The Architecture of the 'Pantheon' in Athens¹ Recent Discoveries

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ABSTRACT

In the decade of the 1960's the remains of a large building were discovered, 65 m southeast of the Library of Hadrian in Athens. The temple-like construction with dimensions 87 m and 39 m was identified with the Pantheon built under Hadrian. Recent research in the Library of Hadrian discovered a number of architectural features that match the colossal size of the building. Column bases and drums, as well as fragments from the superstructure, mostly incorporated in second use in the Tetraconch building, allow for the reconstruction of the outer and interior orders and their association with the in situ remains. The raised panels in the ashlars of the masonry, together with the octastyle prostyle plan which was used only during Hadrian's years confirm the suggested chronology. As the cella corresponds to the 8 columns of the facade, the interior width equals 32 m, making the 'Pantheon' of Athens the broadest known cella, appropriate for the worship of all gods. The article includes stylistic comparisons with other works of the Hadrianic repertoire and views the 'Pantheon' as the Athenian response to the Pantheon in Rome.

In 1960s the remains of a large structure were excavated in *Adrianou str.*, approximately 65 meters southeast of the Library of Hadrian (**Fig. 1**). Overall dimensions of the building should be 87 m and width approximately 36-39 m The building was reconstructed by Travlos as octastyle prostyle with the porch located in the area directly east of *Mnesicleous str*. Two rows, each with 12 pillars, would have divided the interior space in three aisles. Width of wall foundations is approximately 1.70 m with a thicker construction near the south-west corner. Dontas, based on the raised panels of the ashlars, justifiably dated the structure to the Hadrian's days (AD 117-138).²

Today only the area of the corner on *86 Adrianou* and the portion on *78 Adrianou str.* are visible. The latter site is fenced, with signage, and it contains a portion of the foundation construc-

¹ I wish to thank colleague and friend Dimitris Sourlas for bringing the smallest architectural features to my attention, for the guidance and support at the site of the Library of Athens and for all the fruitful discussions, Prof. Eirini Peppa-Papaioannou for her assistance and Prof. Manolis Korres for prompting me to measure accurately the column drums and his encouragement. Last but not least, special thanks are ought to all the volunteers during the documentation works, graduate and post graduate students in the Faculty of History and Archaeology in NKUA: Dr Giorgos Doulfis, Manolis Petrakis, Michalis Barlambas, Alexia Piperi, Lina Tsatsaroni, Niki Georgakopoulou, Maria Tzelli, Anna Dalgkitsi, Dimitra Kovani and to VXF artist Dimitris Tsalkanis, for bringing to life the architecture of the Library. The assistance of the staff at the site of Hadrian's Library is deeply appreciated.

² These are quite common in buildings of Athens that were erected under Hadrian (Library, Arch, enclosure wall of the Olympieion): Δοντάς 1968, 222; 1969. Preliminary plan by I. Travlos in Δοντάς 1968, 223 drawing 1; Travlos 1971, 282 fig. 362, 439.



Fig. 1. Ground plan of the 'Pantheon' (from Travlos 1970, fig. 362).



Fig. 2. The remains of the foundations of the 'Pantheion' on 78 Adrianou str.

tion of the north wall and individual pillars with a cross shaped plan; these pillars appear to be the foundations of an interior colonnade (**Fig. 2**). All foundations are constructed with large ashlars of Piraeus limestone. The facets of the ashlars are treated with a *rusticus* masonry with raised panels, seen commonly in Hadrian's monuments in Athens (the Library, the surrounding wall of the Olympeion). The north wall of the 'Pantheon' was incorporated in the post Herulian fortification³.

