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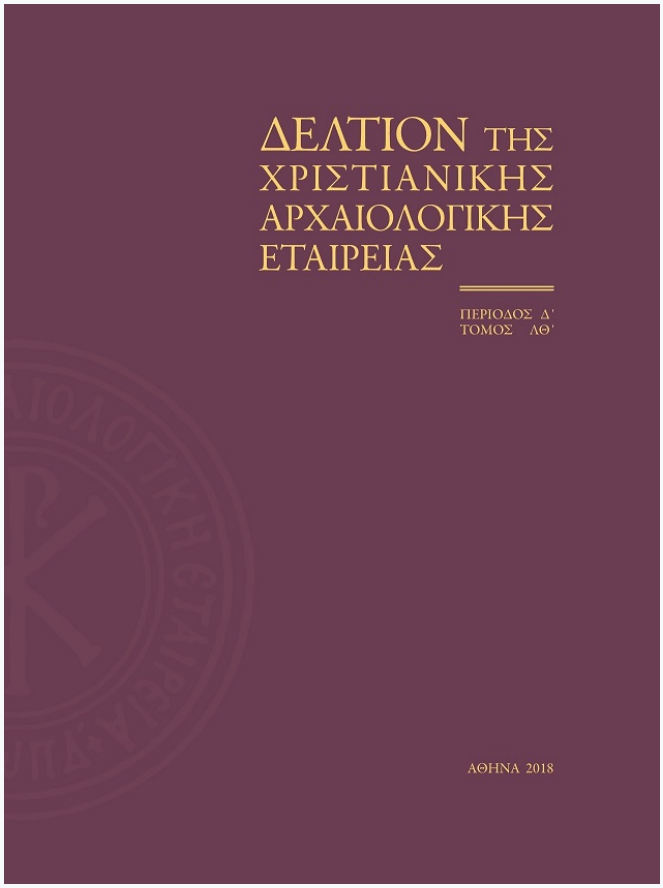

Στοιχεία αρχιτεκτονικού σχεδιασμού και οικοδομικές πρακτικές στη βασιλική του θεάτρου της Μεσσήνης

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Nikos Tsivikis

ARCHITECTURAL PLANNING AND BUILDING PRACTICES AT THE BASILICA OF THE THEATER IN MESSENE

Με αφορμή τη βασιλική του Θεάτρου της Μεσσήνης εξετάζονται στοιχεία αρχιτεκτονικού σχεδιασμού και οικοδομικές πρακτικές σε επαρχιακά μνημεία του 6ου αιώνα. Στα κιονόκρανα της βασιλικής παρατηρούμε τη χρήση χαραγμάτων τοποθέτησης για τη σωστή σειρά των κιονοκράνων στις κιονοστοιχίες, και στο δάπεδο του ιερού τεκμηριώνεται η ύπαρξη μιας αξονικής βοηθητικής χάραξης για την ορθή τοποθέτηση του λειτουργικού εξοπλισμού. Οι ενδείξεις αυτές μας δίνουν την ευκαιρία για μια περαιτέρω ανάλυση της οικοδομικής διαδικασίας μνημείων όπως η μεσσηνιακή βασιλική.

Based on the basilica of the Theater in Messene the architectural planning and building practices in provincial monuments of the sixth century is examined. In the basilica's impost capitals, the use of positioning marks for the correct setting of the colonnades is observed and on the paved floor of the sanctuary auxiliary etchings are visible for the proper setting of the liturgical furnishing. This evidence offers insight into the process of building monuments like the Messenian basilica.

Λέξεις κλειδιά

6ος αιώνας, πρωτοβυζαντινή αρχιτεκτονική, κατασκευαστικές τεχνικές, οργάνωση εργαστηρίων, αρχιτεκτονικό σχέδιο, βασιλική του Θεάτρου της Μεσσήνης, Μεσσήνη, Πελοπόννησος.

Keywords

6th century; Early Byzantine architecture; building techniques; workshop organization; architectural planning; basilica of the Theater of Messene; Messene; Peloponnese.

The study of Early Byzantine (4th-6th c. AD) architectural planning has seen major breakthroughs in the past decades, and issues of building techniques, site organization and job specialization have received intense scrutiny[1]. The work of Charalambos Bouras, who pioneered many aspects of documenting and interpreting the function of architectural planning and design in Byzantine architecture, has been of paramount importance to its study. Still, many questions about the ways that Byzantine architects and masons conceived architectural plans and then applied them remain

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Part of this paper is based on a presentation first delivered at the Workshop Masons at Work organized by Robert Ousterhout, Renata Holod and Lothar Haselberger at the University of Pennsylvania in 2012 but never published; partially because a lot has changed since then in our understanding and dating of the monument.

[1] Some of the most important studies of the recent decades are: R. Ousterhout, *Master Builders of Byzantium*, Princeton 1999. Ch. Bouras, "Master Craftsmen, and Building Activities in Byzantium", A. Laiou – Ch. Bouras (eds), *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, 2, Washington, D.C.

unanswered. Traditionally most of the discussion on architectural planning during the Early Byzantine period has been limited to major monuments in cities like Constantinople and Ravenna of the fifth and sixth centuries AD[2]. The aim of this paper is to explore some of these issues, both in terms of chronology and the gradual "disappearance" of ancient architectural building traditions after the sixth century, and in terms of the spatial distribution of monuments that are located far from the important urban centers of the Empire. These questions are closely connected with the relative scarcity of discussion in the bibliography on building processes of humbler and more provincial Byzantine architectural monuments[3].

My analysis is based on unpublished material from the excavation of the Early Byzantine town of Messene in the SW Peloponnese. The paper evaluates the dissemination of certain building techniques (fitters' marks, auxiliary lines, incisions, measurements) by the masons responsible for constructing ecclesiastical monuments in the Peloponnesian city of the 6th c. AD.

Messene was an important Hellenistic and Roman city of the Peloponnese and southern Greece in general[4], and continued to be of some significance in early Byzantine times as attested by the contemporary sources[5]. From the second half of the sixth century historical information about the site becomes literally non-existent, and we only hear about Messene again as a village or town named Vourkano in sources of the tenth-eleventh centuries[6]. This situation is generally attributed to the migration of Slavic populations into the area by the last decades of the sixth century and the loosening of imperial control in large portions of the Peloponnese[7].

By contrast, systematic excavation in Messene has been uncovering a settlement that continued its existence, even after the sources fall silent[8]. Next to the early Byzantine residential remains and the extended cemeteries, three Early Christian church buildings have

2002, 539-554. J.-P. Sodini, "Marble and Stoneworking in Byzantium", A. Laiou – Ch. Bouras (eds), *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century*, 1, Washington, D.C. 2002, 129-146. Ch. Bouras, *Τρόποι εργασίας των βυζαντινών αρχιτεκτόνων και αρχιμαστόρων*, Athens 2010. E. Zanini, "Technology and Ideas: Architects and Master-Builders in the Early Byzantine World", L. Lavan – E. Zanini – A. Sarantis (eds), *Technology in Transition: A.D. 300-650* (*Late Antique Archaeology* 4), Leiden 2007, 381-406.

