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THE QUESTION OF ARCHITECTURAL PLANNING AND REPRESENTATIONS IN BYZANTIUM.

In 1999 begun in Thessaloniki in the frame of the European Center for Byzantine and Postbyzantine Monuments and Princeton University a research project on Representations and Perseption of Architecture in Byzantium. This project intended to offer some a approach to the topic and explore angles that until now where in the shadows. The finale event of that enterprise is an exhibition that has been open in the Museum of Byzantine Culture in Thessaloniki in Nove-mber 2009. At the same time, actually in the last 3 years, a series of seminaries are offered by Aimos-the Society for Studies of Medieval Architecture in the Balkans and Its Preservation, on theoretical topics that are not in the regular focus of academic schedules. The use of architectural models, the notion of space in Byzantium and other topics were explored.

In this context my paper will touch some of the aspects of representations of architecture in the planning process [1].

An architect carries in his mind a representation of the form of the building he wishes to construct. This ideal representation is three-dimensional or even multidimensional and expresses more or less all his ideas on the exterior form and the interior space, an architectural concept to which Byzantines paid particular attention. Being the "container of the uncontainable", interior space is extremely important in a Byzantine church, and it is in Byzantium that interior space becomes the prime expression of architecture as a vehicle for ideas also when exterior was humble[2].

How was an architectural concept represented?

Drawing in all its possible forms (floor-plan, section, elevation, perspective, etc.) is a geometrical representation of space in smaller, equal or larger

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[1] Several aspects on this topic have been explored in an introductory essay published with the opportunity of the exhibition Architecture as Icon, see Ε. Χατζητρύφωνος, Παραστά-σεις και αναπαραστάσεις της αρχιτεκτονικής στο Βυζάντιο. Η σκέψη πίσω από την εικόνα. *Αρχιτεκτονική ως εικόνα,* Exhibition Catalogue, eds. E. Hadjitryphonos and S. Curcic, Thessaloniki 2009, 132-171. Also in English edition Architecture as Icon, Princeton 2010, 113-154.

[2] Discussed by V. Bychkov, *Βυζαντινή αισθητική: Θεωρητικά προβλήματα,* trans. Konstantinos Charalampides, Athens: E. Tzapherē, 1999, 110, ff., p. 189, see also and O. Wulff, *Das Raumerlebnis des Naos im Spiegel der Ekphrasis*, BZ 30 (1929–1930), 530-539.

Fig. 1 A model in hands of Ktetor after completion or after a model. Decani monastery (G. Subotić 1997, phot. B. Strugar)

Сл. 1 Макета у рукама ктитора, након завршетка изградње или након моделирања. Манастир Дечани (Г. Суботић, 1997., фото Б. Стругар).

scale; it establishes a practical discourse[3] and at the same time it constitutes an intellectual tool for the study and organization of ideas, which pre-exist in the mind of an architect long before any attempt at construction (This point in relation to illusion is discussed by Stevović, in his *Kalenić*)[4]. What could have been the use of these representations during the early stages of the composition process? In modern terms, in early stages of composition nothing can be definitive. The intellectual process involves transferring of an idea for the construction from the mind to a drawing, which as a concept (written discourse) was already known since classical antiquity. The issue relates to representation, as image of reality and as imitation, but also to reality of the image itself[5]. Yet, images rendered by intellectual tools, and the intellectual tools as images in themselves, bear a likeness of a special kind to material but also to spiritual reality[6].

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[3]   On this term and its significance see Oreopoulos**,** *Le modèle spatial,* op. cit., 113. Within the framework of EKBMM Architecture as Icon project, architect M. Michelakis searched dictionaries with aim different from that of Oraiopoulos.

[4]   И.Стевовић, *Каленић,* Беогеад 2006, 170, see also A. Chastel, *Art et humanisme à Florence au temps de Laurent Le Magnifuque*, P.U.F., Paris 1961, 131, Oreopoulos *Le modèle spatial,*, 13 and 14.

[5]   See relevant discussion by Γ. Γεράση in: *Η εικόνα ως οντολογία του αγαθού*, Athens 1994, specially pp. 16 and 45 ff. *passim*.

