

# THE ISLAMIC URBAN TRANSFORMATION OF CONSTANTINOPLE INTO ISTANBUL

## The birth of an Ottoman architectural style?

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### Introduction

In his famous treatise on Ottoman construction work (*Risâle-i Mi'mâriyye*) the Ottoman architect Sedefhar Mehmed Aga, the builder of the equally famous “Blue Mosque” in Istanbul and an apt student of the even more famous Mimar Sinan, writes:

*“The golden dome rises to the heavens like the moon. Let it give light to the world in all directions like the sun! The bits of blue (the tiles) on its side are eyes to it. Oh that great dome became a mountain on the sea coast, and the small domes are the waves of pleasure; no one could build a mosque like this.”<sup>1</sup>*

On the pinnacle of its political power, the Ottoman Empire included the territories of Europe, Africa and Asia; protecting Muslim, Jewish and Christian minorities; developing a cultural basket of architectural variations in both place and time. Even though any true empire excels in its geographical spread, its cultural achievements and its military power, such empire needs an urban symbol to show the world its political, its economical, its cultural and religious supremacy. It needs an imperial capital; a **visible** seat of power.

The city of Constantinople, or rather Istanbul as it is called following the Ottoman conquest in 1453, is such an urban symbol. Today the skyline of Istanbul has become a distinctive example of architectural apogee in the Muslim world. The numerous pencil-thin minarets and massive domes are emblematic signs of Muslim influence not just upon the urban architecture of the world’s third largest city, but also upon the heritage of the entire human history of architecture through its uniqueness in style. But exactly what *kind* of style?

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<sup>1</sup> *Risâle- i Mi'mâriyye – An Early Seventeenth Century Ottoman Treatise on Architecture*, trans. Howard Crane (Leiden, 1987), page 74

The objective of my paper is to outline the major urban transformations that accompanied the Ottoman conquest and subsequent rule of Constantinople, secondarily to find out whether it is possible to define a distinctively Ottoman architectural and/or urban style.

### **Historical background**

Constantinople was historically established as a city by Greeks in 600 BC, although settlements of Neolithic origin have been excavated in the vicinity of the modern Yenikapi district<sup>2</sup>. Formerly called Byzantium, Constantinople was founded on the European side of the Bosphorus strait forming the border between Eastern Europe and Western Asia, between the Black Sea in the North and the Sea of Marmara to the South. The name Constantinople is Greek and means “Constantine’s City”, named after the Roman emperor Constantine I. who built several churches, palaces and squares in the city. The impressive Hagia Sophia church became the major political symbol of his reign, making Constantinople the capital of Christianity in the Eastern Roman Empire in 300 AD.<sup>3</sup> Other famous Hellenic and Roman structures in the city were the Hippodrome, the aqueducts and the Emperor’s Palace as well as several forums, creating public urban space between important streets and ceremonial roads<sup>4</sup>.

After Constantine I, several Roman emperors - Theodosius, Justinian and Septimus Severus - built defensive outer walls and military fortifications around the city, some of who are still visible today. During the years 400-1400 Constantinople would be under siege and attacked by Arabs, Varangians and crusaders, sometimes successfully, but mostly not. Each time the walls and defensive structures would have been repaired and/or intensified, but the Byzantium Empire slowly crumbled due to political and military defeats. The urban architecture of Constantinople crumbled with it, the city losing inhabitants and commercial value. However, the *strategic* and *military* value of the city remained. This was the reason for the Ottomans to conquer the city and incorporate it into the Ottoman Empire as their capital, giving rise to important urban architectural changes in both the city grid and skyline.