Dontas identified the colossal building with $\theta \epsilon o \tilde{\iota} \tau o \tilde{\iota} \tau \tilde{\alpha} \sigma \iota i \epsilon p \dot{o} \kappa o \iota v \dot{o} \iota$, or the 'Pantheon', built under Hadrian and mentioned by Pausanias;⁴ this identification was accepted by Kokkou, Travlos, Shear and Boatright. Spawforth with Walker and, more recently, Corcella, Monaco and Nuzzo identify this large structure as a basilica, the meeting place of the Panhellenion. After Willers the large structure termed the 'Pantheon' could be a temple on a podium, but the possibilities of a large basilica or a stoa with reinforced corners cannot be ruled out. Lippolis has suggested that the remains of the 'Pantheon' belong to a Hadrianic phase of Ptolemy's gymnasium whilst Camia explores the possibility that the large Hadrianic building on the north slope of the Acropolis hosted imperial cult.⁵ The recent discovery of the north-east corner of the building (*88 Adrianou str.*) confirms the reconstructed plan by Travlos and weakens out the hypothesis for a stoa.⁶

Recently discovered features of two colossal Corinthian orders suggest the existence of a temple like building. The latter have been identified and documented in the Library of Hadrian and in the excavated property of the National and Kapodistrian University of Athens; the latter site lies 65 m east of the 'Pantheon'.⁷ These features are a base and drums from gigantic columns (**Figs. 3, 8-10**), the large acanthus fragment of a corinthian capital, a volute from a Corinthian capital, and a dentil from a large cornice (**Fig. 12**). The re-use of the column parts in the Tetraconch, which is tentatively dated to the early 5th century AD, supports our identification. The provenience of the one dentil, now stored in the Library of Hadrian and associated with the 'Pantheon' is unknown.

The extant foundation construction suggests wall thickness of about 1.70 m. In the prostasis, an anta jamb that would be slightly wider than the wall, in the common manner, would associate well with the corresponding column diameter of 1.90 m. Most probably, the walls were also constructed of Piraeus rock and were covered with revetment.

It seems improbable that the entire surface of the cella wall with a length of approximately 72 m was plain. Such large surface would be strikingly uninteresting, resulting in a bulky, boxy mass seen from all over within the city. Smaller Roman monuments in Athens were treated with pilasters (Odeion of Agrippa, Monument of Philopappos) and it is possible that such was the case in the Athenian 'Pantheon' (**Fig. 6**).

Drum AB2118 and large dentil Π A2593 are the known members that can be attributed to the outer colonnade of the 'Pantheon', with criteria size and provenience. Theoretically, drum AB2118, that was incorporated in secondary use in the Tetraconch, could have belonged to

³ Σπετσιέρη-Χωρέμη 1991, 22 fig. 3; Malacrino 2014, 756.

⁴ Paus. 1.18.9 and "ἔστιν οἱ πάντα γεγραμμένα Ἀθήνῃσιν ἐν τῷ κοινῷ τῶν θεῶν ἱερῷ" (Paus. 1.5.5). Three inscriptions from the Agora contain the phrase 'to all gods' (Travlos 1971, 439 with related bibliography).

⁵ Κόκκου 1970; Karivieri 1994, 90 with related bibliography. Spawforth and Walker 1985, 97-8; Raja 2012, 121; Corcella *et al.* 2013, 133; Willers 1990, 22-3; Lippolis 1995, 45-55; Camia 2011, 59-60; Background information in Malacrino 2014. After Martini (1985, 191) the Pantheon is identified in the great hall of Hadrian's Library on the basis of its similarities with similar halls of Imperial cult ('Kaisersäle').

⁶ Σπετσιέρη-Χωρέμη 1991, 22 fig. 3, 23; 1993, 19.

⁷ We are grateful to Prof. Eirini Peppa-Papaioannou for her support in the study of the fragment.



Fig. 3. Axonometric view of column drum AB2118. Drawing: Chrysanthos Kanellopoulos.

the Olympieion which has outer columns with shaft diameter of similar size (lower diameter of 1.91 m)⁸; however the location of the Tetraconch which lies 65 m to the NW of the 'Pantheon' makes it more likely that AB2118 originally belonged to the porch of the latter building. The incorporation of the 'Pantheon' structure in the post Herulian wall suggests that the large Roman building went out of use already in AD 267.

As demonstrated above, only one out of hundreds of cornice dentils has been identified; similarly, only one out of the 250 drums of the interior colonnades has survived. The state of preservation of the two colonnades is notoriously fragmentary. The phenomenon is not uncommon in Athens. The main orders of the Odeion of Agrippa are also in an extremely poor state of preservation.⁹

⁸ Quite strikingly, small features from the Olympieion site are recovered as far as the area of the Horologion of Andronikos. Such are the fragments of a course with a large, archaic bead and reel (height of bead is 0.10 m). These resemble strikingly the archaic features discovered in the Olympieion area; the latter were attributed by Welters (1922, 65-6) to an archaic altar. We ought to thank Lina Tsatsaroni for identifying the features.

