

Madonna Pantanassa Church at Monastiraki Square (Athens) : architectural research and proposals for the revival of the “invisible” historical data

Dott. **NIKOLIA IOANNIDOU**

Architect and Architectural and Urban Planning Historian

Ph.D, IUAV (Istituto Universitario di Architettura di Venezia 1998)

MA, Università di Roma “La Sapienza”

Dipl. Arch. Eng., Aristotle University of Thessaloniki, 1975.

IOANNIS CHANDRINOS

Civil Engineer

Raymond Lemaire International Centre for Conservation,

Leuven (Belgium)

“ Advanced Studies in Restoration of Monuments and Sites”

Dipl. Engineer, University of Patras,

Abstract

Athens’s historical center consists of three zones: the oldest archaeological center around Acropolis, the Byzantine and Ottoman ones up to 1833, and the most recent part of the city, outside the classical and Roman walls.

Athens’s historical center in a permanent state of crisis. Installing a continuous monitoring system, in order to obtain at real time and any moment information for its state of conservation. Cause to continuous basements trembling, related to vibrations caused by the Metro and the Railway Monastiraki Station, but also to the history through the centuries as described above, the impression of being a living monument - entity, is evident.

This paper aims also to emphasize to the actual state and the revival of the “invisible” Monastiraki Square and of the medieval church of Panaghia Pantanassa (Assumption of the Virgin) (Fig.1,2).



Figure 1. Church of Madonna Pantanassa. Western facade, actual state

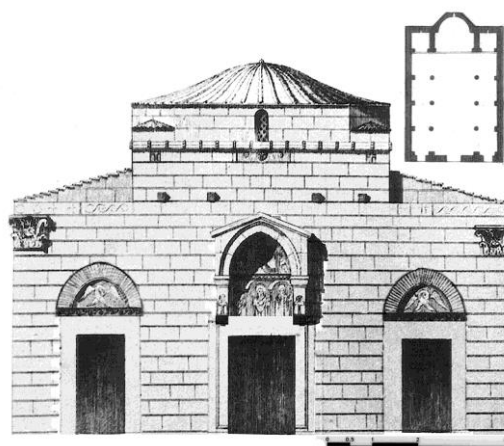


Figure 2. Madonna Pantanassa church, drawing of main western facade, design, incorporated Corinthian capitals at the angles (André-Louis Couchaud, 1842)

Acknowledgments

Based on our participation at 18th ICOMOS General Assembly and Scientific Symposium 10 – 14 November 2014, Florence, Italy, “Heritage and Landscape as Human Values”

Before proceeding to the development of the main text of our paper we wanted to express our acknowledgment towards Icomos organizing Committee.

« L'Hellénisme et Lyon, dans la première moitié du XIXème siècle «Paul Chenavard et la Palingenesis: L'art a commencé en Egypte, et par l'architecture. Orphée se rend de l'Egypte en Grèce: ca signifie que l'humanité civilisée est passée d'Egypte en Grèce. Orphée retrouve Psyché sous la forme humaine: c'est Eurudice. Comme son esprit est devenu plus net, plus précis, il représente Euridice sous la forme de la statue. Euridice meurt piquée par un serpent, et Orphée pour la pleurer invente la musique. Mais Euridice ressuscite, et cette fois, elle est incarnée dans la Vierge catholique, Marie” C'est la l'un des cheminements de la Palingenesis. La Revue du Lyonnais, 1921, Lyon»¹ (Fig. 3)



Figure 3. P. Bonirote, *Baptême selon le rite Grec dans la chapelle de la Vierge à Athènes*, huile sur toile, 1845, Musée de l'Archevêché, Nicosie.

The city of Athens, the main monuments of the Acropolis and many byzantine churches were dedicated to Goddess Athena (*Πολιούχος Αθηνά*) and it is considered that devotion to the Goddess Athena is incarnated to the Virgin.

Madonna Panaghia Pantanassa Medieval Church that stands at Monastiraki square, near its NE corner at the slopes of Acropolis was the Catholikòn of the homonymous Medieval Great Monastery dedicated to the Assumption of the Virgin. Pantanassa is an appellation of the Virgin. (*Παντάνασσα . Η βασίλισσα των πάντων, προσωνύμιο της Θεοτόκου, Ετυμ.: παντ + άνασσα*)

The Virgin in Athens was also called Madonna Panaghia Athiniotissa (*Αθηνιώτισσα*) and it's integral portrait, one of an alone woman, standing at feet, recalls Goddess's Athena integral portrait (Fig.4-6)

¹ JEAN-CLAUDE MOSSIERE, *L'Hellénisme et Lyon, dans la première moitié du XIXème siècle*, t.1, Thèse de doctorat, sous la direction de Professeur Roland Etienne, Directeur de l'Ecole Française d'Athènes, Université Lumière Lyon 2, Lyon 1994, p.77



Fig.4. One possible representation of Panaghia Athinotissa (by A.Xyngopoulos)
Fig.5. Goddess Athina.



Fig.6. Icon (Image) of Megali Madonna Panaghia-Panaghia Athinotissa (church of Megali Panaghia of the city of Thebes, perhaps made by Luc the Evangelist)

Icons of Virgin of *Madonna Panaghia Athinotissa* recall also Goddess's Athena integral portrait. Some of them are considered as made by Luc the Evangelist² as this one preserved at the church of *Megali Panaghia of the city of Thebes*³ (Figure 6)

“The view of modern Athens, if someone stands in one of the mountains that encircle the Athenian basin, is astonishing causing the observer a great amazement and many different feelings. The city fills the whole area of the basin and expands even to the nearest mountains and hills proceeding out of natural borders. Metro S.A.Group (Fig 7,8). Some of the archeological-architectural findings have been preserved at Metro stations but most of them have been destroyed.