[6]   See the discussion on this point by Bychkov, *Αισθητική*, op. cit., 116-117.

Fig. 2 A perspective view of the interior of a building; a well known ancient method of representation. Rom, the House of Augustus (I. Iakopi 2008, phot. L. Mozzano)

Сл. 2 Перспектива – поглед на унутрашњост зграде; добро познат антички метод представљања. Рим, Августова кућа (I. Iakopi, 2008., фото L. Mozzano).

Fig. 3 External view of a church; a Byzantine method of representation Proskenetarion, 18th C. (Byzantine Christian Museum, Athens)

Сл. 3 Поглед на цркву споља; византијски метод представљања Проскенетарион (Proskenetarion), XVIII в. (Византијски хришћански музеј, Атина).

The transition, however, which transubstantiates the intellectual image[7] in creative act and construction has not as yet been explored in the context of the Byzantine world.

Artistic approach to space as demonstrated primarily in pictorial compositions in the Christian East very probably influenced the designing approach of architects and of all those invited to create architecture or render it visually. It is worth noting that Byzantines display their interest not but in imitating nature but in imitating the archetypal absolute beauty (κάλλος) of God. In analogy to early phases of drawing which were concerned with recording an idea that would imbue the solution and guide to more eligible *topoi*, in Byzantine visual

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[7] On the question of the relationship between verbal image and visual image and on the views of Gregory of Nyssa and the Cappadocian fathers see. Bychkov, *Αισθητική,* op. cit., 120-121.

Fig. 4 A detail of a façade of the Patriarchate of Peč with painted decorative ornaments
(author)

Сл. 4 Детаљ фасаде Пећке патријаршије са осликаним декоративним орнаментима
(аутор).

representations of completed buildings exists a regression as a process of retracing these *topoi*, which are then depicted as the essence of the completed building.(fig. 1)

However, for the Byzantine mind every space could be both real and supra-real and every point in space was a kind of synthesis of inherently incompatible levels of space. We suppose that in matters of architectural processes, "the makers" of architecture may use both linear perspective known since earlier times (Fig. 2,3) *(Προοπτικά)* and the so-called "inverted" perspective as an opening up of the subjective gaze towards space. Given that Greek tradition and expertise in solving complex problems of projection was a familiar past, the question to what degree Byzantines had assimilated these achievements and ways of producing drawings using projection methods remains an open issue.

Although -as F. Oraiopoulos in his *Le model special de l' orient hellene* notes[8] - in dictionaries lack a conceptual system denoting the existence of a view or a theory regarding architectural drawings, despite the fact that a cognitive framework which would have permitted its development was unquestionably in place[9]. Oraiopoulos also questions what the element might have been that afforded the possibility to overcome epistemological obstacles and shape a theory of drawing in the West but not in Byzantium, despite shared cultural prerequisites at discourse level. The delimitation between the Byzantine prac-

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[8]   An analysis of the presence of terms in dictionaries, see Oreopoulos, *Le modèle spatial,* 114.
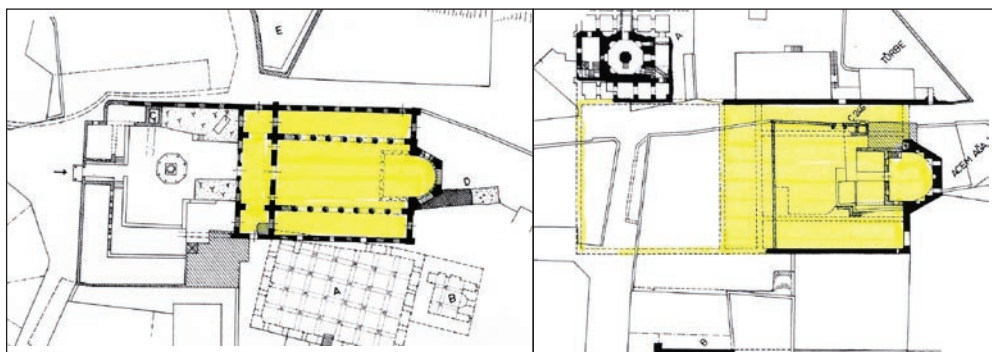
[9]   *Ibid*, 116.