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<sup>2</sup> Mark Rose and Şengül Aydingün: *Under Istanbul, Archeology Magazine, June/July 2007*

<sup>3</sup> Commemorative coins that were issued during the 330s already refer to the city as Constantinopolis (see, e.g., Michael Grant, *The climax of Rome (London 1968), p. 133*)

<sup>4</sup> Freely, John; Ahmet S. Cakmak (2004). *The Byzantine Monuments of Istanbul. Cambridge University Press.*

## The Ottoman Empire

The Ottoman Empire (Ottoman: دَوْلَتِ عَلِيَّةٔ عُثْمَانِيَّة *Devlet-i 'Aliyye-yi 'Osmâniyye*) is the name of one of the biggest Islamic empires, founded in 1299 and dissolved in 1923, originally founded by Anatolian Ghazi-warrior tribesmen. In 1683 the Ottoman Empire extended from the city of Fes in North Africa in the West to the Caspian Sea and the Arab Gulf in the East, from the vicinity of Vienna, Austria in the North, to the Eastern shores of Northern Somalia in the South, covering parts of Africa, Asia and Europe.

Between 1326 -1365 the original capital of the Ottoman Empire was the city of Bursa, about 40 km South of Constantinople. From 1365-1453 the city of Edirne, (formerly Adrianople) West of Constantinople, served as the official capital of the Ottoman Empire.

The Ottoman Empire was ruled by Sultans on Islamic premises, but granting cultural and religious autonomy to non-Muslim minorities in its conquered areas (*millet* system). In the early 15<sup>th</sup> century, the Ottomans had conquered large parts of Eastern Europe on the Balkans, leaving Constantinople and her immediate vicinity as rudimental Christian islands of the Byzantium Empire inside the Ottoman sphere of military rule, but not yet conquered by the Ottoman Empire. The year **1453** would change that, as **Sultan Mehmet II Fatih** after a nearly 2-months long siege on May 29 finally **conquered Constantinople**, incorporating the city into the Ottoman Empire and making Constantinople the capital of the Ottoman Empire under its new name of “**Istanbul**”. The urban and Muslim architectural changes following the conquest of Constantinople became an important part of this transformation.

### Early Ottoman transformation 1453-1520

According to the contemporary Byzantic historical writer Critobulus of Imbrios <sup>5</sup>, when Sultan Mehmet II Fatih conquered Constantinople, he brought with him architects and pre-prepared blueprints of how he wanted the city to change into a symbol of Ottoman Islamic power. And merely three days after the conquest, after having removed the altar, Sultan Mehmet II Fatih led the traditional Islamic Friday’s prayer inside the Hagia Sophia Church, declaring it a permanent mosque.

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<sup>5</sup> Kritovoulos, *History of Mehmed the Conqueror*, Riggs, C. (transl.), (Princeton – New Jersey 1954, new edition 1970)

Using the original Hellenistic/Roman street grid of the city as a base layer<sup>6</sup>, Sultan Mehmet II Fatih's architects established new imperial mosques on the former Roman forums and Byzantine church sites (Fatih Cami, Eyüp Sultan Cami, Mahmutpaşa Cami), a Grand Bazar (Kapalıçarşı) to attract commerce, a new imperial palace (Topkapı Palace) on the ruins of the old Byzantine emperor's palace, as well as grand public baths (*hamâmât*), hospitals (*darüüşşifa*) and public kitchens (*imaret*).