⁹ Only two large fragments from the cornice course have been discovered, while the courses of the architrave



Fig. 4. Reconstructed foundation layout and ground plan of the 'Pantheon'. Drawing: Chrysanthos Kanellopoulos.



Fig. 5. Reconstructed elevation of the 'Pantheon' (white). With light blue, the elevation of the Olympieion and the Parthenon in red. Drawing: Chrysanthos Kanellopoulos.



Fig. 6. The 'Pantheon' as viewed from the north east. Image by Dimitris Tsalkanis.

The size of the large building assigned the 'Pantheon' is known since Travlos's plan, who reconstructed 7 equal interaxial spaces of approximately 5 m each across the width of the building. The stylobate would have been 3 m longer than the stylobate of the octastyle façade in the Pantheon of Rome.¹⁰ After the recent discoveries, it is now possible to associate the width of the building with the size of columns and proceed to a suggested plan and elevation (**Figs. 4-5**).

The unusual plan of the 'Pantheon' finds two parallels in the façade of the Pantheon in Rome and in the large octastyle prostyle temple of Serapis in Ephesos, which were also built during Hadrian's reign; the latter building has stylobate width 29 m.¹¹ Whilst the octastyle porch derives from the dipteral plan, the Serapeion and the Pantheon employ 8 columns for the porches in front of their abbreviated, compact plans. Only the 'Pantheon' of Athens has plan proportions of a true dipteral temple with 17 columns along the length. Indeed, the length of the building would accommodate 17 columns spaced on 16 interaxial spacings, each approximately 5.07-5.12 m (versus \pm 4.96 m for those spaces in the façade).¹² It would be tempting to assume that the revetted surface of the walls was treated with shallow pilasters in the place of columns along the flanks and rear (**Figs. 6-7**).

and frieze are identified in small fragments that retain the crowing moldings; the heights of the courses remain unknown (Thompson 1950, 49 fig. 5 pl. 36).

¹⁰ Wilson Jones 1989, 37.

¹¹ Keil 1926, 266-70 fig. 53; Lyttelton 1987, 46 fig. 11.

¹² Such variations are possible in the Roman temple architecture. In the temple of Bacchus at Baalbek, for example, the interaxial column spaces of the flanks are 0.28 m. longer than the corresponding spaces in the front (Wiegand 1921, fig. 2).

Appropriate to most Roman temples, the central interaxial column spacing is expected to have been longer than the rest of the openings in the porch. In the 'Pantheon', however, the known location of the pronaos column reveals the corresponding third column from the corner of the porch, and consequently, seven equal interaxial spacings across the facade. It appears that all 8 columns in the porch would have been arranged on 7 equal axial spacings of approximately 4.95 m each, very much as in Travlos' suggested plan. Equal spacings between columns would have resulted in the appearance of a Greek temple, as in the temples of Side and Euromos.¹³ A pediment with the Greek gradient of approximately 1:4 would then be more appropriate than the intense Roman pediment, and it is favored in our reconstructed elevations.

In lack of definitively known interaxial spacings the ratio stylobate width : lower diameter of column can be used to demonstrate the relative density of the portico openings. In the 'Pantheon' this ratio would be 19.5:1-20:1 whilst in the Olympieion the corresponding proportion is 41.10:1.91 m, or 21.51:1.¹⁴

It is expected that the proportions of the large portico would have conformed to the rules of Roman metropolitan taste; following the latter the overall column height should be close to 10 times the diameter of the shaft.¹⁵ In Athens however, that has a strong classical tradition, a more modest column height of 9.5 lower diameters is preferred for Corinthian columns.¹⁶

In the 'Pantheon' this would have resulted in an overall column height of ± 17.50 m. This dimension can be compared with the columns of the Olympieion. The latter have roughly the same lower diameter (1.91 m), however combined with the lowest known proportions for the Corinthian order (8.8:1), resulting in an overall column height of 16.90 m With a pediment that sloped 14 degrees from the horizontal plane, in the Greek fashion, the 'Pantheon', though not the largest temple, would have been the tallest temple in Greece. The column shafts of the Olympeion are constructed of 14 and 15 drums, with drum heights varying between 0.62 m and 1.32 m. Given that the columns of the Pantheon' would have had more slender proportions, each shaft would have been constructed of 16 to 17 drums. With a slightly steeper pediment favored in the Roman period, the overall height would have been even greater. With the above in mind the 'Pantheon' can now be identified as the second largest octastyle façade in Athens, the other three being the Odeion of Agrippa, the Parthenon and the Olympieion, categorized by size (**Fig. 5**).