Fig. 5a Plan of Studios monastery, Constantinople/Istanbul, b. Plan of the church in Chalkoprateia, Constantinople/Istanbul. (W. Müller-Wiener 1977)

Сл. 5а План манастира Студиос, Константинопољ / Истанбул; б. План цркве у Халкопратеји (Chalkoprateia), Константинопољ/ Истанбул (W. Müller-Wiener, 1977.).

tices of architectural planning and of depicting architecture as evidenced from pictorial compositions, seems to be a particularly difficult task. The question is related, among other things, to the cognitive and spiritual infrastructure of the draughtsman. A crucial question posed by written sources and pictorial imitations of construction opus or similar ornaments found on building façades (fig. 4), is to what extent an artist may also have been an architect and vice versa, and what the meaning of this dual role when and if it existed may have been. We recall the inscription on the west wall of the narthex of Bogorodica Ljeviška at Prizren, where artist and architect are mentioned as working closely together[10], the cases of Buschetto, the Greek architect of Pisa Cathedral (11th C.), the artist-architect Michael Proeleuses in Thessalonike (early 14th C.)[11], Giotto (14th C.), Brunelleschi (15th C.), probably the architect of Gračanica (early 14th C.), show that under certain social conditions the identification of the two roles was not impossible. This matter has not hitherto been explored. At the same time, cases of churches with identical floor-plans featuring different architectural implementation and techniques, betray a dissemination of plans for use and implementation often independently of the period in which they were created. Thus, (fig. 5a,b) the case of Studion Monastery and of the church of Chalkoprateia is particularly characteristic, as the two churches feature identical plans but differences in methods of construction[12].

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[10] See Д. Панић, *О натпису са именима протомајстора у екзонартексу Богородице Љевишке*, Зограф 1, (1966), 21-23, (Serbian with French abstract), with earlier bibliography. See also Ђ. Бошковић, *О неким нашим градитељима и сликарима из првих деценија XIV века*, Старинар IX-X, (1959), 125-131.

[11] See Г. Бабић, *Михаило Ппроелевсис, солунски сликар раног XIV века* (Michel Proeleusis, un peintre de Thessalonique du debut du XIV siécle), Zograf 12, 1981, 4-8.

[12] Ε. Χατζητρύφωνος, Αρχιτεκτονικός σχεδιασμός στην πρώτη βυζαντινή χιλιετία: Κωνσταντινούπολη – Θεσσαλονίκη, *Χριστιανική Θεσσαλονίκη και Κωνσταντινούπολις από του τετάρτου μέχρι του δεκάτου αιώνος*, Κ΄ Διεθνές Επιστημονικόν Συμπόσιον "*Χριστιανική Θεσσαλονίκη*", Ι.Μ. Βλατάδων, Thessalonike 2006 (in print)

Scholarship and related literature have, in a somewhat facile manner, embraced the view that no architectural plans existed in the Middle Ages. It is precisely on this view that the theory of orality in architecture is founded as the exclusive approach to architecture in Byzantium and the western Middle Ages. The prevailing view is that communication between patron and architect and between architect and master-builders was carried out orally. Particularly interesting from the historiographical point of view are publications dealing with representations of Byzantine architecture, the frame of mind under which they were written and the significance of the view about absence of theoretical architectural discourse they promote[13]. The absence of formulated architectural theoretical discourse has been attributed to the anticlassicist frame of mind which is considered to define in Byzantium the way hierarchical relationships function between the heavenly (superior) and the earthly (inferior) in shaping an aesthetic theory on architecture[14]. The same reasons have been attributed equally to a cognitive inertia which kept the building craft (*tektonikê*) at a level of practical work and not intellectual pursuit. These perceptions cloud our knowledge regarding the use of drawings in architecture and building practice. Consequently there are views which state with absolute certitude that Byzantine architecture did not result from planning and there was no reliance on drawings as design working tools[15]. Yet such views overlook two important elements: firstly, the existence in different locations of churches with identical floor-plans, which argues in favour of the existence of drawings used for the construction of more than one building;[16] and secondly, the very complexity of buildings, particularly of those that had a public character. The construction of such buildings shows that she would have been impossible without the initial recording and elaboration of an architectural idea and at the same time demonstrates a significant input of requirements in the designing process. The existence of precisely such a drawing is explicitly mentioned by Procopius, who clearly describes the preparation of a model and drawings for the construction of Hagia Sophia[17]:

*".... Justinian built not long afterwards a church so finely shaped .... shewing them some sort of **model** of the building we now see, it seems to me that they would have prayed that they might see their church destroyed forthwith, in order that the building might be converted into its present form....And*

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[13]   See also the Oraiopoulos' view on drawings, Oreopoulos**,** *Le modèle spatial,* 120 ff.