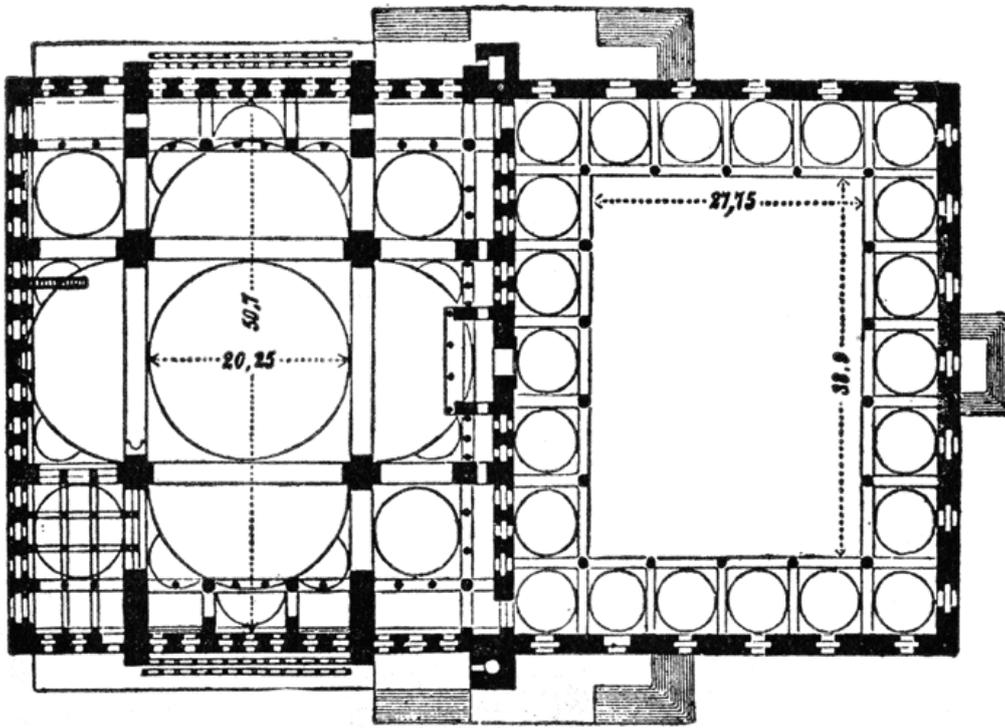
The Fatih Cami was to become a pre-standard for Ottoman mosque complexes, serving religious as well as social and urban purposes. The original complex of Fatih Cami<sup>7</sup> included a set of well-planned buildings constructed around the mosque, built on the hills of the ruined Byzantine Church of the holy Apostle in 1463-1470. Fatih Cami included 8 madrasat, a library, a hospital (*darüüşşifa*), an urban caravanserai (*tabkhane*), a covered market, a hamâm, two primary schools and a public soup kitchen (*imaret*). The Sultan's mausoleum (*türbe*) and other burial monuments were added at later dates. The original complex covered an almost square area of 100 acres. Its blueprint and name (*küliyye*) was to become a model for many later mosque complexes in Istanbul.<sup>8</sup>

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<sup>6</sup> The re-use of Hellenistic street grids for establishing a new Ottoman urban structure after conquering Anatolian and European cities, is a typical pattern of early urban Ottoman constructional work, see: *E. F. Alioglu: Similarities Between Early Ottoman Architecture And Local Architecture or Byzantine Architecture in Iznik, Yildiz Technical University, Istanbul, Turkey* <http://www.unesco.org/archi2000/pdf/alioglu1.pdf>

<sup>7</sup> ☆Aga-Oglu, Mehmet: *The Fatih Mosque at Constantinople*, *The Art Bulletin*, Jun., 1930, Vol.12(2), p.179-195

<sup>8</sup> On the issue of the various extra structures in the Ottoman mosque complex, see Rabah Saoud (July 2004). "Muslim Architecture under Ottoman Patronage (1326–1924)". *Foundation for Science Technology and Civilisation, UK*. <http://www.muslimheritage.com/uploads/OttomanArchitecture.pdf>



The picture above<sup>9</sup> shows the blueprint of the mosque itself, revealing the small domes on the roof of the enclosure, the half domes on the roof of the mosque structure, and the adhering steps and entrance terraces, a design that later evolved into the double porticos so typical of Ottoman mosques.

Sultan Mehmet II Fatih also reinforced the defensive walls around the city, built Yedikule Castle, guarding the main entrance gate of the city in the West, and built the first bridge across the Bosphorus. He also reinforced the structures of the ancient waterways of the city. On the street grid level, Istanbul remained pretty much the same, on the hills and skyline it changed quickly and drastically.

### **Urban transformation 1520-1700**

The biggest transformation of Istanbul happened during the Classical Era between 1520 and 1700. Literally thousands of new grand structures were built in the city, among the most notable ones of course, the grand mosques. The standardization of what we could call typical Ottoman construction style for a mosque was originally developed in Bursa and Iznik, mainly built upon elements of Seljuk architecture, such as the Ulu Cami in Bursa.