Figure 7.
Archeological-architectural findings by the excavation for the construction of the Metro Monastiraki Station: Eridanos brick vault and various settlements dating from 8th B.C (Geometric Period) to the 19th century A.D



Figure 8. Archeological-architectural findings by the excavation for the construction of the Metro Monastiraki Station: Eridanos brick vault and various settlements dating from 8th B.C (Geometric Period) to the 19th century A.D

This paper intends to focus to the case of Monastiraki square and Madonna Panaghia Pantanassa church as examples of computed rehabilitation and restoration works, that didn't

² https://en.wikipedia.org/wiki/Luke_the_Evangelist#As_an_artist

³ <https://www.el.wikipedia.org>

respect historic sequel of the urban landscape. This paper also suggests some proposals for revival of Monastiraki square and Pantanassa church aiming at the visualizations of the of the main historical periods and at the mutual correlation of architectural and archeological findings remainings *in loco*.

1.Description of Monastiraki Square

Monastiraki Square (Fig.9-12) is located at a significant small distance from Athens's Ancient Agora of Classical Antiquity and this of Hellenistic Times at the slopes of Acropolis.

It is a popular square and is distinguished for its multiethnic character since Tzistaraki's Mosque is also to be found there (*Figure 9,10*), Giousurum open-market of Jewish is at a small distance and Avissinias square, old curiosity open-market is near.



Figure 9. Monastiraki Square from south-west. The evidence of the passage of Eridanos River from the walkable level of the square in a completely opposite direction



Figure 10. Madonna Pantanassa church, western façade



Figure 11. Hadrian's Library and the Roman Agora (Théodore Achille Louis, Vicomte du Moncel, 1843-45)

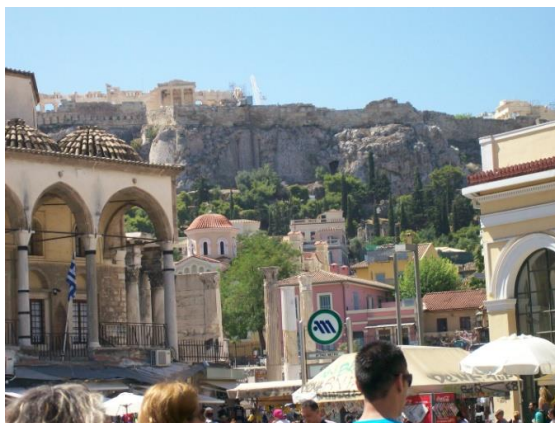


Figure 12. Monastiraki square: Tzistaraki's Mosque on the left, Athenian Agora and Acropolis of Athens in the center, Electrical Railway station on the right

In Classical Antiquity, Monastiraki was near the Holy Street that travelled from Acropolis to the Athenian Agora and then to Eleusis, through Monastiraki. In Hellenistic Times (323-86 B.C) another road (20m.wide) named Dromos pursued Holy street's roots and this one was bordered by "porticos" that accommodated private stores ⁴.

⁴ Digital Library, http://www.eie.gr/archaeologia/gr/chapter_more_4.aspx, CHARALAMBOS BOURAS



Fig 13. Architectural members from the church of Madonna Pantanassa, Hadrian's Library

Moreover Eridanos River passed from Monastiraki. It rises from the foothills of Licabettus Hill, follows its course through the city, arrives at Syndagma Square, at Mitropoleos str, then at the Athenian Agora, and through Monastiraki, arrives at the ancient Kerameikos before flowing into Ilissos river.

Eridanos like other two rivers of Athens, Kifissos and Ilissos, besides its use as a water supply was a constant factor in urban design, entertainment and local development of artisanship etc⁵.

Monastiraki place was included three times within the city boundaries and twice outside them⁶.

Was Eridanos, the protective spirit Genius Loci of Monastiraki square? It is possible that it was, because it has a constant flow during the year and was a constant factor in urbanizations of this area.

This research leaves space for a hypothesis about the existence of an Hellenistic Secular Private Building⁷ (Fig.14-15) with a permanent use in this area but with different patrons. The transformation of a classic temple into a Christian one was common in Athens. Perhaps in our case a secular private building has been transformed at last into a church (*Figure 11*).

⁵ TONIA KOUSOPOULOU, *The invisible Byzantine cities of the Hellenic estate (130'150 c)*, Editor Polis, Athens 2013, pp.41-42. (in Greek)

⁶ Op.cit.IOANNIS TRAVLOS, 1960, *Urban development...*, Editor Archaeological Society p.229-232(in Greek)

⁷ SANDRO CARANZANO (Miscellanea curator), *L'architettura ellenistica*, Università Popolare di Torino, Corso di Archeologia, Torino 2006-2007

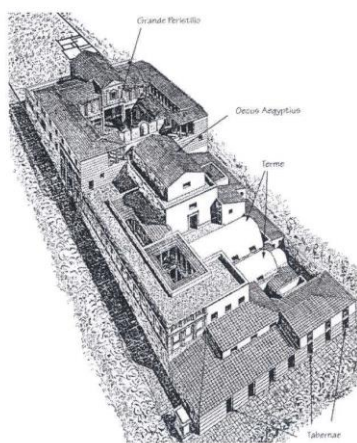


Figure 14. Tolemais (Libya). La villa delle colonne (Graphic Reconstruction). Hellenistic building, used as a residence of the successive commanders of the area (Hellenistic, Roman, Byzantine periods) SANDRO CARANZANO (Miscellanea curator), *L'architettura ellenistica, Tolemaide, Il Palazzo delle Colonne*, Università Popolare di Torino, Corso di Archeologia, Torino (2006-2007).