The columns of the inner colonnade would be standing on the massive piers discovered in *78 Adrianou str*. These are individual supports with a cross shape plan, at foundation level, and are spaced at an axial distance of 4.45 m Plan dimensions are 2.15 m (E-W) and 1.85-1.90 m (N-S). The distance between the E-W axis of the north colonnade of the interior and the inner face

¹³ Contrary to the Roman norm, the hexastyle peripteral temples of Apollo at Side and of Zeus Lepsynos at Euromos, both of which date to Hadrian's reign, also have equal interaxial column spaces across their fronts.
14 The octastyle peripteral temple of Bacchus at Baalbek is even more densely spaced, with a corresponding

ratio of only 33.47:1.79, or 18.69:1 (Wiegand 1921, fig. 2).

¹⁵ Wilson Jones 1989, 37.

¹⁶ This proportion (9.6:1) occurs in the façade and the propylon of the Library of Hadrian (Kanellopoulos and Sourlas 2018, 428; the columns of the Odeion of Agrippa were reconstructed following this ratio 9.5:1 for the overall height and column diameter respectively (Thompson 1950, 47). The dimensions of the large columns in Hadrian's Arch remain unknown. All reconstructed elevations are based on Stuart's and Revett's suggestion with columns that have a height of 6.34 m and stand on excessively slender pedestals; the reconstructed height of the latter is 1.907 m. See suggested elevations of the Arch by Stucchi and Ward-Perkins collected in Willers 1990, 73 pl. 25. Stuart must have realized that the pedestals must have been of shorter, more cubical proportions, resulting in taller columns, when he undertook the construction of a replica of Hadrian's Arch in Staffordshire. On the arch in the gardens of Shugborough Hall at Staffordshire, see Noszlopy and Waterhouse 2005, 103-4; Bryant 2007; Marr 2007. Special thanks to Maria Tzelli for her assistance in the matter.



Fig. 7. The 'Pantheon', as seen from inside the Library of Hadrian. Image by Dimitris Tsalkanis.

of the north wall is approximately 7.85 m Column base AB2119 and drum AB2402 would have belonged in the same colonnade, with a lower diameter of the shaft 1.35 m.¹⁷ Both features were turned to ashlars of the Tetraconch (see below, Catalogue). The size of Corinthian capital fragment Δ 1715 matches the size of the same column. The column is attributed to the inner colonnade of the 'Pantheon' with the known interaxial column spacing of 4.45 m.

Fragments Π A2593, Π A2882 and Π A2883 belong to Attic column bases (**Figs. 12d, 13d-e**); these are notably taller than those bases in the Odeion of Agrippa (**Fig. 13b**). The column diameter in the latter monument is 1.09 m and the height is estimated approximately 10.30 m. The above mentioned *toroi* fragments come from unknown, so far, larger columns in Athens. It would be tempting to attribute these features to an "adyton" arrangement in the interior of the 'Pantheon', in the fashion seen in the temple of Bacchus at Heliopolis/Baalbek. Indeed, remains of walls in the west end of the cella's interior may have belonged to this *adyton* space (Figs. 1, 4). Categorized by size, the exterior columns would have had a lower diameter in the range of 1.91 m, the columns in the interior colonnades a lower diameter of approximately 1.35 m, while those columns in the adyton arrangement, a lower diameter of ±1.15 m.