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<sup>9</sup> Source: Hamlin, A. D. F. *College Histories of Art History of Architecture* (New York: Longmans, Green, and Co., 1915) page 151

Yet, one of the most important steps towards a distinctive Ottoman style of building was the establishment of the Sultan's Office for Construction, called Architectural Office of the Abode of Felicity (*Mimariyye Der-U-Saadet*)<sup>10</sup> in 1538. The construction of any larger building in the Ottoman Empire (be it inside Istanbul or in any city across the Ottoman Empire's acquisitions) had to take place according an imperial specific permit or *firman* (issued in Istanbul). The Ottoman architects and builders had little constructive space to experiment with, as the **blueprints of any construction at any times had to follow strict Imperial guidelines**, creating architectural uniform. However, the building materials, the carpenters or the brick layers and construction workers, consisted of **local craftsmen**, bringing the local cultural traditions of their crafts with them to the construction sites, shaping the building style in detail, but not in common.

Thus the urban structures of the Ottoman Empire, such as mosques, public baths, palaces, hospitals, soup kitchens or *madrasas* (schools) all had the same style of construction, but differed in material, in decorations and in enhancement details. Most of the materials used for both exterior and interior construction of grander monuments of the time was brick and a mixing of marble, powder, lime and plaster, to a lesser extend wood.<sup>11</sup> The structural design of Ottoman mosques and municipal



Tekkiye Cami, Damascus. Picture: public domain, 1870

buildings in Istanbul are visibly found in numerous other Ottoman mosques and buildings in Bosnia (Begova Dzamija in Sarejevo), Greece (Kara Musa Cami), Greater Syria (Tekkiyye Cami, *left*), Libya (Gurgi Masjid) and throughout Anatolia.<sup>12</sup>

Owing to the meticulous registration of virtually every official decree and annual accountings of tax collectors, we have several reliable sources of information on the planning of urban construction in the city of Istanbul,

from the the 16<sup>th</sup> and 17<sup>th</sup> centuries and up. Notably less reliable, but still of some historical value,

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<sup>10</sup> *Der-U-Saadet* (The Abode of Felicity) was the official Ottoman imperial name for Istanbul

<sup>11</sup> *Risâle- i Mi'mâriyye – An Early Seventeenth Century Ottoman Treatise on Architecture*, trans. Howard Crane (Leiden, 1987)

<sup>12</sup> Irene Bierman calls the stylized Istanbuli export of Ottoman architecture to other cities “franchising”, see: “*Franchising Ottoman Istanbul – The case of Ottoman Crete*”, *7 centuries of Ottoman Architecture “A Supra-National Heritage”*, Turkish Chamber of Architects, Yapi-Endustri Merkezi Publications (2000)

are the numerous *Mimarî Tezkeresi* - biographies of Ottoman builders and architects, telling about their professional merits. Among the most notable ones were the biographies of Mimar Sedefhar Mehmed Aga and, of course the most famous of them all, Mimar Sinan.

Sinan is said to have constructed or supervised 476 buildings (196 of which still survive) in Europe (Rumeli) and Asia (Anatolia, Greater Syria), according to the official list of his works, the *Tazkirat-al-Abniya*. Sinan became the master of domes, trying to excel his former work each time he was asked to create a new building. He rebuilt the Aya Sophia Mosque, strengthening its basic structure against earthquake by adding adherent and supporting structures, half domes and minarets. His master piece in Istanbul is probably the Süleymaniyye Cami with its main dome, 53 meters high and a diameter of 27.5 meters. At the time it was built, the dome was the highest in the Ottoman Empire. However, Sinan's apogee work (The Selimiyye Cami) is not found in Istanbul, but in Edirne.<sup>13</sup>

A typical feature of almost all the grand mosques and monuments built during this era is the multiply vault system. Multiply vault constructions are, of course, something to be found in almost every society on Earth, but the distinctive and mastered intentional use of double and triple vault constructions during the classical era of Ottoman construction must be regarded as a typical architectural pattern.<sup>14</sup> Sinan cleverly used the multiply vault system in almost every of his construction works, even in bridges.<sup>15</sup>

### **Urban transformation 1700-1808**

The classical Ottoman Style of building received new impulses during the start of the 18th century, when French and German architecture, namely European Baroque - but also Rococo and Ampir - became the favorite inspiration for constructing larger buildings in Istanbul. It is during the 18th century (called the *Laleh/Tulip* era) we see the constructions of the Nûr al-Osmaniya Mosque, the Zaynep Sultan and Laleli Mosques, as well as the Mausoleum of Mehmet II Fatih.