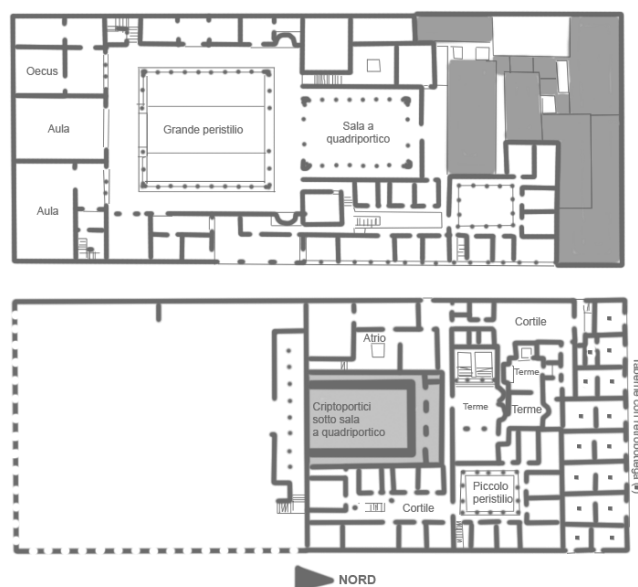


Figure 15. Palazzo delle Colonne a Tolemaide, schizzi planimetrici dell'articolazione degli ambienti ai livelli superiori (sopra) e ai livelli inferiori (sotto) [https://it.wikipedia.org/wiki/Palazzo_delle_colonne_\(Tolemaide\)](https://it.wikipedia.org/wiki/Palazzo_delle_colonne_(Tolemaide))

“Archeological excavation conducted during the construction of the Metro Monastiraki Station brought to light remains of various settlements dating from 8th B.C (Geometric Period) to the 19th century A.D.” as it is written at the information plates of the excavation’s-exposition at Monastiraki station.

“At Emperor Hadrian’s time (117-138 D.C.) the Eridanos was roofed over by a brick vault, covered with earth and converted into a sewer (Hellenistic times). Afterwards in Roman Times, a large retaining wall was built on the north side of the river to support a wide gallery – stoà or street and the building line was moved back 4,50m. The buildings have a private character consisting of workshops and storage rooms. There have been found and maintained in loco also, some ruins of a Building of the Roman Period and some ruins of an Early Christian Building (4o-5o c. A.D)”⁸. Thus Eridanos river was downgraded in Roman Times into a sewer, because of the creation in Hellenistic times, aqueducts, cisterns and Public Baths⁹ But Eridanos remained a crucial factor for many other reasons As a result many interesting architectural examples have been buried at the Basement or the Metro Station and below the lithic revetment of Monastiraki square.

The Monastery of Madonna Pantanassa occupied, from Middle Byzantine Times (800-1204) until the establishment of the Modern Greek State (1833), all of Monastiraki square and also a part of the adjacent Athenas street (Fig.16-17). The Monastery at that time had developed a remarkable artisanship and an interesting Agora place with workshops and storage rooms.

⁸ The exploration and landscaping of the area involved collaboration between the Ministry of Culture (1st Ephorate of Byzantine Antiquities) and the powerful Attiko Metro S.A”.

The date of ruins is based on numerous and architectural members, mosaic floors, wall-paintings, vases, coins, metal and bone artifacts.

⁹ op.cit. CHARALAMBOS BOURAS, <http://www.eie....gr>

But the oldest historic reference about the “Great monastery of Madonna Panaghia Pantanassa” is only of 1678 and is the “Sigillion about Kaisariani Monastery” by Patriarch Dionysius (1678). It is referred to the Great Monastery of Madonna Panaghia Pantanasa as a women’s Convent (*Figure 12*), founded during the Frankish occupation (1204-1456) and as a dependency of Kaisariani Monastery on the nearby Mount Hymettus¹⁰.



Figure 16. 1870, View from the North of Panaghia Pantanassa monastery and its courtyard.. STILLMAN WILLIAM JAMES, *The Acropolis of Athens:illustrated picturesquely and architecturally in photography*, London, F.S.Ellis



Fig 17. Struck-1911-Χατζηδάκης 1958

According to this Sigillion, in 1678, an individual named as owner or patron of the “Great monastery of Panagia Pantanassa. Nicola Boniface¹¹, gave the Monastery as a gift to the Monastery of Kaisariani on Imittos. With this citation we also refer to the interesting relation between the patron (owner)¹² and the architectural form. The donation of the Monastery happened a few years (9 years) earlier from the Venetian leader Francesco’s Morosini attack against Athens and its Acropolis (1687) in his trial to deliberate it from the Turks¹³.

We know also that any political change would likely provoke variation or turnover of the status quo of things. This means that the reasons for donation of the Monastery of Panaghia Pantanassa to Kaisariani Monastery made by Nicola Boniface perhaps are to be related to the critical political situation of that time¹⁴.

When the city of Athens became capital of the Modern Greek State (1833), Panaghia Pantanassa parochial Church was listed among the first ten parochial churches of Athens. Meanwhile it was converted to a parochial female church with a local artisanship of convent’s sisters (weaving – looms).

The church of Pantanassa has preserved some important relics (molt of them are sacred icons, prestigious ecclesiastical books printed in Venice), from other Athen’s churches demolished after the 1821 Greek War of Independence.

¹⁰ D.KABOUROGLOU, *Documents of the History of the Athenians*, Athens 1890, v.2, p.39-42 (In Greek)

¹¹ KITSIKI-PANAGOPOULOS B., *Cistercian and Mendicant Monasteries in Medieval Greece*, Chicago and London 1979

¹² N.IOANNIDOU-J.CHANDRINOS, *Patron and architectural works in middle byzantine years*, *Abstracts of 23^o Symposium of Byzantine and Post-Byzantine Archeology and Art*, Athens, May 2003, pp.43-44 (In Greek)

¹³ Digital Library http://www.eie.gr/archaeologia/gr/chapter_more_8.aspx, ΚΟΡΝΗΑΙΑ ΧΑΤΖΗΔΑΚΗΣ.

¹⁴ TONIA KOUSOPOULOU, *The invisible Byzantine cities of Hellenic estate (13o’15o c)*, editions Polis, Athens 2013, pp.41-42 (in Greek)

When the two architects Kleanthis and Schaubert, students of the famous neo-classicist Schinkel, and followers of neoclassicism, were called in 1831 from Berlin by King Otto to design the new city of Athens outside the city walls they proposed in 1833 a project¹⁵ (Figure 18) based on an austere German neoclassicism that was applied with some variations.