[2] On Constantinopolitan monuments: A. Paribeni, "Le sigle dei marmorari e l'organizzazione del cantiere", A. G. Guidobaldi – Cl. Barsanti (eds), *Santa Sofia di Costantinopoli, l'arredo marmoreo della grande chiesa giustinianea*, Vatican 2004, 653-734. J. Bardill, "The Masons' Marks", J. Crow – J. Bardill – R. Bayliss (eds), *The Water Supply of Byzantine Constantinople*, London 2008, 181-210. On monuments in Ravenna: F. W. Deichmann, *Ravenna. Hauptstadt des Spätantiken Abendlandes*, Band II Kommentar, 2. Teil, Wiesbaden 1976, 206-230 and additionally 3. Teil, 375. A wider geographical discussion by: J.-P. Sodini, "Marques de tâcherons inédites à Istanbul et en Grèce", *Artistes, Artisans et Production Artistique au Moyen Age*, ed. X. Barral i Altet, 2, Paris 1987, 503-518.

[3] Rare are the cases of such discussions, like the one about Basilica A of Amorium: O. Karagiorgou, "An early Byzantine stonemason and his workshop: new evidence from Amorium", P. Petridis – V. Foskolou (eds), *Δασκάλα. Απόδοση τιμής στην καθηγήτρια Μαίρη Παναγιωτίδη-Κεσίσογλου*, Athens 2014, 177-199.

[4] For a recent overview of Ancient Messene and its monuments see: P. Themelis, *Ancient Messene*, Athens [2]2014. For Roman Messene see: idem, "The Economy and Society of Messenia under Roman Rule", A. D. Rizakis – C. E. Lepenioti (eds), *Roman Peloponnese III. Society, Economy and Culture in the Imperial Roman Order: Continuity and Innovation* (Meletemata 63), Athens 2010, 89-110. Idem, "Messene. From the Hellenistic to the Roman City", M. Yannopoulou – Chr. Kallini (eds), *Ἰχάδην. Τιμητικός τόμος για τη Στέλλα Δρούγου*, 2, Athens 2016, 540-556.

[5] A. Avramea, *Le Péloponnèse du IVe au VIIIe siècle: changements et persistances*, Paris 1997, 191-192. I. Anagnostakis, "Ιστορικογεωγραφικές σημειώσεις", *Σύμμεικτα* 8 (1989), 69-79. Idem, "Παράκτιοι οικισμοί της Πρωτοβυζαντινής Μεσσηνίας", *Πρωτοβυζαντινή Μεσσήνη και Ολυμπία: Αστικός και αγροτικός χώρος στη δυτική Πελοπόννησο. Πρακτικά Διεθνούς Συμποσίου (Αθήνα 29-30 Μαΐου 1998)*, eds P. Themelis – V. Konti, Athens 2002, 137-160.

[6] O. Lampsides, *Ὁ ἐκ Πόντου Ὅσιος Νίκων ὁ Μετανοεῖτε: κείμενα, σχόλια*, Athens 1982, § 62.22, p. 357-359.

[7] I. Anagnostakis – N. Poulou, "Η πρωτοβυζαντινή Μεσσήνη (5ος-7ος αιώνας) και προβλήματα της χειροποίητης κεραμικής στη Πελοπόννησο", *Σύμμεικτα* 11 (1997), 229-319. N. Tsivikis, "Considerations on some Bronze Buckles from Byzantine Messene", B. Böhlendorf-Arslan – A. Ricci (eds), *Byzantine Small Finds in Archaeological Contexts* (*Byzas* 15), Istanbul 2012, 77-80.

[8] For an overview of the archaeology of early Byzantine Messene: P. Themelis, "Υστερορωμαϊκή και Πρωτοβυζαντινή Μεσσήνη", *Πρωτοβυζαντινή Μεσσήνη και Ολυμπία*, op.cit. (n. 5), 20-58. N. Tsivikis, "Πού πάνε οι πόλεις όταν εξαφανίζονται; Ο οικισμός της πρώιμης και μέσης βυζαντινής Μεσσήνης», T. Kiousopoulou (ed.), *Οι βυζαντινές πόλεις, 8ος-15ος αι. Προοπτικές της έρευνας και νέες ερμηνευτικές προσεγγίσεις*, Rethymno 2012, 47-71.

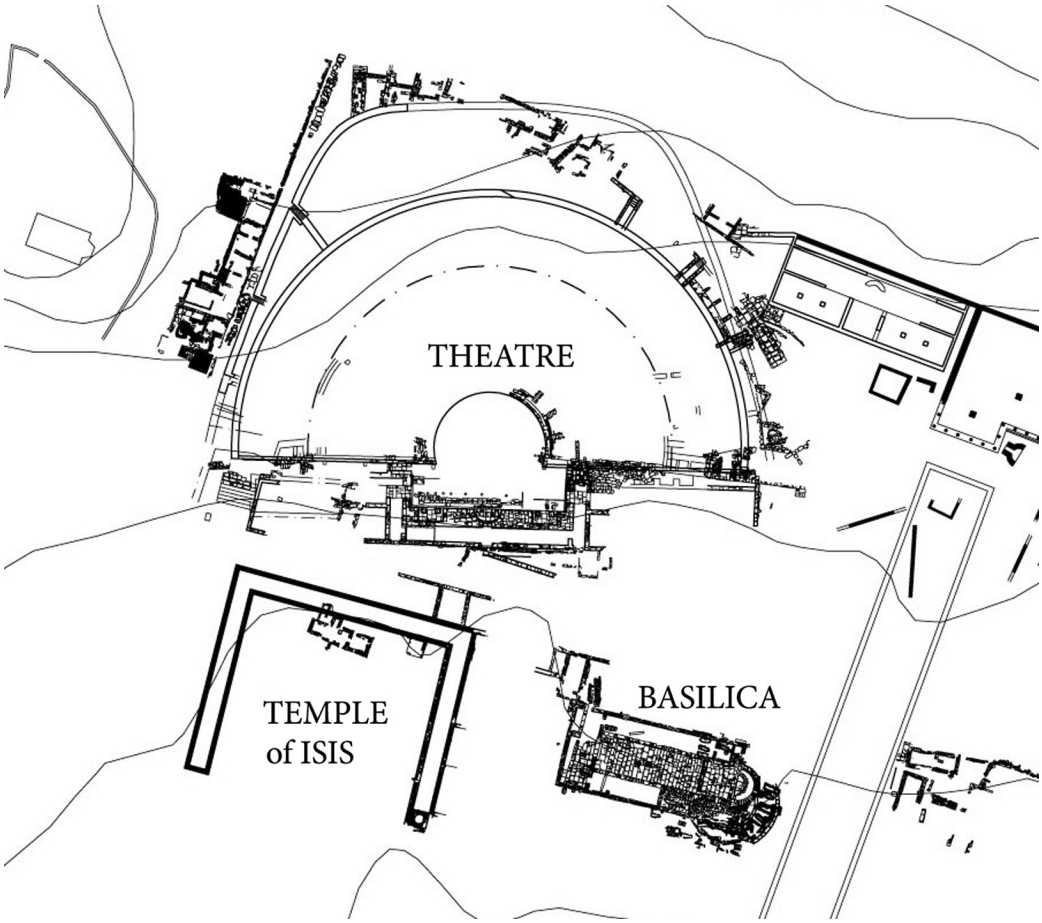

Fig. 1. Ancient Messene. Topographical plan of area around the Theater and the basilica.