[14]   On this discussion see *ibid,* 70 ff., 76, 83 (on hierarchy)

[15]   *Ibid***.**

[16]   Χατζητρύφωνος, Αρχιτεκτονικός σχεδιασμός. where the case is mentioned of the temples at Attale Euoia; for related drawings see Δ. Πέτρου and Π. Ανδρούδης**,** Οι βυζαντινοί ναοί του Αγίου Νικολάου και των Εισοδίων της Θεοτόκου στην Άτταλη Ευβοίας, *Αρχαιολογικό Έργο Θεσσαλίας και Στερεάς Ελλάδος,* Πρακτικά Επιστημονικής Συνάντησης, Volos 27/2-2/3 2003, I, Volos 2006, 1165-1184, and Σ. Μαμαλούκος**,** Η προσέγγιση της διαδικασίας του σχεδιασμού στη βυζαντινή αρχιτεκτονική μέσα από τη μελέτη των μνημείων, Seminar III: Models in Medieval Architecture, ed. I. Varalis, Aimos-EMMABP, Thessalonike 2009, 37-48.

[17]   *Procopii Caesariensis Opera Omnia,* rec. Jacopus Haury , vol. IV *περί κτισμάτων* libri VI, ed. Gerhard Wirth, Ληψία 1964, σ. 8-9 (B173, P22), Procopius, *Buildings General Index*, with an English translation by H.B. Dewing with the collab. of G. Downwey, Harvard Un. Press, 1996[5], 10, 11.

*Anthemius of Tralles, the most learned man in the skilled craft wich is known as the art of building (author: μηχανικὴ = engeneering) .....ministered to the Emperor's enthusiasm, duly regulating the tasks of the various artisans and **preparing in advance designs** of the future construction ...".*

Also in the case of the Metropole of Gaza (402-407) Mark the Deakon refered to a similar event[18]. A letter from Empress Eudoxia to the Bishop of Gaza was received containing a plan of the church in the form of a cross. The church had to be built according to the imperial guide - plan, that was presented to the Christian community as will of God. The famous architect Roufinos was responsible for the church's lay-out and construction.

If we were to accept that the building craft (*tektonikê*) lagged behind in developing relationships with other disciplines[19], we would be faced by the contrary evidence of literary discourses on architecture (*ekphraseis*), which illustrate the interest this craft commanded and the importance attached to it on many levels. The work of an engineer, knowledgeable in arithmetic and geometry, was presumably expressed through construction drawings (*skaripha*, *indalmata*) and wax models with addition of wood as Gregory of Nyssa indicates. The fact that extreme precision in construction may have gradually declined following Middle Byzantine times must be attributed to philosophical attitudes, if one accepts the view that chance was the prevailing "system"[20], along with practical, political and economic reasons.

As was said, few drawings have survived from medieval times in the West and still fewer from the geographical area of Byzantium, which has suffered greatly as a result of successive disasters and calamities. In line with the frame of mind of the times, creation in many fields relied on repetition and imitation, and these drawings are expressions of a tradition that goes well back in time and is quite widespread geographically.

In fifteenth-century Western Europe, Alberti records a view that had deep roots and cannot be examined independently of a long-lasting tradition equally in East and West:

*"The presentation of models that have been coloured and lewdly dressed with the allurement of painting is the mark of no architect intent on conveying the facts; rather it is that of a conceited one, striving to attract and seduce the eye of the beholder, and to divert his attention from a proper examination of the parts to be considered, toward admiration of himself. **Better then that the models are not accurately finished** .... **But plain and simple**, so that they demonstrate the ingenuity of him who conceived the idea, and not the skill of the one who fabricated the model".* (SL)

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[18] C. Mango, *Sources and Documents*, 30-32 in the Life of Porphyry.