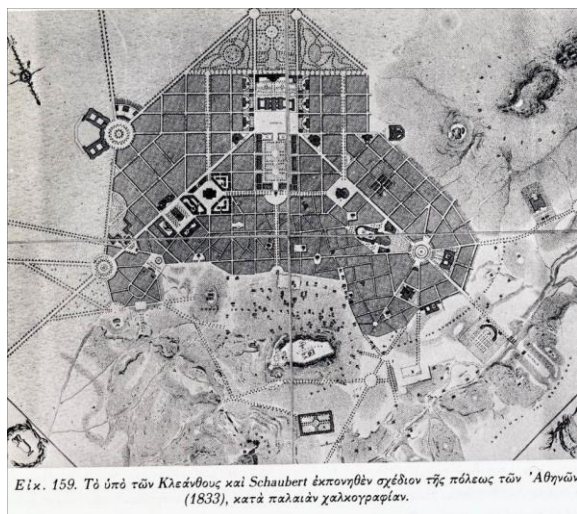


Figure 18.

In this project they surveyed the parochial church of Pantanassa in the midst of urban clusters¹⁶, dense but extensively damaged during the Independence War that led to the founding of the modern Greek State. The two architects upon completing the proposed city plan for Athens, the new capital of Greece, designed the two most important remedial streets of Byzantine and Ottoman citadella of Plaka, Ermou and Aioulou str. to intersect at the site of Pantanassa. (Fig.18)

In this way the most important historical square of Athens lost its historical, cultural and natural environment, sloping topography included¹⁷

At the top part area of the square (close to Agora), during Ottoman Empire and wars, there were located the Turkish artillery barracks. In 1759 besides Pantanassa church, it was built the “Tzistaraki’s Mosque” (who was the Ottoman’s governor “voevodas” of Athens), transformed today into a museum.

Monastiraki square received its radical transformation of modern era at the end of 19th c (1895) with the construction of Monastiraki station of the Electrical Railway in 1895. That demanded the expropriation and abusive acts against church’s properties courtyard and environs¹⁸ In recent years (from 1990 on) Monastiraki became the main connection between the new Metro subway with the Electrical Railway and demanded extensive subterranean excavation near the church

Moreover the archeological sites of Ancient Agora, Hadrian’s Library and the Roman Agora have expanded towards the square



Figure 19. Monastiraki Square from southwest. The evidence of the passage of Eridanos River from the walkable level of the square in a completely opposite direction

¹⁵ op.cit.. IOANNIS TRAVLOS, 1960, *Urban development*....., p.244

¹⁶ DELINIKOLAS NIKOS-MILTADOU-FEZANS A., TSOFOPOULOU-GHINI H., The Adventures of the Pantanassa church in Athens through the centuries, International Congress, “*Conservation in Changing Societies – Heritage and development*”, organized by Raymond Lemaire International Centre for Conservation, Leuven, May 2006, p.2

¹⁷ T.KALANTZOPOULOU, *Medieval churches of Athens according to Paul Durand preserved drawings*, Editor, Greek Literary and historical Archive, Athens, 2002

¹⁸ STILLMAN, WILLIAM JAMES, *The Acropolis of Athens:illustrated picturesquely and architecturally in photography*, London, F.S.Ellis, 1870



Figure 20. 1895, Pantanassa, during the construction of Monastiraki station of the Electrical Railway



Figure 21. Pantanassa, 1895

2. Church of Madonna Panaghia Pantanassa: Actual state-excavations and restoration works (2004-2006)

The actual state of the church is the result of the 2004-2006 restoration executed by the competent 1st Euphoria of Byzantine Antiquities in collaboration with Direction of Restoration of Byzantine and Post-Byzantine monuments.

The Church of Madonna Panaghia Pantanassa dedicated to the Assumption of the Virgin, is preserved in two main structures, the one visible and the other invisible

The visible church, (the one in the square). According to historians and Athens scholars (Kabourogou¹⁹, Chatzidakis²⁰) the church dedicated to the Virgin was built in the end of 8th-9th c. D.C. Meanwhile other scholars date the church in middle Byzantine times (800 or 997-1204)²¹ or sustain another hypothesis about the dating and the origins of that church.



Fig.22. Successive transformations of Monastiraki square. Down on the left the left 1958, Down on the right 1983.

¹⁹ D.KABOUROGLOU, *Documents of the History of the Athenians*, Athens 1890, v.2, p.39-42. (in Greek)

²⁰ M.CHATZIDAKIS, 1958, *Byzantine Athens*, Atene 1958 (in Greek)

²¹ CHARALAMBOS BOURAS, 2001, *Byzantine and Post byzantine Architecture in Greece*, Athens, Editor Melissa, p.256 (997-1204) (in Greek); op.ci.COUCHAUD ANDRE-LOUIS, 1910, *Choix d'églises*, a Paris Lenoir, 1842, p.14, pl. IV, ...1910

Panaghia Pantanassa church is a three aisled vaulted basilica with the central aisle raised (Figure 23a-23d). Some support shelves of a portico along the west façade are preserved until now, and they were noticed also by A-L Couchau in 1842²²