been located, and one of them has been fully excavated[9]. This church, conventionally named: the basilica of the Theater, is a three-aisled basilica and was erected directly to the east of the Hellenistic and Roman theater of Messene (Fig. 1). It was founded on and partially reuses a preexisting Roman building in the same location with long open *stoas* and a *monopteros* temple in the middle[10]. The main building was timber-roofed and the superstructure was supported by just the outside walls and the two colonnades crowned by semicircular arches (Fig. 2). The plan of the building is extremely simple following the general trends of local Early Christian architecture in the southwest Peloponnese: a wide central nave, narrow side aisles, a semi-circular apse protruding at the east end, and a rectangular narthex[11] (Fig. 3).

[9] P. Themelis, "Ανασκαφή Μεσσήνης", *PraktArchEt* 1998, 106-108; *PraktArchEt* 1999, 81-86; *PraktArchEt* 2000, 82-84; *PraktArchEt* 2001, 79-82; *PraktArchEt* 2002, 34-38; *PraktArchEt* 2003, 33-34; *PraktArchEt* 2004, 47-48. V. Penna – A. Lambropoulou – I. Anagnostakis, "Γλυπτά μεταβατικών χρόνων από τη βασιλική του Θεάτρου της αρχαίας Μεσσήνης", *La sculpture byzantine VIIe-XIIe siècles. Actes du colloque international organisé par la 2e Éphorie des antiquités byzantines et l'École française d'Athènes (6-8 septembre 2000)*, eds Ch. Pennas – C. Vanderheyde, Athens 2008, 375-392. Tsivikis, op.cit. (n. 8), 66-68.

[10] P. Themelis, "Ανασκαφή Μεσσήνης", *PraktArchEt* 2009, 79-82.

[11] Among the few early Byzantine ecclesiastical monuments known from Messenia the best documented ones are: the now destroyed Ayioleos basilica near Methone (Ch. Bouras, "Επανεξέταση του λεγόμενου 'Αγιολέου' κοντά στην Μεθώνη", *Φίλια ἔπη εἰς Γ. Ε. Μυλωνᾶν*, 3, Athens 1989, 302-322), the Drakaki plot three-aisled basilica in Methone (E. Chalkia, "Παλαιοχριστιανική Μεσσηνία. Αρχαιολογικά δεδομένα", *Χριστιανική Μεσσηνία. Μνημεία και Ιστορία της Ιεράς Μητρόπολης Μεσσηνίας*, Athens 2010,

Fig. 2. Ancient Messene. Basilica of the Theater, aerial photograph.

The architectural elements of the Messenian basilica consist mostly of recycled material from pre-existing buildings. The main exception are the marble capitals from the colonnades and the liturgical furnishings. In earlier publications of sculptural material from the building and in preliminary excavation reports before the conclusion of the excavation a dating for the building in the 7th or 8th century based mainly on this architectural sculpture had been suggested[12].

The continuation of the excavation of the basilica of Messene and further research into old and new material has provided evidence that a dating of the building in the middle of the sixth century is more likely[13]. The main arguments are: I) the architectural plan of the three-aisled columnar basilica (Figs 2, 3) with the elongated proportions and a single apse at its east ending would be very difficult to be attributed to Byzantine architectural tradition after the end of the sixth

84) and the five-aisled basilica of Philiatra (D. Pallas, "Ἀνασκαφὴ εἰς Φιλιατρὰ τῆς Τριφυλλίας", *PraktArchEt* 1960, 177-194).

[12] A dating of the construction of the basilica in the 8th c. was suggested by: Penna – Lambropoulou – Anagnostakis, op.cit. (n. 9), 382-385; a dating of the basilica in the 7th c. was later suggested by: Tsivikis, op.cit. (n. 8), 68-69; while the annual excavation reports refrained from assigning a fixed date: P. Themelis, "Ανασκαφή Μεσσήνης", *PraktArchEt* 1998, 106-108; *PraktArchEt* 1999, 81-86; *PraktArchEt* 2000, 82-84; *PraktArchEt* 2001, 79-82; *PraktArchEt* 2002, 34-38; *PraktArchEt* 2003, 33-34; *PraktArchEt* 2004, 47-48.

[13] A lengthy discussion of the sum of the archaeological material from the basilica of the Theater of Messene in: N. Tsivikis, *Ο βυζαντινός οικισμός της Μεσσήνης (300-800 μ.Χ.). Μετάβαση από την Αρχαιότητα στον Μεσαίωνα*, Phd dissertation (unpublished), University of Crete, Rethymno 2016, 208-255; a dating for the basilica of the Theater of Messene in the sixth century was first suggested by: M. Kappas, «Η εκκλησιαστική αρχιτεκτονική στη Μεσσηνία, 7ος-12ος αιώνας», *Χριστιανική Μεσσηνία. Μνημεία και Ιστορία της Ιεράς Μητροπόλεως Μεσσηνίας*, Athens 2010, 147-149.