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<sup>13</sup> Erzen, Jale. 1988. *Sinan as Anti-Classicist*. In *Muqarnas V: An Annual on Islamic Art and Architecture*. Oleg Grabar (ed.) Leiden: E.J. Brill.

<sup>14</sup> Gülsün Tanyeli and Kani Kuzucular: "Double Vaulting in Ottoman Architecture", *7 centuries of Ottoman Architecture "A Supra-National Heritage"*, Turkish Chamber of Architects, Yapı-Endüstri Merkezi Publications (2000)

<sup>15</sup> Most famously the *Büyükçekmece Bridge*

During the 19th century, the Baroque style spread widely in Istanbul, and we see the constructions of the famous Ortaköy Mosque and the Dolmabahçe Palace.<sup>16</sup>

### **Urban transformation 1870-1922**

During the last years of the Ottoman Empire, Istanbul was modernized with bridges, new municipal structures such as postal offices and railway stations, electrical infrastructure, universities and other modern buildings, some of them equipped with symbolic Ottoman features in the form of domes or even fake mihrabs, even though they had no religious function at all and remain out of classical context. This era of architectural mismatch is called *neo-classical*, for its frequent use of classical Ottoman architecture as constructive enhancement on modern municipal buildings.

What then are some of the typical **architectural patterns** found in **classical Ottoman urban constructions**?

During the Ottoman reign, **the mosque** as a religious institution underwent major structural changes in use and style, as compared to mosques developed by the Seljuks, the Persians and the Mamluks, although to some extent Ottoman architecture owes “details” of style to them all.<sup>17</sup> The large domes of Ottoman mosques are naturally rudiments of Byzantine inspiration, but the thin corner minarets are a new invention. Many Ottoman grand mosques are cornered by pencil-thin minarets; some mosques have up to 6 minarets around the garden walls and the main prayer building.

The Ottomans transformed their style of mosque from the traditional Arabic/Seljuk hypostyle building with open prayer’s hall into a religious monument of power with both vast exterior and interior decorations. Often the mosque was part of a larger structure, consisting of the mosque itself, adjoining *madrasas*, soup kitchens, mausoleums and libraries. The roofs of the Ottoman mosques, as well as the roofs of adherent buildings (*külliyeler*), were often covered by smaller domes and half domes, clinging to the central structure of the buildings.

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<sup>16</sup> During this era, Istanbul grew as to include the area of Beyoğlu, formerly the Genovese town of Pera, on the other side of the Golden Horn. Many of the Baroque style constructions and monuments of the 18<sup>th</sup> century are to be found there.

<sup>17</sup> Necipoğlu, Gülru (1995). *Muqarnas: An Annual on Islamic Art and Architecture. Volume 12. Leiden : E.J. Brill. p. 60*

Many of the grand mosques in Istanbul were built on hills, thus becoming not only visible places of worship, but also places of religious power symbols. A very unique feature of Ottoman mosques is the frequent addition of a (double) portico and the paired, arched windows.

Additionally, the Ottomans developed smaller versions of single dome urban mosques (today colloquially dubbed “the 7-Eleven-style mosques”), typically built on corners of crossroads throughout Istanbul, with limited space available. Several of such smaller Ottoman mosques have been **constructed in wood**, a building material not used widespread in the rest of the Muslim world.

The construction of **public baths** is not an original Ottoman idea, as such structures have been excavated and well described in Roman and pre-Roman eras. However, the Ottomans transformed many of the existing Roman baths of Constantinople into larger urban institutions.<sup>18</sup> As the main purposes of these baths were religious purity and ablutions, the Ottoman public baths did not have any swimming pools.