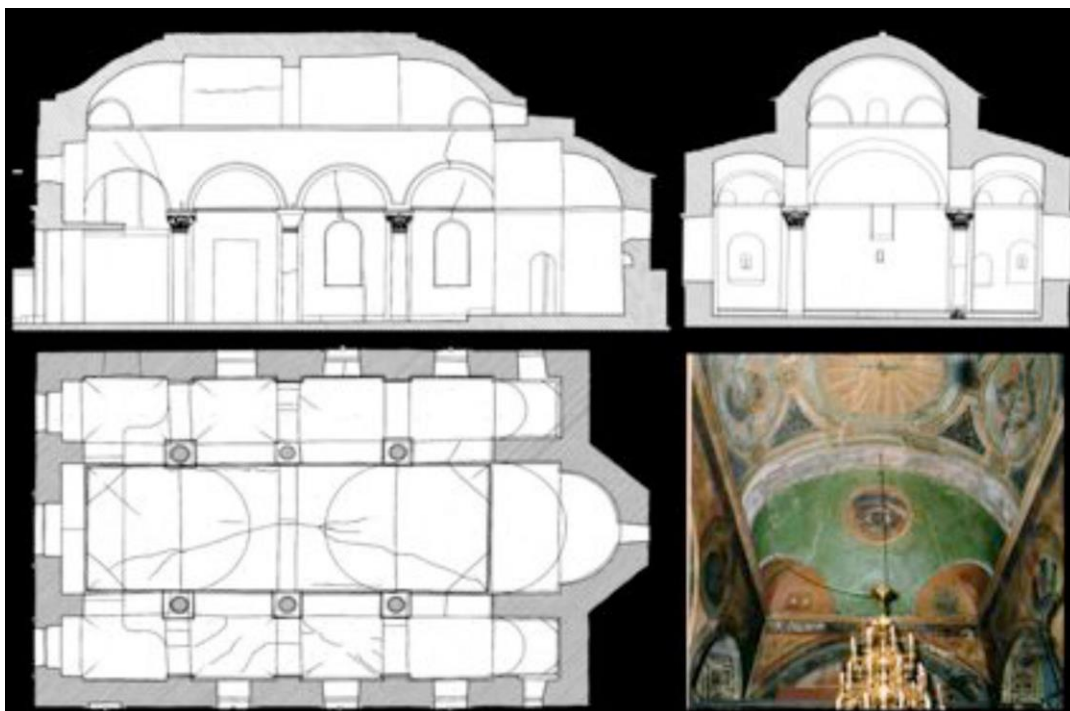


Figure 23a, 23β,23c,23d (Photos taken from N.DELINIKOLAS, Restoration of the church of Madonna Pantanassa, contrast of principles), up on the left, longitudinal section, up on the right transversal section, down on the left, groundplan,down on the right some frescoes decorations from the interior of the church

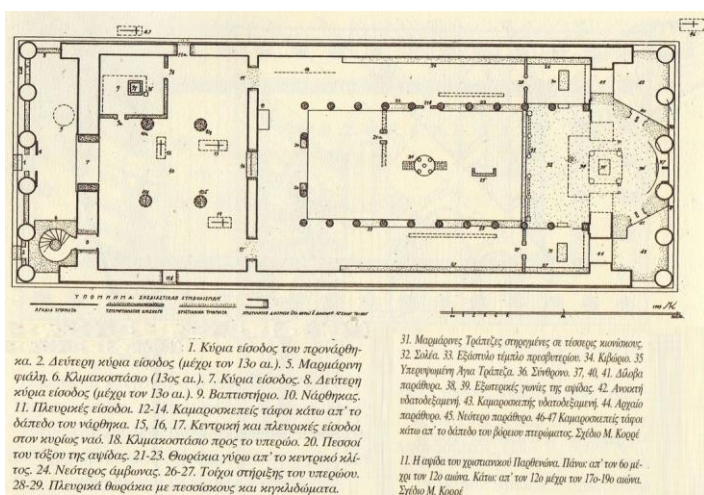


Fig.23e Parthenon, transformed in Panaghia Athinotissa church (by M.Korres)

²² op.cit.COUCHAUD ANDRE-LOUIS, 1910, *Choix d'églises...*p.14, a Paris Lenoir, 1842, p.14, pl. IV, ...1910



Figure 24. Church of Panaghia Pantanassa. Western facade. The tripartite structuring of the main façade, The arched shrine above the main entrance and the spoglia incorporated into the masonry, is a result of restoration



Fig.25. Rebuilding the main entrance (Photos taken from N.DELINIKOLAS, Restoration of the church of Madonna Pantanassa, contrast of principles)



Figure 26. (Photos taken from N.DELINIKOLAS, Restoration of the church of Madonna Pantanassa, contrast of principles) Revealed graves, of the invisible earlier church below the pavement of the visible church, during the restoration and excavation works of 2004-2006.



Figure 27. Church Panaghia Pantanassa. Revealed church below the pavement of the visible church during the restoration and excavation works of 2004-2006. Parts of frescoes dated in Middle Byzantine Times (800-1204 A.D)

Within the architectural design of the church we notice also: the tripartite structuring of the main façade, of the lateral facades and of the interior (*Figure 23a-d, 24*). We notice also symmetry and harmony ²³ of the architectural and structural composition of the church regarding the two axis NS and EW.

Above the main entrance and at the vertical axis of the western facade was to be found, in a historical period, an arched shrine with the Virgin (this one preserved now is product of restoration works). Beneath it was a very interesting decorative circular motive made up by bricks recalling churches of Catholic rite.



Fig.28. Main western façade during 2004-2006 restoration works (Greek Ministry of Culture)

During the 1911 restoration works, many incorporated spolia were rebuilt at significant positions of the facades of the church p.e. A piece of sculptured marble was used as an architrave of the main entrance. Corinthian plate capitals are built at the upper part of the 4 angles of the basilica. (Fig.29)



²³ op.cit.R.WITTKOVER, *Principi architettonici...*, Torino, 1964, p.110



Fig.29. In 1911, during some restoration works they have moved from the church some spolia in marble, from their position in origin. Then they rebuilt them at other positions (Photos taken from N.DELINIKOLAS, Restoration of the church of Madonna Pantanassa, contrast of principles)

The architectural vocabulary and the “sintassis” of the main western façade recalls a classic and even a Hellenistic temple or palace, or some even early byzantine church of 6th c, a hypothesis discussed among many scholars²⁴. The exterior reflects in some way the interior’s architecture. The central vaulting is projected to the exterior of the church, but the side aisles are covered with simple wooden roofs. This Byzantine Icon of 6th, (Fig.31) Romanos Melodos a n Byzantine Saint is represented on the Nativity as a singer (that was among the first composers of Byzantine Songs and kanons (inventor of Kontakion) and legend credits him with the *oktōēchos* classification though the system is documented a century earlier in Syria. One can see that Madonna Pantanassa church presents some similarities with this one in the background of the Image

Gertrude Margaret Lowthian Bell (1868–1926), traveller, archaeologist, and diplomatist, has sustained in 1910, the similarity of Panaghia Pantanassa with Middle East Palaces of Hellenistic Times²⁵.