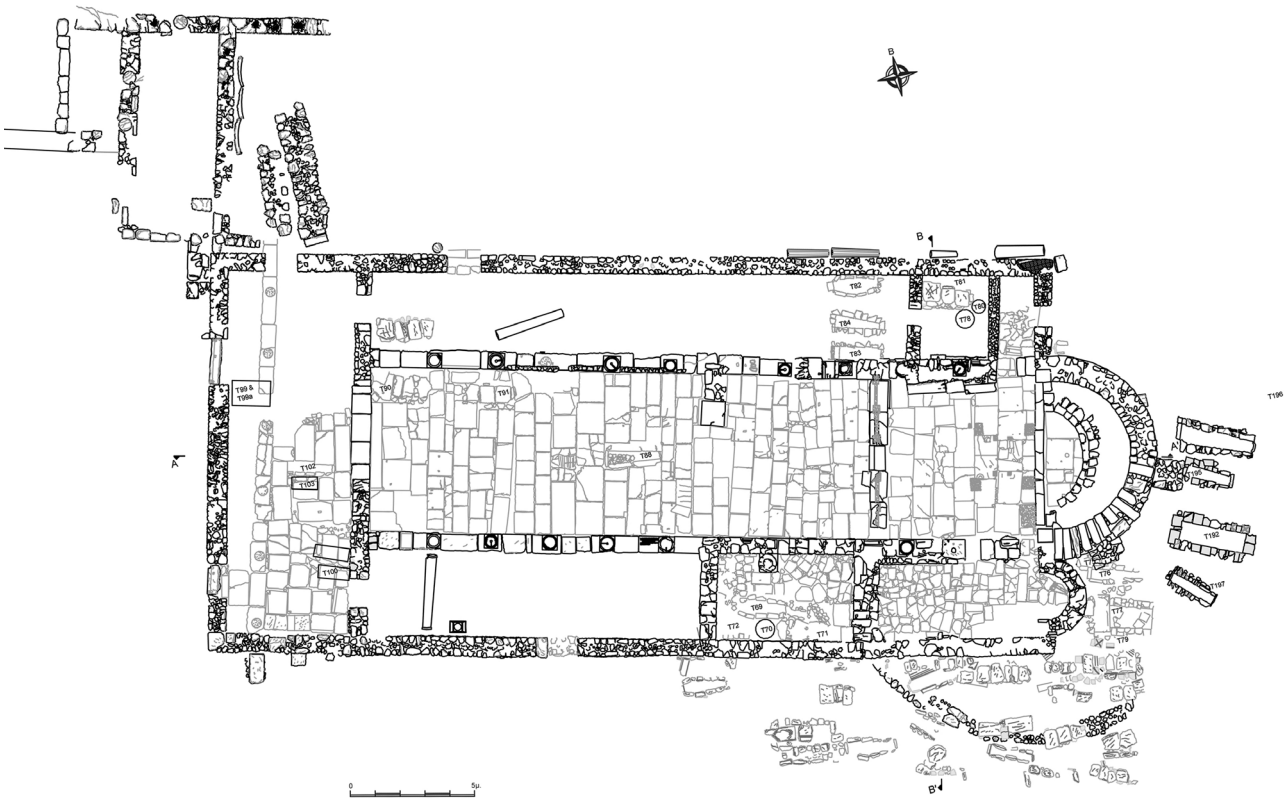

Fig. 3. Ancient Messene. Basilica of the Theater, ground plan.

century[14], II) the locally carved capitals of the basilica, although simplistic and crude, (figs. 5-7) can be smoothly incorporated into a large group of provincial and locally made architectural sculptures of the sixth century[15]. Finally the recent finding of a hoard of mid-sixth century bronze coins hidden under the earth floor of one of the north annexes further supports a dating of

[14] The three-aisled basilica of the Episkopi at Mastros, which has been dated in the 7th c. still differs significantly from earlier buildings like the Messenian basilica as it completely lacks the "Hellenistic" style colonnades with stylobates and free supports (P. L. Vocotopoulos, *Ἡ ἐκκλησιαστική ἀρχιτεκτονική εἰς τήν Δυτικήν Στερεάν Ἑλλάδα καί τήν Ἤπειρον ἀπό τοῦ τέλους τοῦ 7ου μέχρι τοῦ τέλους τοῦ 10ου αἰῶνος*, Thessaloniki [2]1992, 11-20). This is further attested in the broader study of Byzantine basilicas from the 7th c. and through the Middle Byzantine period: M. Altripp, *Die Basilika in Byzanz: Gestalt, Ausstattung und Funktion sowie das Verhältnis zur Kreuzkuppelkirche*, Berlin 2013, 8-12.

[15] There is a large group of early Byzantine architectural sculptures with provincial and rough execution originating from various sites in the Peloponnese. Characteristic are the pieces from Kyparissos in Mani that caused confusion to the excavator of the basilica who dated the building in the 6th c. and the sculpture in the 7th c.: N. Drandakis, "Σκαφικαί ἔρευναι ἐν Κυπαρίσσῳ Μάνης", *PraktArchEt* 1958, 199-219. Soon after Pallas ["Ἀνασκαφή εἰς Ἄργος", *AD* 16 (1960), Chronika, Athens 1962, 98] argued that the architectural sculpture of Kyparissos should be dated along with the construction of the Mani basilica in the 6th c. This older but still interesting broader discussion of such material in: D. Pallas, "«Ἰουστινιάνεια» γλυπτά αἰσθητικῶς ἀνεπέργαστα", *Εἰς μνήμην Παναγιώτου Α. Μιχελῆ*, Athens 1972, 420-441 (= *Συναγωγή Μελετών Βυζαντινής Αρχαιολογίας*, 2, Athens 1987-1988, 497-524.) Other Peloponnesian examples of crude 6th c. architectural sculptures include e.g. the capitals from Tegea, that are also the closest parallels to the Messenian ones [A. Orlandos, "Παλαιοχριστιανικά καί βυζαντινά μνημεῖα Τεγέας-Νυκλίου", *ABME* 12 (1973), 18-19, fig. 15, and 92-94, figs 54α-γ] or some capitals and imposts from Argos (A. Oikonomou-Laniado, *Argos paléochrétienne: contribution à l'étude du Péloponnèse byzantin*, Oxford 2003, 18, fig. 27).

the construction of the building before the middle of the sixth century[16].

Thus, the basilica of Messene, although a rather simple and modest building, poses a series of questions regarding the architectural design of a provincial small scale monument and its execution in the middle of the sixth century in a Byzantine town of the periphery[17].

Special focus should be given to the marble capitals that crowned the columns dividing the three aisles of the church. In contrast to their crude incised decoration, the impost capitals show a very interesting and precise articulation of volumes (Fig. 6). From top to bottom we observe first the impost part, properly expressed by an inverse elongated truncated pyramid, sitting on a well-defined flattened cubical volume that represents a schematic version of the ionic capital with a short cylindrical drum attached to the bottom to carry it onto the column shaft. The only decorated surface is consistently on just one of the diagonal sides of the impost. The stone-mason has paid special attention to keeping the three volumes distinct even when it would have been very easy to render them continuously or even omit the flattened cube. This is emphatically evident where the cubic capital meets the impost – the cube is made slightly larger than the impost, in order to define the separated volumes[18]. Thus, the schematic rendering of the ionic impost capital is a conscious and meaningful translation of the early Byzantine original containing in simplification all the elements of the ionic impost capital.

These capitals are actually the only elements of the colonnades carved anew specifically for their use in the basilica. Stylobates, column bases and columns are all in second use from nearby Roman and Hellenistic edifices that lay in ruins at the time of the church's construction (Fig. 4). The capitals were created locally in Messene by reusing and re-carving older marble and we can even identify the exact source of this material.

Three of the surviving capitals preserve traces of decoration from their previous use on their upper or lower sides, that was not removed later as these sides would not be visible (Fig. 5). On these surfaces, there are segments of a deeply carved inwards-curving band of fascia with foliage and lotus flowers, a typical Roman decoration in both theme and style[19]. One of the capitals carries additionally an inscription in Greek (*SEG* 51-491) on its upper non-re-worked side, next to the garland, reading:

E]ΡΓΟΝΙCḬΔΟΣ
ἔ]ργον Ἴσιδος

The inscription is written in informal large lettering (0,07 m.) with characteristic lunate sigmas typical of late Roman and early Byzantine inscriptions in Messene[20]. Themelis has dated the inscription in the late 4th c. and has interpreted the text as referring most probably to the original spot of the architectural member that was later cut down and reshaped into a capital for use in the church. This must have been a marble door-jamb located probably in a niche at the Roman *scenae frontis* of the theater of Messene hosting the statue of Isis[21].