The Ottoman Empire covered vast areas of different ethnic and cultural origin, yet in Istanbul and the main European Ottoman areas (the Balkans), a typical “**Ottoman**” **housing style (residential buildings)** developed during the 16<sup>th</sup> century and upward. Mainly constructed in wood, the Ottoman housings consisted of very small gardens, multi storey buildings, porticos, and the typical enclosed living quarters “hanging” over the street, equipped with windows, their external features supported by pillars leaning diagonally on the house wall below.

Compared to traditionally Muslim houses of the Arab world, the Ottoman residential buildings typically did not hide behind high walls, but were clearly visible on the street, creating a **true urban style of living**. The evolving conformity of Ottoman housing style of the 16<sup>th</sup> century is evidence of a larger Ottoman scheme of cultural syncretism in architecture throughout the empire, today still visible in the Istanbul districts of Sultanahmet, Kumkapi and Fatih, and easy recognizable in Bosnia and Anatolia.<sup>19</sup>

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<sup>18</sup> Kristina Smolijaninovaite: *A Study on the Historic Hamams in Istanbul – Changing Aspects of Cultural Heritage and Architecture*, master thesis for World Heritage Studies, Technical University of Cottbus, Germany, 2007 [http://www-docs.tu-cottbus.de/alumniplus/public/files/master\\_theses/Kristina\\_Smolijaninovaite.pdf](http://www-docs.tu-cottbus.de/alumniplus/public/files/master_theses/Kristina_Smolijaninovaite.pdf)

<sup>19</sup> Maurice Cerasi: *The Formation of Ottoman House Types: A Comparative Study in Interaction with Neighboring Cultures*, *Muqarnas*, Vol. 15 (1998), pp. 116-156

Originally developed in Eastern Asia (India, Persia), the Ottomans were fond of building “**garden pavilions**”, called *köşk* (**kiosks**). Throughout Istanbul, kiosks were built in “grand style”, almost looking like small mosques with open windows and domes. Some of them served indeed as garden pavilions, others were built on street corners serving the public by providing fresh water (fountains) and occasionally selling snacks to passer bys. Under Ottoman rule in Istanbul, even small kiosks became symbols of religion and power, while at the same time serving specific urban purpose.

Similarly, **Ottoman tombs** (*türbe*) of Sultans and their families were often constructed to look like a cross between a garden pavilion and a mini-mosque, mostly built close to existing mosque complexes in Istanbul. Thus **religious worship, historical remembrance and political power became embedded in one place**, visible to everyone in the Ottoman city of Istanbul, creating a distinctive style of urban planning.

### **Conclusion: an Ottoman urban style?**

The main purpose of Ottoman urban architecture was clearly to create symbols of religious and political power, both internally as well as externally: that’s why the mosques and greater urban structures of Istanbul have been built on the top of hills, to be easy visible for any enemy thinking about trying to take away Ottoman land, or as a friendly but powerful reminder of the economical and religious grandeur of the Muslim Ottoman empire to those passing by.

In a very short span of historical time, Istanbul was **genuinely re-shaped** from a Byzantine Christian stronghold in 1453 into today’s impressive Islamic skyline, containing more than 3000 mosques, among them some of the world’s finest examples of Islamic architecture. The greater buildings and monuments of the Ottoman Empire share visible uniform similarities in style and construction, proving the strict use of centralized, imperial working guidelines upon the Imperial architects.

Although the spread of the Ottoman Empire included numerous ethnic and cultural variations on three different continents, the similarity in the building styles of namely mosques in such different places like Istanbul, Aleppo, Crete, Tripoli (Libya), Edirne and Bosnia, clearly proves the existence of a centralized Ottoman architectural blueprint, **solidified in the urban construction of Istanbul** and later exported throughout the Ottoman empire as symbols of culture and power. We can call that blueprint - with all its typical characteristics and consistent details described in this paper – the development of a true Ottoman urban style.

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