²⁴ BELL, GERTRUDE MARGARET LOWTHIAN, (1868–1926), traveller, archaeologist, and diplomatist, *Churches and Monasteries of the Tūr 'Abdīn and Neighboring Districts*, Winter’s, Heidelberg, 1913

DEICHMANN F., *Fruhchristliche kirchen in antiken Heiligtumern*, JdI, LIV 1939; MILLET GABRIEL, *L'école grecque dans l'architecture byzantine*, Preface Andre Grabar, Paris, Editeur Ernest Leroux, 1916, Variorum Reprints, London 1974, σελ.20, υποσ.3, p.33, p.45

²⁵ BELL, GERTRUDE MARGARET LOWTHIAN, *Journ. Hellenistic Studies*, t.XXX(1910), p.79, fig.11; http://gertrudebell.ncl.ac.uk/photos_in_album.php?album_id=14&start=20

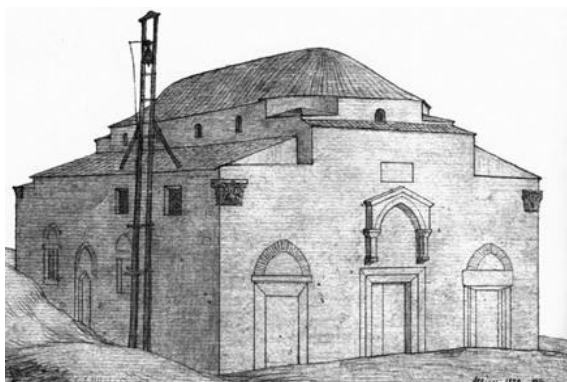


Fig.30. Western façade by Couchaud, 1842



Figure 31. Byzantine Icon, representing the Byzantine Syrian Saint of 6th c Romanos the Melodist²⁶ on the nativity

As for Corinthian capitals, one novelty of Hellenistic architecture was the use of them specially at temples's perimetric porticos. But since Pantanassa's capitals are plate perhaps their origins are to be found elsewhere. Some other spolia, architectural members curved in white marble belonging to Pantanassa, were found in the nearby Agorà of Classical Times. They have been removed from their original position at the church and transferred there during the 1911 restoration works executed by the Municipality of Athens. (Figure)The interior contro-facades are more complex, with pilasters and blind arches.

The side facades are decorated by (three) simple openings covered by pointed (or inflected) arches, framed by white marble, that can be attributed to Frankish or Islamic architecture.

As for the interior: the wide central aisle is covered by a barrel vault which ends towards the east and west taking the form of quarter's spherical vaults²⁷. Similar vaults appear also in the vaulting of Prothesis and the Catholikon. This uncommon vaulting arrangement characterizes a particular type of basilica surviving in the broader region of Athens 1982) and also in Crete and in Mesopotamia (now Turkey)²⁸.

The dimensions of the church measured at A-L Couchau survey of 1842 (before radical transformations) were: for the western main facade: 10,70m width, 5,2 m. height of the main structure, 7,30 m. height up to upper part of western façade, 8,00 m to the upper part of domes and the length of the church was 16,00 m.

From the dimensions and the structuring of the church we conclude that there have been used harmonic dimensions as following: harmonic dimensions for total and partial lengths-widths-heights. The dimensions of the temple are multiples of number 3, or the dimensions of length/ width/ height of the temple are related between each other by the ratios

²⁶ <https://www.britannica.com/biography/Romanos-Melodos>, Romanos Melodos (fl. early 6th century) is revered as a singer and as the inventor of the kontakion. John of Damascus (c. 645–749) composed *kanōns*, and legend credits him with the *oktōēchos* classification, though the system is documented a century earlier in Syria.

²⁷ op.cit.AUGUSTE CHOISY, ingénieur en chef des ponts et chaussées, *L'art de bâtir chez les byzantins*, Paris, Librairie de la Société Anonyme de Publications périodiques, 1883, σ.180

²⁸ STRYGOWSKI, JOSEF, VON, Amida (Mesopotamia), 1910, p.180, Sous les bas-côtés se trouvent les voutes d'arêtes, ainsi que dans quelques églises crétoises; op.cit.MILLET GABRIEL, *L'école grecque dans l'architecture byzantine*, Préface Andre Grabar, Paris, Editeur Ernest Leroux, 1916, Variorum Reprints, London 1974, σελ.45; op.cit.COUCHAUD ANDRE, *Choix d'églises...*, à Paris Lenoir, 1842, p.14, pl. IV; BELL GERTRUDE, Journ. Hell. Studies, t.XXX(1910), p.79, fig.11

1:2, 2:3, 3:4, 8:9, corresponding to the difference in length of sound wave²⁹ These ratios according Rudolph Wittkover and other scholars³⁰ that were based initially on Pithagora and Platon³¹ theories mean the implementation of music tones in Geometry

The church suffered severe damage by the 1999 earthquake and by the Metro S.A. tunneling and station construction. The restoration of the church was then decided by the Archdiocese of Greece, Attiko Metro S.A.Group and the competent for this geographic area 1st Euphoria of Byzantine Antiquities.

2. The invisible church

This one has been revealed below the pavement of the visible church, during the restoration and excavation works of 2004-2006.

“The excavations have revealed some parts of a preexisting church *in loco* consisting of the remain of some central pillars and some walls. It is possible that these rests were parts of a small basilica or of a small quincunx (cruciform inscribed church). Until now the historical and *in situ* research over that church has not arrived at any further conclusions about that church. That church had its central axis towards NS and towards EW differentiated regarding the axis of two main historical phases of the posterior churches at the same place³². As for our results: the differentiation of the central axis of the church leave space for ypothesis for a secular building or a religious one of another rite (catholic, Islamic).