[16] P. Themelis, "Ανασκαφή Μεσσήνης", *PraktArchEt* 2014, 93.

[17] Pottery finds suggest imports of wares until at least the 5th c. AD, albeit declining in numbers: A. Yangaki, "Late Roman Pottery from Funerary Monument 18 and the adjacent monuments of the Arcadian Gate (Ancient Messene, Peloponnese)", *LRCW 4 - Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean: Archaeology and Archaeometry, The Mediterranean: a market without frontiers*, eds N. Poulou-Papadimitriou – E. Nodarou – V. Kilikoglou, 1, Oxford 2014, 769-776.

[18] Analogous emphasis on the morphological distinction between the impost and the capital on the sides can be seen in an ionic impost capital from the Archaeological Museum of Lamia dated "in the end of the Early Christian period, or maybe even later": V. Sythiakaki-Kritisimalli, *Ο ανάγλυφος αρχιτεκτονικός διάκοσμος στη Θεσσαλία και Φθιώτιδα. Παλαιοχριστιανικά και πρώιμα μεσαιωνικά χρόνια*, Volos 2012, 245-248, cat. n. 36, pl. 17, fig. 94-96.

[19] P. Themelis, "The cult of Isis in Ancient Messene", *Biblioteca Isiaca II: IVe Colloque International sur les Études Isiaques*, ed. R. Veymiers, Liege 2011, 102, fig. 13.

[20] Compare with the letters of two 4th c. inscriptions from imperial statue bases of Messene: N. Tsivikis, "Οι τελευταίοι εθνικοί στη Μεσσήνη του 4ου αι. μ.Χ.", *Ιερά και λατρείες της αρχαίας Μεσσήνης από τα προκλασικά χρόνια έως και τη βυζαντινή εποχή. Πρακτικά Διεθνούς Συνεδρίου, 24-25 Οκτωβρίου 2014*, eds P. Themelis – M. Spathi – K. Psaroudakis), Athens 2017, 273, figs 7 and 8. More examples of late Roman and early Byzantine Messenian inscriptions in: V. Bardani, "Παλαιοχριστιανικές επιγραφές Μεσσήνης", *Πρωτοβυζαντινή Μεσσήνη*, op.cit. (n. 5), 82-98.

[21] Themelis, op.cit. (n. 27), 102, fig. 13, for the statue of Isis Pelagia, 98-102; also for the Isis niche: P. Themelis with a contribution on the masons' marks by Kl. Sidiropoulos, "The Theater at Messene: Building phases and Masons' Marks, *The Architecture of the Ancient Greek Theatre. Acts of an International Conference at the*

Fig. 4. Ancient Messene. Basilica of the Theater, view of the south colonnade.

Excavation at the theater has shown that by the fifth-sixth century a lively and organized quarry was in operation in parts of the theater with the cutting down older architectural elements for the building needs of the early Byzantine city[22]. Already since late Roman times it is known that the exploitation of 'ancient' architectural monuments for reusing their material was a common and organised process, occasionally highly regulated by imperial legislation connected to special individuals who could own or profit from the old material[23]. Roman theaters in the Greek peninsula that soon after the beginning of the fourth century started falling into disuse were among the first monuments to be dismantled for their material[24]. The theater of Messene is a good example of this process, and the architectural fragment with the name of Isis, its "quarrying" and reuse in the basilica attests to details of this process.

Danish Institute at Athens 27-30 January 2012, eds R. Frederiksen – E. R. Gebhard – A. Sokolicek, Aarhus 2015, 224-225, fig. 19.

[22] P. Themelis, *Τα θέατρα της Μεσσήνης*, Athens 2010, 10-18; for the quarry and the limekiln of the theater of Messene: Tsivikis, op.cit. (n. 8), 63-66; for a recent overview of the organization of late Roman and early Byzantine quarries: Y. Marano, "Le cave di marmo nella tarda antichità: aspetti organizzativi e produttivi", *Arqueología de la construcción IV: Las canteras en el mundo antiguo: sistemas de explotación y procesos productivos: Actas del congreso de Padova, 22-24 de noviembre de 2012,* eds J. Bonetto – S. Camporeale – A. Pizzo, Merida 2014, 413-427.

[23] Y. Marano, "Spoliazone di edifici e reimpiego di materiali da costruzione in età Romana: le fonti giuridiche", E. Pettenò – F. Rinaldi – R. Bortolin – Y. A. Marano (eds), *Memorie dal passato di Iulia Concordia: un percorso atraverso le forme del reimpiego dell' antico*, Rumpano 2011, 141-161.

[24] For Sparta: V. Di Napoli, *Teatri della Grecia romana: forma, decorazione, funzioni: la provincia d'Acaia*, Athens 2013; for Orchomenos and the use of *spolia* in the church of Skripou in: Th. Bilis – M. Magnisali, "Η επανάχρηση αρχαίων λίθων στην Παναγία της Σκριπούς. Συμβολή στον σχεδιασμό ενός βυζαντινού εργοταξίου", *37th Symposium of the Christian Archaeological Society (Athens 2017),* 83-84.

Fig. 5. Ancient Messene. Basilica of the Theater, capital Λ178.

Fig. 6. Ancient Messene. Basilica of the Theater, capital Λ134.

The practice of recycling older building material for the creation of new architectural sculptures was quite common in the early Byzantine period. Two examples from important early Byzantine architectural monuments where the same principle is employed offer a useful comparison. In the Acheiropoietos basilica of Thessaloniki built in the fifth century some of the original pilaster capitals are reworked from Roman *spolia* that retained parts of their original decoration or inscriptions on the non-visible upper side[25]. In the basilica of St. John in Ephesus among the Justinianic architectural sculptures a number of ionic impost capitals were also created out of older Roman marble elements that still bear the traces of their original decoration on the upper or rear sides[26]. In all cases we see that the initial decoration did not pose a hindrance for the reuse as long as it could be hidden inside the masonry of the new building. These pieces also provide evidence for the work of itinerant or local workshops that would be able to create the needed architectural members using local material, either in addition to imported members like in Thessaloniki or Ephesus, or working exclusively with the local reused material like in Messene.

But the information provided by the capitals of Messene extends also to the building conditions and application of architectural planning. Out of the six fully preserved capitals of the basilica of the Theater four of them have inscribed Greek numerals on their lower circular surfaces[27] (Fig. 7). These numerals were made by the sculptors and/or the masons and were connected to the production process of the capitals and the assembly process of the colonnades. These marks should be considered *positioning marks* since they are parts of an information transfer code on the handling of each member and its correct final position in the building[28].

If the capitals were identical it would not make much sense to have specially designated positions in the building. So, although the articulation of the volumes of the capitals is quite remarkable and well planned, the capitals demonstrate a peculiar differentiation in height, varying from 0.23 m. to 0.35 m. This is not an error in design or execution, rather the contrary: with this variation in height the capitals besides their obvious function of carrying the weight from the arches to the columns serve a secondary and equally important function. As the only pieces of the colonnade that were carved anew, they were utilized by the builders to harmonize the differences in height caused by the reuse of an odd collection of columns and bases.