¹⁷ This colonnade cannot be reconstructed in the Olympieion. All features of the interior are entirely missing due to extensive destruction and looting activities (Koppéç 1999, 29). After Tölle-Kastenbein (1994, drawings 35-6) the diameter of the columns in the lower tier of the interior colonnades would have been approximately 1.15 m. Corinthian column composed of base AB2119, drum AB2402 and, possibly, capital Δ 1715 cannot be a votive pillar. Votive columns reach an approximate lower diameter of 0.90 m. and a height of 9 m. See e.g. the Trajanic column and the one that dates to the reign of Antoninus Pius in the decumanus of Apameia (Foss 1997, 207-9) and the honorific columns in the upper agora of Sagalassos (Waelkens and Loots 2000, 298).



Fig. 8. Axonometric view of column base AB2119. Drawing: Chrysanthos Kanellopoulos.

Architrave beams and corresponding spans with a length of 5 m¹⁸ are within the capacity of Athenian workshops during the Hadrianic period; during the same period a large number of marble beams, each 5.50 m long, were quarried, transported and lifted over the intercolumniations of the dipteral Olympieion. Along with the erection of columns in the dipteral temple, 16 same size columns would have been constructed for the 'Pantheon' of Athens. In this aspect, the 'Pantheon' appears as a byproduct of the Olympieion building program under Hadrian. With the Olympieion worksite in full development it would be convenient for the quarries, carriages for transportation and cranes to be readily employed only for a smaller number of columns and entablature features of the same size for the gigantic portico of the 'Pantheon'. It cannot be ascertained whether the remains of the large octastyle temple-like structure on the North slope of the Acropolis are indeed the relics of Hadrian's 'Pantheon'. The size of columns, the raised panels in the masonry, the craftsmanship and style of acanthus $\Delta 1715$, all point to a Hadrianic date for the large building. Furthermore, the occurrence of the rare octastyle prostyle plan seen in the Pantheon of Rome¹⁹ and in the temple of Serapis in Ephesos, both of which also date to the reign of Hadrian, are all in support of Dontas' suggested chronology. The two columns behind the prostasis seem to have been borrowed from the Pantheon in Rome.

As the cella corresponds to the 8 columns of the facade, the interior width equals 32 m, making the 'Pantheon' of Athens the broadest known cella, appropriate for the worship of all gods.²⁰ The location of the large temple-like 'Pantheon', which looks squeezed between the streets in the north slope of the Acropolis and the area of the *Horologion of Andronikos*, is somewhat puzzling. Its large façade should be viewed in connection with the eastern parts of the city. A piazza of analogous dimensions must have existed before the large structure, following the Roman schemes. The building, as most temples do, faces east, but also faces the smoother landscape northeast of the Acropolis. This allows the development of a processional way leading directly to the temple from the alleged 'Hadrianoupolis' and viewed axially from the same area of eastern Athens.²¹ More importantly, the colossal Hadrianic temple, practically unseen from the part of the city west of Ceasar's and Augustus' forum and concealed behind the west elevation of the Library's facade, would be revealed and experienced from the interior of Hadrian's Library (**Fig. 7**).²²

As demostrated above, the Athenian 'Pantheon' can be understood within the frame of the Hadrianic repertoire. Quite surprisingly, the construction of a Corinthian octastyle elevation with equally spaced, same sized columns with those columns in the Olympieion seems unin-spired; this was conceived under the strong Attic tradition that leaves no room for experimentation and metropolitan tastes²³. Yet, the uninteresting, squeezed flanks and rear of the structure

¹⁸ The length (5.25 m) of the central span in the front of the Serapeion at Ephesos is close to the one found in the temple of Bacchus at Baalbek.

¹⁹ The Hadrianic Pantheon of Rome retained Agrippa's original inscription (MacDonald 1976, 12-3).

²⁰ In the colossal dipteral temple of Zeus/Jupiter in Baalbek, with a column diameter of 2.15 m, the interior width of the cella is close to 24 m, as the latter is aligned behind the six columns of the decastyle front. The same is true for the decastyle temple of Venus and Roma which has an interior cella width of 26 m (Stamper 2005, fig. 155). The pseudodipteral octastyle temple under Hadrian in Cyzicus should have had a similar cella width (DeLaine 2002, 208).

²¹ Quite common to cities in the East, Roman colonnaded streets embellish the processional way that led to the main temple of the city, in the Greek fashion. Such is the *cardo* at Jerash that leads to the great temple of Zeus and the colonnaded street at Palmyra that leads to the temple of Bel. The foundation of the Hadrianoupolis in the area of modern Zappeion has justifiably been debated by Fuchs (2016-7).