There have been found many important archeological findings including parts of frescoes (*Figure 27*) that were dated in Middle Byzantine Times (800-1204 A.D) and some vaulted tombs. After the necessary restoration works³³ the revealed by the excavations church has been decided to remain inoperative, by the competent authorities of the Greek Ministry of Culture, claiming structural and functional reasons. In this way the revealed church was buried. A certain local council of priests submitted a request to the Superior Archaeological Council for the use of the disclosed temple, which was finally rejected.

3. Recent rehabilitation works of Monastiraki square

The unification plan for the archeological sites of Athens (1992-2004) inspired ad Kleanthis- Schaubert project of 1833 but with a chronological distance of 160 years, considers the square to be one of the three main entrances to the historical “citadella” of Plaka and the Acropolis of Athens. A national architectural competition decided for the rehabilitation project and for both the architectural and landscape design of the square (*Figure 8*)

According to the winner project³⁴ of a National Competition minimal pavements consisting of small colored stone blocks³⁵ and pedestrianization of the square, were executed.

²⁹ op.cit.R.WITTKOVER, *Principi architettonici...*, Torino, 1964, p.103; NIKOLIA IOANNIDOU-IOANNIS CHANDRINOS, *Research for an architectural and reinforcement design upon the Byzantine Church of Taxiarcha at Mesarià of Andros Island (dated 1158), Abstracts of 25^o Symposium of Byzantine and Post-Byzantine Archeology and Art, Athens, May 2005, pp.43-44 (in Greek)*

³⁰ BOEZIO, *De Musica*, Edited in Venice, 1491-1492

³¹ FRANCESCO FRONTEROTTA, *Timeo*, Milano 2003, p.178, 190, 214, 218

³² All the material regarding this excavation is not yet published but small parts. We owe these information at the architect NIKOLAOS DELINIKOLAS working at that time at the competent and responsible 1st Euphoria of Byzantine Antiquities

³³ IOANNIS CHANDRINOS, one of the authors of this paper, was working at that time at the Directorate Restoration of Byzantine Monuments Civil Engineer and had participated in the restoration project of the revealed church (2004-2006)

³⁴ EAXA, Unification plan for the archaeological sites of Athens

4. Proposals of revival of Monastiraki square and of Panaghia Pantanassa church

i. Some critical points over recent rehabilitation works (2011) of Monastiraki square

The Restoration works of the church and the rehabilitation of Monastiraki square were completed in 2011 at the expense of historical and natural environment for several reasons that we'll attempt to clarify. The whole project as applied results to be contrasting with any sense of ecological sustainability and historical sequel As for ecological sustainability : **i.**The kind of pavement used with small stone blocks like basalt was in use in many states of Western Europe, but it is not adapted in Greece because of its characteristics of great thermal conductivity. **ii.** Lack of any sense of green or plants **iii.** Lack of some water supply at least as a fountain. As for historical sequel: according to some rules of Restoration³⁶ and Museology of open space architecture and Art, a project of the rehabilitation works has to rievocate all the historical evidence and to make it visible.

i.The actual Pantanassa church (*Figure 32*) and any preexisting construction in the area

ii. The significant passage of Eridanos River in an appropriate way. Eridanos river was also responsible for the water supply and the urbanization of the most recent part of the city of Athens that one created after the Independence War of 1821 against the Turks. Among all it was responsible for the water supply of King's Otto Palace (nowadays Greek Parliament) at the higher part of Syntagma Square, of the adjacent National Garden (former Royal Garden) and also of Monastiraki Square. **iii.** the multiethnic and multi ritual character of that zone.



Fig.32. May 2009. Monastiraki square. Church of Madonna Pantanassa on the left SW, when the restoration works Were concluded

³⁵ LORENZO LAZZARINI, *Poikiloi lithoi, versicolores maculae: i marmi colorati della Grecia antica. Storia, uso, diffusione, cave, geologia, caratterizzazione scientifica, archeometria*, Fabriizo Serra Editore, 2007

³⁶ MANFREDO TAFURI, *Storia, conservazione, restauro, Il progetto del passato:memoria, conservazione, restauro, architettura* (curator Bruno Pedretti), Milano, 1997, p.86-100, as a free translation of the authors of this article

5. Issuance of a new landscape design of the square - Visualizations of preexisting constructions in this area

Issuance of a new landscape design of the square taking in account the preexisting constructions in loco in order to create an open-space museum. This shall be accomplished by:

i. Collection of data about preexisting constructions at the square *in loco*. p.e. Great Monastery Panaghia Pantanassa courtyard (there are preserved many photos) **ii.** the findings of private buildings (urban clusters) consisting of workshops and storage rooms³⁷ that are preserved at Attiko Metro Basements.

iii. Specially for these storage rooms one could explore if they consisted an Agora of Ancient times or a “fondaco”, of the space that Venetian and Western Europe people maintain in many Byzantine cities³⁸.

One could explore also the hypothesis about the existence of an Hellenistic Private or Public Building with constant use in this area but with different patrons (*Figure 10*)

iii. Highlighting the archeological and architectural findings preserved today at the basements of Metro Monastiraki station starting from Mycenaean Times, to Roman and Classical Times, to Early Christian period (4th-5th A.D), to Byzantine era in an appropriate way;

iv. Identification of: a retaining wall of a gallery - stoà or a street (2nd c. A.D.), of the collecting Drain, and of the building of the Roman Period, of a Building of Early Christian period (4th-5th c. B.C);

v. Make visible from the walkable level of the square the passage of Eridanos River in an appropriate way that could revive all the passage of the River.

vi. Putting in mutual correlation many interesting architectural remainings that are preserved at Monastiraki Square from Byzantine era, to Art Deco and Modern and Contemporary architecture, with Panaghia Pantanassa Monastery.

6. Proposals of revival of Pantanassa church- visualizations of the entombed preexisting church

Revival of ancient church shall be accomplished by:

i. Collection of data about the preexisting church, entombed after the excavations of 1st Euphoria of Byzantine Antiquities of the Greek Ministry of Culture in collaboration with Attiko Metro S.A.

ii. Carry out historical research about the preexisting church, temple or secular building, identification with oral tradition and written resources, in order to define the architectural type the initial design of the church and the successive historical phases.

iii. Implement architectural research over an architectural-harmonic design of the church as used in some historical periods³⁹.

iv. Relating the entombed preexisting church with the Early Christian Building (4th-5th c. A.D) found and preserved at Monastiraki Metro Station;

v. Compile of an appropriate restoration project aiming at the visualizations, revival and exposure of the buried church so that it can be used as a part of the above church.