Fig. 7. Ancient Messene. Basilica of the Theater, capital Λ128, lower side.

The numbering was extremely important, as each capital could have only one position in the triple combination of architectural elements (base-column-capital). Each component had a different height, but then they all added up to the same total height in their final positions in the colonnades. The impost capitals thus functioned as a means for the masons to establish a viable

[25] K. Raptis, "Παρατηρήσεις επί ορισμένων δομικών στοιχείων της Αχειροποιήτου", *AEMTh* 13 (1999), 226-229.

[26] E. Russo, "The Ionic Impost Capitals of the Church of Saint John in Ephesus", *25. Araştırma Sonuçları Toplantısı* 2007, 1, Ankara 2008, 223, figs 1-4.

[27] Penna – Anagnostakis – Lambropoulou, op.cit. (n. 9), 377-379, cat. no. 1, 3-5.

[28] Jonathan Bardill suggests the use of the term *positioning marks* [Bardill, op.cit. (n. 2), 182], while Andrea Paribeni has suggested as more accurate the term *fitters' marks* [Paribeni, op.cit. (n. 20), 662].

solution for the most crucial element of a timber-roofed basilica, the colonnades carrying the roof.

By focusing on these small positioning marks on the capitals we open a window into the understanding of the building conditions. The procedure reconstructed here from the initial design of the building, to the acquisition of the needed materials, and finally to the carving of the new architectural members, suggests that the whole project was overseen and executed by one group of people who transmitted information and guidelines through given measurements. The stonemason knew from the architect exactly how high a capital should be, and through positioning marks the stonemason could indicate in a fixed and clear way its correct position in the building. One can imagine the master builder, after collecting the material and halfway through the building process, handing some kind of written instructions to the stonemasons, and then the masons being literate enough to carve into the capitals they had just created, where exactly they were supposed to be placed according to the instructions.

The second characteristic connected with the implementation of precise architectural planning and also attesting to a unified building process is the evidence of incised marks and guidelines on the building's paved floor. On the floor of the bema a shallow incised tracing line was recorded extending to a total length of app. 2 m. (figs. 3 and 9). The straight line is centered on the East-West axis of the building and the central aisle. It runs west beginning from the step of the raised semicircular exedra of the apse extending along three or four flagstones up to the center of the sanctuary.

Around this axial line, perfectly centered and symmetrical to it, a number of low sockets have been carved out (Fig. 8). Four smaller ones form a narrow rectangular shape and they should be interpreted as the placements for the legs of the altar table. These are framed by a wider square formed by larger sockets for the four bases of the altar's *ciborium* supports[29]. Based on its position and its relation with the rectangular sockets the incised line should be considered as an auxiliary mark created by the masons during the creation of the building and its immovable architectural furnishing and especially the altar table and its *ciborium*, as it does not extend to the west beyond the area covered by the *ciborium*.

It is quite interesting that such a permanent and irreversible solution was implemented here. Byzantine builders used various auxiliary lines in ground plans and vertical views, usually in the form of string lines fixed onto nails called *σπαρτία*[30]. We can also imagine other less permanent media that could have been used for auxiliary lines, such as chalk or charcoal. It would have been easy also in the basilica of Messene to use a simple string cord, without having a permanent and indelible marking on the Sanctuary's pavement. However, the solution adopted with the incised line might be connected with a number of possible reasons: the training of the craftsmen and the forms of collaboration between the team members or maybe the transmission of information between two different teams of artisans, the builders and the sculptors.

Although this kind of permanent etchings on the surfaces of early Byzantine architectural monuments is not common, our example is not unique[31]. In the sixth-century church of the Holy Cross in Resafa a group of similar incisions located on the paved floor has been documented[32]. The Messene mark is more closely related to the middle axial line of the Resafa monument. But if the Syrian monument's incisions show evidence of higher complexity, as there are also curved lines that would have been used for fashioning key-stones for the arches and other dome elements, the Messene example is more akin to the simpler setting marks on the stylobates of the Stoudios Basilica in Constantinople used for the proper positioning of the columns[33]. Such setting marks

[29] A very similar arrangement has been found on the pavement slabs of the basilica of Knidus, I. C. Love, "A Preliminary Report of the Excavations at Knidos, 1969," *AJA* 74 (1970), 153, fig. 17; and more on the archaeology of stone canopies: J. Bogdanović, *The framing of sacred space: the canopy and the Byzantine church*, New York 2017, 92-108.

[30] Bouras, op.cit. (n. 1), 28.

[31] Ousterhout, op.cit. (n. 1), 64.

[32] I. Bayer, "Architekturzeichnungen auf dem Boden der Basilika", Th. Ulbert, *Resafa II. Die Basilika des Heiligen Kreuzes in Resafa-Sergiupolis*, Mainz 1986, 155-159.

[33] Th. Thieme, "Metrology and Planning in the Basilica of Johannes Stoudios", *Le dessin d'architecture dans les sociétés antiques: Actes du Colloque de Strasbourg, 26-28 janvier 1984*, ed. Th. Thieme, Leiden 1985, 291-308, fig. 4.

Fig. 8. Ancient Messene. Basilica of the Theater, area of the presbyterium.

on stylobates are commonly found in many fifth- and sixth-century monuments, like in the Hagia Sophia in Constantinople or in Basilica A in Amorium[34].

It is difficult to sufficiently explain the existence of so highly visible incised auxiliary lines on the floor of the Messenian basilica; however, whatever the explanation might be, it certainly is telling of the anxiety of the masons and the stonecutters to avoid mistakes during the execution of the building and its furnishings.

The Messenian monument stands in this way on an interesting crossroads both temporally and geographically. On the one hand, dating the basilica to approximately the middle of the 6th century places it at the meeting point of traditional Early Christian architectural forms and new transitional architectural forms that would culminate in subsequent centuries. On the other hand, Messene is in the interior of the Peloponnese, away from the main sea routes of the Empire where the commerce in architectural elements and the transfer of traditions and craftsmen was mainly conducted up to the late sixth century[35]. In this way, the solutions adopted here offer precious insight into conditions that usually pass unnoticed, but which pertained to a large part of the Byzantine Empire.

[34] C. S. Lightfoot – E. A. Ivison, "Amorium Excavations 1995: The Eighth Preliminary Report", *Anatolian Studies* 46 (1996), 96.

[35] For the magnitude of this trade: Sodini, op.cit. (n. 2), 129-146; a more localized but extensive study with more recent bibliography: Y. Marano, "The circulation of marble in the Adriatic Sea at the time of Justinian", J. Nelson – J. Herrin (eds), *Ravenna, its role in earlier medieval change and exchange*, London 2016, 111-132; for the marginal position of Messene on the main transport and communication arteries see: G. D. R. Sanders – I. K. Whitbread, "Central Places and Major Roads in the Peloponnese", *BSA* 85 (1990), 333-361.