²² Lina Tsatsaroni's PhD thesis, in progress, De imagine urbana: εικόνες και απόψεις της ρωμαϊκής Αθήνας, explores the scenography in Roman Athens and related manifestations.

²³ Features encompassed in Hadrianic monuments echo local artistic traditions. The arch of Hadrian at Gerasa



Fig. 9. Column base AB2119. Photo by Giorgos Doulfis.



Fig. 10. Drum AB2118. Photo by Giorgos Doulfis.

are typical of a Roman temple. Quite possibly, the octastyle prostyle temple was introduced in Hadrian's years and only during this period, after the erection of the Pantheon in Rome. The original plan of the latter monument involved monolithic granite columns with a lower diameter of 1.90 m, to be modified and realized with smaller columns and a corresponding diameter of 1.50 m.²⁴ With a complete façade of 8 equally spaced columns and a corresponding diameter of 1.90 m the large building termed the 'Pantheon' becomes the Athenian response to the Pantheon of Rome, in line with Hadrian's Philhellenic attitudes seen in the temple of Venus and Roma. The realization of such colossal temples under Hadrian (Pantheon, temple of Venus and Roma, temple at Cyzicus, Olympieion) would introduce in Athens, too, the element of the unreal, the exceptional and the sense of the wonder.²⁵

CATALOGUE

Column base AB2119. Ashlar AB2119 of the Tetraconch is made of a large Ionic base with the Attic part and a plinth (Figs. 8-9, 13f). The overall length of the ashlar is 1.21 m and height is 0.725 m. The reconstructed diameter in the upper torus is 1.57 m. The length of the plinth would have been \pm 1.91 m. The location of a dowel hole indicates that two such dowels on each bearing surface were employed for pinning the drums together. The height (0.425 m) of the Attic part of AB2119 matches well the reconstructed lower diameter of 1.35 m in the corresponding column shaft (see below ashlar AB2402).²⁶

Column base ΠΛ2593. Fragment of an Attic base, stored at the site of the Library of Hadrian. Torus height is 0.126 m. Provenience is unknown (Fig. 12d).

Column base ΠΛ2882. This is a fragment recorded in the lapidaria of the Library of Hadrian. It preserves a torus with a height of 0.125 m (Fig. 13d). Provenience is unknown.

Column base ΠΛ2884. This is a fragment recorded in the lapidaria of the Library of Hadrian. It preserves a torus with a height of 0.129 m (Fig. 13e). Provenience is unknown.

Ionic drum AB2118. A large ashlar (AB2118) of the Tetraconch was manufactured out of a colossal Ionic column drum. The ashlar has a length of 1.293 m and a height of 0.69 m Material is Pentelic marble (Figs. 3, 10). The cutting for the insertion of a Π shaped clamp is on the left hand side thrust surface of the ashlar.²⁷ The axial distance between the Ionic flutes

is adorned with Alexandrian elements, namely the acanthuses in the lower parts of the attached column shafts and the broken pediments (Browning 1982, 108). The arch at Ephesos employs the local composite capitals and the tongues in the frieze (Fuchs 2016-7, 302-4 with related bibliography). The style and the unusually low proportions of the Corinthian columns in the upper tier of the Arch in Athens (column height : lower diameter ~9:1) are in accordance with the extremely low column proportions in the adjacent Olympieion (on the style of the capitals in the Arch, Willers 1990, 85 pl. 10). In Athens only the gate to the Hadrianic aqueduct of 'Dexameni', with its 'baroque' Syrian pediment and the inscription in Latin, underlines the personal relationship with the emperor of Rome and his duty to provide water in the city. On the latter issue, Bruun 2000, 603-4. 24 Wilson Jones 2015, 201-2.

²⁵ Aelius Aristeides, Orations 27, Panygeric in Cyzicus, 16-22, 40-1; DeLaine 2002. The octastyle pseudosipteral temple at Cyzicus has plan dimensions 46 x 90 m. with a column diameter of 2.10 m and a corresponding height of about 20-21 m (DeLaine 2002; 208).