[19] See Oreopoulos, *Le modèle spatial*, 48ff. where the author discusses his view on the epistemological obstacles that did not permit interdisciplinary relations.

[20] On the role of chance in Byzantine philosophy see the discussion in ibid, op. cit., 120-122.
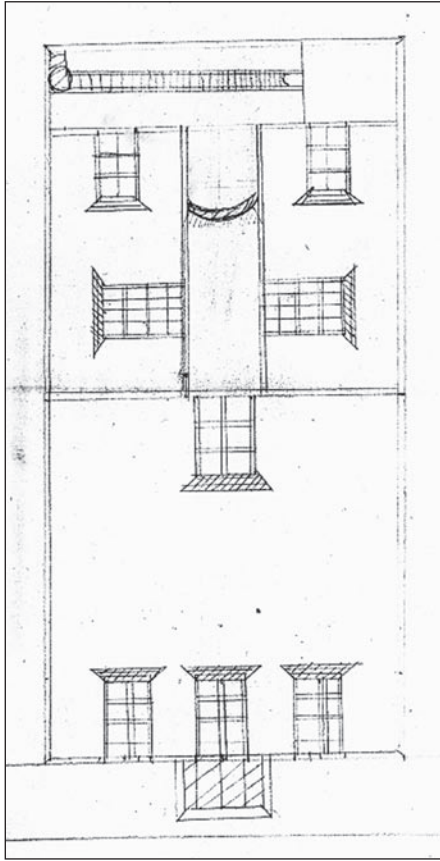
Fig. 6 A 19th C. drawing of a house in Athens, where facade, plan and section are combined.(R. Fatsea, 2006)

Сл. 6 Цртеж куће у Атини из XIX века где се комбинују фасада, план и пресек (R. Fatsea, 2006.).

It transpires from the study of texts and drawings from Alberti's time that drawing analysis and its representation was something of a preoccupation for those involved in construction. Nevertheless, cognitive synthesis and the perception of the whole, which in the early Middle Ages had been something of a novelty[21], meets therefore with analytical thought. The importance of examining the individual elements that make up the whole assumes particular gravity.

Yet, the decline of a tradition and of acquired knowledge is always a slow process. A 19th C drawing in Athens (fig. 6) shows that a testimony of the continuation of views found in a period when the concept of the whole had been linked to analytical thought for quite some time. Folk artists who did not have the possibility of following in the course travelled by architectural thought in central and Western Europe, and who combined a familiar tradition with contemporary elements.

The question, however, of dealing with religious space and approaching it as a container of the uncontainable, and of the tendency of effacing architecture in favour of space remains open for further exploration.

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[21] For more information on this view see P. Lampl, Schemes of Architectural Representation in Early Medieval Art, *Marsyas* 9 (1960–61): 6–13, esp. p. 9, Wulff, *Raumerlebnis*, op. cit., 539.

Евангелија Хаџитрифонос
ПИТАЊЕ АРХИТЕКТОНСКОГ ПЛАНИРАЊА И ПРИКАЗИВАЊА У ВИЗАНТИЈИ

Као „садржитељ несадрживог“, унутрашњи простор је од изузетне важности у византијској цркви, и управо у Византији унутрашњи простор постаје примарни израз архитектуре, као „превозног средства“ за идеје. Истовремено, цртеж у свим својим могућим формама (план пода, пресек, елевација, перспектива, итд.) је геометријски приказ простора у мањој, подједнакој или већој размери; он успоставља практичан дискурс и истовремено представља интелектуалну алатку за проучавање и организацију идеја, које претходно већ обитавају у уму архитекте, много пре било каквог покушаја да се почне са изградњом. Каква је могла бити корист од ових представа у току раних фаза композиционог процеса у Византији? Интелектуални процес укључује пренос идеје о изградњи, од ума не према дискурсу, већ према цртежу, који је као концепт (дискурс у писаној форми) већ био познат још од класичне антике. Ово питање односи се на представљање, као на слику реалности и као имитацију, али и на реалност саме слике.