In the Messenian basilica, many questions remain. Why are these marks and lines present and in what way do they facilitate the building's construction? Are they part of a typical method of construction, or is this a rare case? Are the marks connected with the skills of a well-trained group of masons, or rather the contrary, are they evidence of an insecure *protomastoras* (masterbuilder) and a less able labor unit? Could the emphasis on positioning marks in this simple and straightforward monument mean an extended construction period and the need for the guidelines to be actually set in stone instead of marked with another more ephemeral material? Or could it imply a gap in communication between the various groups of masons and stone masons, who needed explicit signs to guide one another? Or could this all be part of a system for recording the work; a system also corresponding to some payment at the end of the construction[36]?

The church of Messene itself and the insight it can offer us into building techniques stand as a good example of things fading away and things rising. At the same moment, it poses as an example of the highest possible achievement with the fewest available means, an outstanding moment for the local Messenian community. Almost all of its stylistic solutions come from a rich tradition of ancient forms, elements and rhythms, but, under the new circumstances prevalent in the Peloponnese and much of the Empire by the middle of the sixth century, all of them acquire a new character, closer to what will come to be called transitional or medieval in the following centuries. The same is true for the techniques: the architectural elements are all spolia, the decorated capitals become mainly functional components, the ancient technique of positioning marks is used mainly to facilitate the economizing of material and stability of the building, and the setting lines make no effort to hide themselves[37].

[36] Such a case is probably recorded in a series of documents from Egypt: A. Papaconstantinou, "La reconstruction de Saint-Philoxène à Oxyrhynchos: l'inventaire dressé par Philéas le tailleur de pierres", *Mélanges Jean-Pierre Sodini* (*TM* 15), Paris 2005, 183-192.

[37] Positioning had faded away by the end of the early Byzantine period: M. Dennert, *Mittelbyzantinische Kapitelle. Studien zu Typologie und Chronologie*, Bonn 1997, 171; Paribeni, op.cit. (n. 2), 662. In few examples like in the late ninth-century church at Dereağzı in Lycia it had been suggested that numerals on marble cornices could be positioning marks (J. Morganstern, *The byzantine church at Dereağzı and its decoration*, Tübingen 1983,131-132, fig. 23, pl. 46), to be refuted later by Dennert (op.cit) as the numerals probably belong to the early Byzantine use of the cornices. In the Islamic East positioning marks and inscribed guidelines seem to have still been in use in some Umayyad and early Abassid monuments: J. Wilkinson, *Column capitals in Al Haram al Sharif (from 138 A.D. to 1118 A.D.)*, Jerusalem 1987. In contrast, western medieval architecture preserved this technique as one among many: G. Bianchi, "I segni dei tagliatori di pietre negli edifice medievali. Spunti metodologici ed interpretativi", *Archeologia dell'Architettura* 2 (1997), 25-37; G. Coppola, *La Costruzione Nel Medioevo*, Avellino 1999, 184-185.

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Νίκος Τσιβίκης

ΣΤΟΙΧΕΙΑ ΑΡΧΙΤΕΚΤΟΝΙΚΟΥ ΣΧΕΔΙΑΣΜΟΥ ΚΑΙ ΟΙΚΟΔΟΜΙΚΕΣ ΠΡΑΚΤΙΚΕΣ ΣΤΗ ΒΑΣΙΛΙΚΗ ΤΟΥ ΘΕΑΤΡΟΥ ΤΗΣ ΜΕΣΣΗΝΗΣ

Στο άρθρο εξετάζονται ζητήματα αρχιτεκτονικού σχεδιασμού, κατασκευαστικών πρακτικών και οργάνωσης εργοταξίου στην πρωτοβυζαντινή αρχιτεκτονική, ως προς την εφαρμογή τους σε επαρχιακά και λιγότερο φιλόδοξα μνημεία.

Προκειμένου να επιτευχθεί ο στόχος αυτός, εξετάζεται ένα παλαιοχριστιανικό μνημείο εντός του πρωτοβυζαντινού οικισμού της Μεσσήνης, που έχει ανασκαφεί συστηματικά και βρίσκεται υπό αναλυτική μελέτη. Το εν λόγω μνημείο, που συμβατικά ονομάζεται «βασιλική του Θεάτρου» εξαιτίας της εγγύτητας που έχει με το ελληνιστικό και ρωμαϊκό θέατρο της Μεσσήνης, είναι μια τρίκλιτη ξυλόστεγη βασιλική με επιμήκεις αναλογίες, η οποία σώζεται στο επίπεδο του δαπέδου (Εικ. 1-3).

Τα αρχιτεκτονικά γλυπτά της μεσσηνιακής βασιλικής προέρχονται σχεδόν όλα αυτούσια από ανακύκλωση παλαιότερου υλικού των αρχαιότερων κτηρίων του οικισμού. Εξαίρεση αποτελούν τα μαρμάρινα κιονόκρανα με συμφυές επίθημα από τις κιονοστοιχίες του κεντρικού κλίτους, αλλά και ο λειτουργικός εξοπλισμός του ιερού (Εικ. 4). Τα μέλη αυτά σε παλαιότερες μελέτες έχουν χρονολογηθεί στον 7ο ή και τον 8ο αιώνα, και, κατ' αναλογίαν, ολόκληρο το κτήριο της βασιλικής είχε θεωρηθεί οικοδόμημα των μεταβατικών χρόνων. Πρόσφατα αρχαιολογικά ευρήματα και επανεξέταση του υλικού δείχνουν ότι τόσο το κτήριο όσο και η γλυπτική χρονολογούνται πιθανότατα στα μέσα του 6ου αιώνα.

Από τα αρχιτεκτονικά γλυπτά ξεχωρίζουν τα κιονόκρανα με συμφυές επίθημα που, παρά τη συνοπτικότητα της μορφής τους, αποδίδουν με πληρότητα όλα τα επιμέρους χαρακτηριστικά του προτύπου τους, του ιωνικού κιονοκράνου με επίθημα (Εικ. 6). Τα κιονόκρανα αυτά σκαλίστηκαν όλα επί τόπου και ως πρώτη ύλη χρησιμοποιήθηκαν μαρμάρινα μέλη από το παρακείμενο θέατρο, όπου μετά τον 5ο αιώνα λειτουργούσε οργανωμένο λατομείο. Ορισμένα από τα κιονόκρανα της βασιλικής σώζουν μάλιστα ίχνη διακόσμησης ή και επιγραφές από την προηγούμενη χρήση τους στο ρωμαϊκό προσκήνιο του θεάτρου (Εικ. 5).

Για το θέμα των αρχιτεκτονικών πρακτικών οφείλουμε να σταθούμε στα χαράγματα που φέρουν στη βάση τους τα περισσότερα από τα σωζόμενα κιονόκρανα. Πρόκειται για ελληνικά αριθμητικά, σημάδια τοποθέτησης δηλαδή, που δηλώνουν την ορθή θέση κάθε κιονόκρανου εντός των κιονοστοιχιών της βασιλικής. Τα χαράγματα αποκτούν έτσι εξαιρετική σημασία για το μνημείο, καθώς κάθε κιονόκρανο μπορούσε να έχει μόνο μία θέση στον τριπλό συνδυασμό των αρχιτεκτονικών στοιχείων (βάση – κίονας – κιονόκρανο) (Εικ. 4). Το κάθε στοιχείο είχε διαφορετικό ύψος, αλλά στο τέλος και τα τρία μαζί κάθε φορά αθροίζονταν στο ίδιο συνολικό ύψος στην τελική τους θέση στις κιονοστοιχίες. Τα κιονόκρανα λειτουργούσαν επομένως ως το εργαλείο ελέγχου στα χέρια των οικοδόμων, για να δημιουργήσουν μια αποτελεσματική λύση για το κρισιμότερο (και πιο ευάλωτο) στοιχείο μιας ξυλόστεγης βασιλικής, τις κιονοστοιχίες και τις τοξοστοιχίες που αυτές έφεραν.