²⁶ By analogy, the Attic base of the columns in the Odeion of Agrippa is 0.35 m tall for a lower diameter of 1.07 m (Fig. 13b; Thompson 1950, 49 figs. 3-4 pl. 36).

²⁷ Masonries in the central part of the Tetraconch are built with tightly fitted, well sized marble ashlars con-



Fig. 11. Ashlar AB2402. Photo by Anna Dalgkitsi.



Fig. 12. a. volute PA1535. Photo by Dimitra Kovani; b. dentil Π A2931. Photo by Niki Georgakopoulou; c. acanthus fragment Δ 1715. Photo by Giorgos Doulfis d. torus fragment Π A2593.



Fig. 13. Attic bases from Athens with corresponding heights and lower diameter of column shaft. A: Attic base from the façade (west) of

is 0.24(2) m. The *arrises* are severely battered. With 24 such flutes, appropriate to the Ionic or Corinthian order, the reconstructed diameter of the drum would be 1.84-1.85 m. The column shaft in this drum tapers 0.010-0.012 m over a height of 0.57 m. Feature AB 2118 must, therefore, belonged to the upper, tapering, portion of a gigantic column shaft, as due to the common *entasis* the lowermost drums would have been nearly cylindrical.²⁸ The larger lower diameter of the same shaft is estimated to approximately 1.90-1.95 m. A large, severely calcified, fragment from a drum of the same colonnade is stored at the site of Hadrian's Library; the fragment also retains 4 flute channels at an axial distance of 0.24 m between them.

Ionic drum AB2402. Ashlar AB2402 of the Tetraconch is made of an Ionic column drum with diameter 1.35 m; height of the drum is 0.65 m (Fig. 11). The rear of the ashlar preserves 6 abraded flute channels. The axial chord in each of the 24 flutes is 0.17 m.

Volute Fragment PA1535 comes from the lapidaria in the Forum of Caesar and Augustus and was brought to our attention by Dimitris Sourlas (Fig. 12a). The diameter of the extant volute part is 0.25 m and as such it matches the scale of the Pantheon.²⁹

Dentil ПЛ2931. The height of dentil is 0.19 m, the width 0.128 m with distance between dentils 0.077 m Projection is 0.10 m. Pentelic marble (Fig. 12b). Provenience is the lapidaria in the Library of Athens. The exact dimensions of the dentil features in the Olympieion remain uknown; the height of dentil ПЛ2931 is identical to the one estimated for the Olympieion, however the projection of ПЛ2931 is half the calculated dentil projection in the latter monument³⁰. The feature can reasonably be associated with the other colossal order in Athens, namely the one of the 'Pantheon'.

Corinthian acanthus Δ **1715**. Fragment Δ 1715 comes from a gigantic Corinthian capital (Fig. 13c). Provenience is unknown. The feature is stored in the 'Diogeneion' property of NKUA, that is situated in the corner of Kyrrestou and Diogenous streets, 65 meters SE of the 'Pantheon'.³¹ Width of the fragment is 0.445 m; the acanthus preserves all features of Hadrianic craftsmanship; specifically, these are the ringed voids between acanthus leaves and the deep channels³². Eight acanthuses with a reconstructed width of appr. 0.50-0.55 m each account for a capital periphery of around 4 m, or a diameter of 1.27-1.40 m.

nected together with IT shaped and recycled H shaped clamps. Most of these blocks come from reused classical, Hellenistic and Roman structures.

²⁸ Special thanks are ought to Prof. Manolis Korres who prompted me to measure the tapering in the drum and come up with conclusions with regards its location within the shaft.

²⁹ A second fragment of a Corinthian volute with similar dimensions was discovered recently incorporated in a wall in the MEAT (Museum of Greek Folk Art) compound. This one has a raised rim, found in the capitals of the Hellenistic Olympeion (Penrose 1888, table 38, reproduced in Tölle-Kastenbein 1994, drawing 17).

³⁰ Tölle-Kastenbein 1994, drawings 29-30. On the distance between dentils, Κορρές 1999, 29.

³¹ I warmly thank Prof. Eirini Peppa Papaioannou for her assistance in the study of the fragment.

³² Walker 1979; Déroche 1987. I ought to thank Giorgos Doulfis for his assistance on this matter.

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