³⁷ NIKOLIA IOANNIDOU, preface Amerigo Restucci, *The Greek community of Venice, the origins of an urban and architectural identity*, Editor TEE, Athens, 2011, p.14 p.28

³⁸ LUZZATTO GINO, *Storia economica di Venezia dal XI al XVI secolo*, Venezia 1961, σελ. 17.

³⁹ NIKOLIA IOANNIDOU-IOANNIS CHANDRINOS, *Research for an architectural and reinforcement design upon the Byzantine Church of Taxiarcha at Mesarià of Andros Island (dated 1158)*, Abstracts of 25^o Symposium of Byzantine and Post-Byzantine Archeology and Art, Athens, May 2005, pp.43-44 (in Greek)

vi. Installing a continuous monitoring system, in order to obtain at real time and any moment information for the state of both churches. Cause to continuous basements trembling, related to vibrations caused by the Metro and the Railway Monastiraki Station, but also to the history through the centuries as described above, the impression of being a living monument - entity, is evident⁴⁰.

Conclusions

The Early Christian period has left some information about architects-enough to determine that the practices of Roman time were continued perhaps as late as in seventh century. Throughout the literature of the fourth through the seventh centuries, architects are praised, names are recorded and the architect seems to have achieved a certain social standing⁴¹.

The innovative vaulting of the naos of Pantanassa superimposes the invisible church, a basilica or a church a quincunx (cross-in-square church). Perhaps the new Pantanassa (the visible one) has its origins in the transformation of a standard church design.

The design and the structuring of Pantanassa church and its square as described above can be interpreted in various ways: with the use of an architectural-harmonic design, with the use of some measuring and structuring methods based on a geometric system of proportions (quadratura) in use from the 10th to 15th c.⁴² or else with the specific numerical measurements of length of Byzantium of 10th c. (10th-Century Instructional Manuals by "Heron of Byzantium")⁴³ based on the archetype manuscript *Vaticanus graecus 1605*.

But all constructions methods and architectural modes in the Eastern part of the Byzantine Empire are transpired by Hellenic ancient modes. Constructions of Classical Times have been transformed towards an oriental, Asiatic or Levantine construction retaining at the same time their character of Hellenism.

The evolution of the discipline of architectural⁴⁴ restoration has been associated with a plethora of contrasting views and controversies, which are intimately linked to cultural and political views held by those individuals who sought to codify its theoretical and ideological accomplishments.

⁴⁰ JOHN CHANDRINOS, *Advanced Studies in Restoration of Monuments and Sites*

Raymond Lemaire International Centre for Conservation, Leuven, “, The installation of an automatic system is with no doubt the only way to continuously monitor the structural behaviour of a monument. The period of observation must be long enough (in permanent bases) in order to clearly analyse deformations induced by temperature variations and to separate thermal effects from deformation due to other causes (foundation settlements, structural modification, new forces on the structure and aging of the materials).

⁴¹ ROBERT OUSTERHOUT, *Master builders of Byzantium*, Princeton University Press, 1999 p.39-40

⁴² HANS BUCHWALD, *Sardis E church, a preliminary report*, JOB(2^), 1977, p.265-299

⁴³ DENIS SULLIVAN, SIEGECRAFT, *Two 10th-Century Instructional Manuals by "Heron of Byzantium"*, *Dumbarton Oaks Research Library and Collection, Washington D.C., 2000, p.23, on defence of fortified positions*, including a number of 10th c. Byzantine texts that have been the subject of recent scholar attention. based on the archetype manuscript *Vaticanus graecus 1605*, For specific numerical measurements of length the author uses the finger (δάκτυλος= 1,95 cm), foot (πούς=31,23 cm) etc.

⁴⁴ NIKOLIA IOANNIDOU, *From critical restoration theory to the theory of modern architecture restoration*, Congress of Architectural History, Athens School of Fine Arts, Faculty of Art History and Theory, Athens, May 22-24, 2014, *Historiography of Architecture in Greece between XX and XXI Century, Architecture and Arts between «Greekness» and Globalization*

Indicative Bibliography

- GERTRUDE MARGARET LOWTHIAN BELL, 1913, *Churches and monasteries of the Tur' Abdin and neighboring districts*, Heidelberg, C.Winter's Universitasbuchandlung
- MANOLIS CHATZIDAKIS, 1958, *Byzantine Athens*, Athens 1958
- ANDRE-LOUIS COUCHAUD, 1842, *Choix d'églises byzantines en Grèce*, par A.Couchaud architecte, a Paris Lenoir
- DIMITRI KABOUROGLOU, 1890, *Documents of the History of the Athenians*, Athens 1890.
- KALANTZOPOULOU, T, 2002, *Medieval churches of Athens according to Paul Durand preserved drawings*, Editor, Greek Literary and historical Archive, Athens
- GABRIEL MILLET, 1916, *L'école grecque dans l'architecture byzantine*, Preface Andre Grabar, Paris, Editeur Ernest Leroux, Variorum Reprints, London 1974 (Reprint)
- JOSEF STRYGOWSKI, VON, 1910, *Der Eintritt Mesopotamiens in die Geschichte der christlichen Kunst, Monashefte fur Kunstwissenschaft, Vol.3, No1, pp.1-14*
- TRAVLOS, IOANNIS, 1960, *Urban development of Athens from prehistoric times to 19th c*, Athens, Editor Archaeological Society
- TRAVLOS, IOANNIS, *Bildlexikon zur Topographie des antiken Athen*. Wasmuth, Tübingen 1971.
- BOURAS, CHARALAMBOS, 2000, *Athens from Classical Times until today, 5^o c.A.D.-2000*, Editor Καπόν