Η υπογράμμιση της παρουσίας των μικρών αυτών σημαδιών ανοίγει ένα παράθυρο στην κατανόηση των συνθηκών κατασκευής. Η διαδικασία οικοδόμησης μπορεί να ανασυντεθεί από την αρχική σύλληψη και τον σχεδιασμό έως την εξασφάλιση των αναγκαίων πρώτων υλών και υλικών, και τέλος τη λάξευση των νέων αρχιτεκτονικών μελών, και υποδεικνύει έτσι ότι το όλο εγχείρημα βρισκόταν υπό την καθοδήγηση και εκτέλεση μιας ομάδας ανθρώπων που μοιράζονταν πληροφορίες και οδηγίες μέσα από ένα συγκεκριμένο σύστημα και δεδομένες μετρήσεις.

Ένα δεύτερο χαρακτηριστικό που συνδέεται με την εφαρμογή ακριβούς αρχιτεκτονικού σχεδιασμού και είναι δηλωτικό ενοποιημένης διαδικασίας παραγωγής στη βασιλική του Θεάτρου, εντοπίζεται στο λίθινο δάπεδο του ιερού. Στο κέντρο του υπερυψωμένου

ιερού βήματος εντοπίστηκε αβαθής ευθύγραμμη χάραξη που εκτείνεται σε τρεις τουλάχιστον συνεχόμενες πλάκες του δαπέδου και σε μήκος 2 μ. περίπου (Εικ. 8). Η χάραξη αυτή συμπίπτει απόλυτα με τον κατά μήκος άξονα του κεντρικού κλίτους και ολόκληρου του ναού. Συμμετρικά τοποθετημένες προς τον αξονικό αυτό οδηγό, ανασκάφηκαν ρηχές ορθογώνιες λαξεύσεις που είχαν κατασκευαστεί για την ένθεση των στηριγμάτων της αγίας τράπεζας και των τεσσάρων κιονίσκων κιβωρίου, που κάλυπτε την τράπεζα.

Βάσει της θέσης που κατέχει η χάραξη αυτή και της σχέσης με τις ορθογώνιες λαξεύσεις, πρέπει να ερμηνευτεί ως βοηθητική γραμμή χαραγμένη από τους τεχνίτες κατά τη δημιουργία του κτηρίου ή του μόνιμου λειτουργικού εξοπλισμού του. Είναι γνωστό ότι προκειμένου να εφαρμοστεί η προσχεδιασμένη γεωμετρία και συμμετρία στα κτήρια, την ώρα της οικοδόμησης χρησιμοποιούνταν στην κάτοψη αλλά και στις όψεις διάφορες βοηθητικές μέθοδοι, όπως τα *σπαρτία*, τα σημερινά ράμματα, ευθείες δηλαδή από σπάγκους στερεωμένους σε δύο σημεία. Και μπορούμε να υποθέσουμε ότι και άλλες, λιγότερο μόνιμες λύσεις μπορεί να εφαρμόζονταν κατά καιρούς για τις βοηθητικές αυτές γραμμές, όπως κιμωλία ή κάρβουνο. Θα μπορούσε εύκολα και στην περίπτωση της βασιλικής του Θεάτρου της Μεσσήνης να είχε χρησιμοποιηθεί ένα τέτοιο *σπαρτίο*, για να επιτευχθεί το ίδιο αποτέλεσμα, χωρίς να χρειάζεται, μάλιστα, να μείνει μόνιμο ίχνος στο πλακόστρωτο δάπεδο, όπως έγινε με τη χάραξη. Προτιμήθηκε όμως η λάξευση, τελικά, της αξονικής αυτής βοηθητικής γραμμής, για λόγους που ενδεχομένως σχετίζονται με την τεχνική κατάρτιση των μαστόρων και τη μεταξύ τους συνεργασία ή τη μετάδοση της πληροφορίας ανάμεσα σε δύο διαφορετικές ομάδες μαστόρων, των χτιστών και των μαρμαράδων.

Το μεσσηνιακό μνημείο στέκεται σε ένα σταυροδρόμι, χρονικό και γεωγραφικό. Από τη μια η χρονολόγηση της βασιλικής στα μέσα του 6ου αιώνα την τοποθετεί στο σημείο επαφής ανάμεσα στις παραδοσιακές παλαιοχριστιανικές αρχιτεκτονικές φόρμες και στις νέες μεταβατικές (μεσαιωνικές), που θα διαμορφωθούν τους επόμενους αιώνες· από την άλλη, η Μεσσήνη βρίσκεται στο εσωτερικό της Πελοποννήσου, σχετικά απομακρυσμένη από τις θαλάσσιες γραμμές της αυτοκρατορίας, όπου διακινούνταν ο μεγάλος όγκος αρχιτεκτονικών μελών μαζί με παραδόσεις και μάστορες μέχρι και τα τέλη του 6ου αιώνα. Με αυτόν τον τρόπο οι λύσεις που υιοθετήθηκαν εδώ, προσφέρουν πολύτιμη γνώση για συνθήκες που συνήθως περνούν απαρατήρητες.

Η βασιλική της Μεσσήνης στέκει ως ένα παράδειγμα του μέγιστου δυνατού αποτελέσματος με τα ελάχιστα δυνατά μέσα, ένα ιδιαίτερο επίτευγμα για την τοπική κοινότητα. Σχεδόν όλες οι καλλιτεχνικές λύσεις και επιλογές έρχονται από ένα αρχαίο ρεπερτόριο μορφών, στοιχείων και ρυθμών, αλλά μέσα στις νέες συνθήκες που έχουν διαμορφωθεί στην Πελοπόννησο και γενικότερα στην αυτοκρατορία, ήδη από τα μέσα του 6ου αιώνα, όλα αποκτούν νέο χαρακτήρα, πιο κοντά ίσως σε αυτόν που θα ονομαστεί σύντομα μεσαιωνικό. Το ίδιο ισχύει και για τις τεχνικές: τα αρχιτεκτονικά μέλη είναι *spolia* σε δεύτερη χρήση, τα διακοσμημένα κιονόκρανα γίνονται απλά δομικά στοιχεία, η αρχαία τεχνική της χρήσης *χαραγμάτων τοποθέτησης* εφαρμόζεται εδώ κυρίως για να διευκολύνει την εξοικονόμηση υλικού, τον περιορισμό των απωλειών και τη βελτίωση της στατικής επάρκειας του κτηρίου.

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