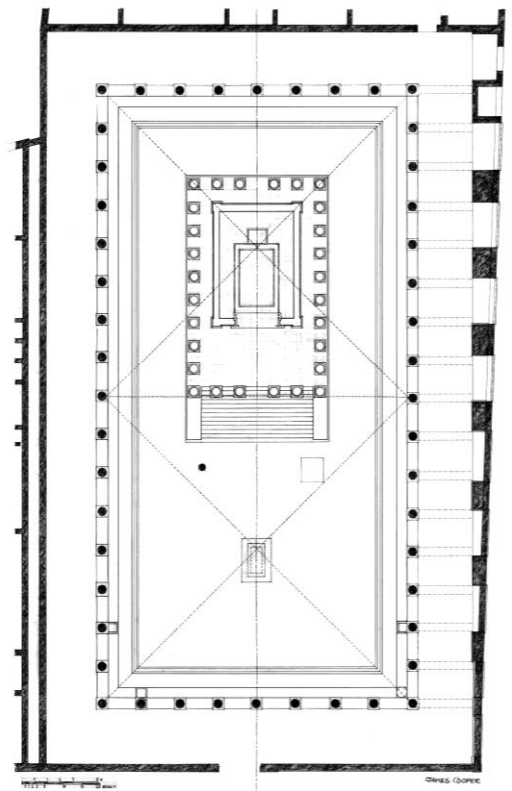


Fig. 5. Sanctuary of Apollo, Pompeii. Plan with restored earlier temple. James G. Cooper.

<sup>12</sup> VETTER1953: no. 18.

<sup>13</sup> DOBBINS *et al.* 1998.



Fig. 6. Temple of Apollo, detail of podium and east flank of cella showing white tesserae bedded on a cocciopesto pavement and pinned under stucco wall decoration; from the northeast.

Furthermore, the rectangular interior of the colonnaded court is a perfect double square whose sides are 80 Roman feet (fig. 5). The front of the reconstructed podium proper and colonnade align with the interface of the two squares, while the dimensions from the east, west, and north sides of the podium to the colonnades of the sanctuary are equal, and precisely one-half the width of the podium itself. Thus, the relationship between the layout of the Augustan colonnade and the Roman Temple of Apollo is precise and intimate. As the major transformation of the sanctuary under Marcus Holconius Rufus would have provided a most appropriate moment for a new temple, we propose an Augustan-period date for the temple itself. Maiuri's discovery of early imperial pottery, including fragments of an Italian sigillata (Arretine) plate, within the fabric of the temple's podium does not prove an Augustan date for the phase we are discussing because it is likely that his finds come from the expanded podium (no specific findspot is provided). His finds most certainly prove, however, that the podium as a whole cannot belong to the second century BC.<sup>14</sup>

In sum, the temple preserves evidence for three phases: (1) A second-century BC cella that contains an *opus sectile* pavement and a Samnite inscription; (2) a Roman (Augustan period, as we posit) expansion of the cella to which the extant corner pilasters, commensurate peripteral colonnade (now vanished) and podium (now encased in a later, expanded podium) belong; this phase is contemporary with the sanctuary colonnade and pier wall; (3) a post-Augustan temple to which belong the present expanded podium and larger columnar order (post-62 earthquake?).

We conclude with a few comments about the pavements of the podium and the exterior stucco decoration of the cella wall. It does not appear that the prominent *cocciopesto* pavement is associated with the temple that we have identified. Its relationship to the pilaster bases suggests that it is associated with a later phase of the temple. Moreover, its extension to the edge of the podium means that it was laid after the podium was expanded. Furthermore, it is not the final pavement. Bedded on top of the *cocciopesto*, and pinned under the stucco decoration of the east flank of the cella, are white tesserae (fig. 6). This mosaic appears to be the ultimate pavement of the podium as there is no evidence of a subsequent phase.

<sup>14</sup> DE CARO 1986: 119-121 quotes the Soprintendenza's *Giornale degli Scavi di Pompei* for 29 September through 30 October 1931. The relevant passages are: 19/20 October: "Inoltre nella costuzione si scoprono frammenti di fittili di età imperiale romana, tra i quali un grande piatto aretino del diam. di m. [left blank] con marca in planta pedis." And 21 October: "Si prosegue lo sterro della trincea lungo il lato ovest del podio del Tempio con scarsi rinvenimenti di materiale fittile del I. secolo a.C. all'incirca."

Interestingly, the stuccowork comes down upon the mosaic, revealing that it was installed later than the mosaic (or possibly as part of the same decorative phase) as the final decorative phase of the cella's exterior. In any case, these multiple decorations that are so evident on the podium and cella walls readily give the lie to any claim that a second-century temple remained unchanged until the eruption of Mount Vesuvius<sup>15</sup>. That model is impossible, inconsistent with the evidence at the site, and counterintuitive.

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#### BIBLIOGRAPHY

- BALL L., DOBBINS J., 2013, "Pompeii Forum Project: Current Thinking on the Pompeii Forum", in *American Journal of Archaeology* 117(3): 461-92.
- D'ALESSIO M.T., 2009, *I culti a Pompei*, Libreria dello Stato, Rome.
- DE CARO S., 1986, *Saggi nell'area del Tempio di Apollo a Pompei: Scavi stratigrafici di A. Maiuri nel 1931-32 e 1942-43*, Annali del Dipartimento di studi del mondo classico e del Mediterraneo antico dell'Istituto universitario orientale di Napoli, Sezione di archeologia e storia antica 3, Naples.
- DOBBINS J., BALL L., COOPER J., GAVEL S., HAY S., 1998, "Excavations in the Sanctuary of Apollo at Pompeii, 1997", in *American Journal of Archaeology* 102(4): 739-756.
- PESANDO F., 2006, "Il 'secolo d'oro' di Pompei. Aspetti dell'architettura pubblica e privata nel II secolo a.C.", in M. OSANNA, M. TORELLI (eds), *Sicilia ellenistica, consuetudo italica: Alle origini dell'architettura ellenistica d'Occidente*, Biblioteca di "Sicilia antiqua" 1, Rome: 227-42.
- Pompei Pitture e Mosaici*, Istituto della Enciclopedia Italiana, Rome, 1997 (Vol. VII).
- RICHARDSON L. jr., 1988, *Pompeii: An Architectural History*, Baltimore and London.
- VETTER E., 1953, *Handbuch der italischen Dialekte*, Heidelberg.
- WOLF M., 1997, "Forschungen zur Tempelarchitektur Pompejis. Der Venus-Tempel im Rahmen des pompejanischen Tempelbaus", in *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung* 115 (209): 221-355.

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<sup>15</sup> PESANDO 2006: 233.