SIMILARITIES BETWEEN EARLY OTTOMAN ARCHITECTURE AND LOCAL ARCHITECTURE OR BYZANTINE ARCHITECTURE IN IZNIK

E. F. ALIOGLU Associate Professor, Yildiz Technical University, Istanbul, Turkey

SUMMARY

Iznik/Nicée/Nicaea, which is in the Marmara/Bithynia Region of Anatolia, was included in the territory of the Ottoman Beylik in 1331 after the Hellenistic, Roman and Byzantine Periods. Construction activities realised after this date are in harmony with the urban pattern, displaying certain characteristics and similarities with the existing architecture.

1. EARLY OTTOMAN CONSTRUCTIONS IN IZNIK

The Ottoman Beylik, when laying the foundations of a new empire on the lands it had recently conquered from the Byzantine State in the Marmara/Bithynia Region, encountered the existing structure of the city. This organisation, whose economic and social realities were given, had its own particular setting already established in the settlements. The new rulers made use of the existing building structure with a pragmatic approach; also, in this first stage of building their empire, they organised the settlements in keeping with their own social demands and had some new buildings constructed. It is difficult to define what kind of a physical appearance Iznik had soon after it had been taken out of the Byzantine rule in 1331. However, what is definitely known is that it did not have a dense population. According to Asikpasazade, the male population of the city had been considerably reduced^[1]. Ibn Batoutah notes that in the years 1334-1339 the city was in a devastated condition and that only a few officials in the service of the Sultan had remained in Iznik^[2]. Again, Orthodox Palamas, who was taken captive by the Turks in 1354, notes that the city was in ruins^[3]. Along with these two testimonies, it is known that the city did not present a good picture in terms of its economic indicators, because it had remained under siege for years since the time of Osman Bey^[4]. However, the fact that it had a

reduced population and that it was economically backward did not prevent most spaces to be re-organised and assigned new functions by the new rulers. The early Ottoman activities undertaken in Iznik for building development can be studied under two headings. The first heading is re-using the existing urban pattern, and the second is making use of the existing buildings and the materials collected from the remains of buildings, and also erecting new constructions.

1.Defence System 25.Seyh Kudbeddin 2.Istanbul Gate Mosque and Tomb 3. Yenisehir Gate 26.Seyh Esrefoglu 4.Lefke Gate Mosque 27.Mahmut Çelebi 5.Göl Gate 6.Gate Mosque 28. Remains of Minaret 7.Gate 8. Roman Theatre 29.Çandarli Hayrettin 9. Roman Gehälk Pasa Tomb 10. Hagia Sofia Church 30. Çandarli İbrahim 11.Koimesis Church Pasa Tomb 12.Church A 31. Çandarli Halil Pasa 13.Church B Tomb 14.Church C 32. Haci Hamza Double 15.Böcek Ayazma Bath 16.Haci Özbek Mosque 33.Murat I Double 17.Orhan Soup-Kitchen Bath 34.Ismail Bey Bath 18. Kirgizlar Tomb 19. Haci Hamza Mosque 35. Private Bath 20.Süleyman Pasa 36.Private Bath Madrasah 37.Kumluk/Agalar 21. Yakup Çelebi Soup- Mosque 38.Huvsuzlar Tomb Kitchen 22.Sari Saltuk Tomb 39. Ahiveyn Tomb 23.Yesil Mosque 40.Alaadin Misri Tomb 24.Nilüfer H. Soup-K. 41.Musa Baba Tomb



Figure 1: Iznik City Plan: Buildings of the Antiquity, the Byzantine Period, and the Ottoman Period (Source: Schneider, Eyice, and Çakmakçi)

1.1. Re-using the existing urban pattern

It is not known what the characteristics of the road pattern were when Iznik was captured by the Ottomans. However, it can be deduced that Early Ottoman buildings were located in reference to the Hellenistic road pattern (Figure 1). Murat I Double Bath (XIVth-XVth centuries) and Mahmut Çelebi Mosque (1443) were sited on the street between Istanbul Gate and Yenisehir Gate; Haci Özbek Mosque (1333, 1334) and Haci Hamza bin Ardunsah Mosque (1343-1346), the tombs of Çahdarli Halil Pasa (d. 1453) and of Çandarli Ibrahim Pasa (d. 1429) were built on the streets between Lake Gate and Lefke Gate, the street which is perpendicular to the other main street. Many other buildings were located on the corners or along the crossing Hellenistic roads, thus presenting plan schemes which indicate development in the north-south or east-west directions. Additionally, in some examples like Haci Özbek Mosque, Haci Hamza Mosque and Nilüfer Hatun Soup-kitchen (1388), the fact that the masses of these buildings do not turn toward Mecca, shows the influence of the already existing

direction of these buildings. In some other examples like Yesil Mosque (1378-1389), Yakup Çelebi Soup-kitchen (XIVth century), and Mahmut Çelebi Mosque, directions toward Mecca came to determine the construction axes of the masses.

And the relations of these buildings with the street levels lend significant facts. It is known that the ground level of the city was in the process of changing in the Hellenistic, Roman and Byzantine Periods, that in the Vth-VIth centuries it was ~4.73 m. and in the VIIIth century, when the Koimesis Church was built, it was ~2.50 m. or even lower^[5] When we try to find an answer to the question, "What was the street level in 1331, the first year of the Ottoman rule?" the position of some buildings offer important evidence. The ground levels of some buildings located at different points of the city, like Yakup Çelebi Soup-kitchen, Mahmut Çelebi Mosque, and Çandarli Halil Pasa Tomb were found to be ~0.50 m. below the other existing examples which were sited at a lower level, like Süleyman Pasa Madrasah (XIVth century) ~0.70 m., Murat I Double Bath ~0.90 m., Yesil Mosque ~0.80 m., Çandarli Ibrahim Pasa Tomb ~0.90 m., and Hagia Sophia Church-Mosque ~2.50 m^[6]. Nilüfer Hatun Soup-kitchen ~1.80 m., Haci Hamza Bath ~1.50 m., and Ismail Bey Bath (XIVth or XVth century) ~1.40 m. And the ground level of Haci Hamza bin Ardunsah Mosque, also called Çukur Mosque, which does not exist any more, must have been below ~1.50 - 2.50 m^[7]. These levels indicate that the ground level of the city at the time was at least ~0.50 m. below the present-day level. On the other hand, this difference indicates that there were two different formations in the use of the city grounds. One of these formations took place ~0.50 - 0.90 m. below the present-day street level, and the other formation was ~1.50 - 2.50 m. below the present-day street level. Here, the question of why the buildings contemporary with those sited ~ 0.90 below the ground level were located at a different level has no definite answer. Rather than providing a definite opinion, this state of affairs indirectly indicates the level of buildings and the remains of buildings in the former period.

1.2. Making use of the existing buildings and building remains, and new constructions

Its position, the significant role it played in the history of Christianity, its serving as the capitals of both the Byzantine State and the Anatolian Seljuk Sultanate, characteristics which must have tempted it to be seized, caused Iznik to be made the capital of the Ottoman Beylik as soon as it had been captured. Iznik enjoyed this title for a very short period but this immediately led it to be put through a programme of reformation in terms of its social, economic and spatial organisation. The first to be realised was to turn the Byzantine Church, Hagia Sophia, which was situated at the junction of the two main perpendicular streets of the Hellenistic period, into a mosque. The Hagia Sophia Church (Vth or VIth century), the host of the VIIth Council and one of the most important centres of Christianity, was re-organized in a way to be used by the Muslims and thus transformed into a mosque/Friday mesjid [8]. However some construction elements from the Byzantine buildings were re-used in Ottoman buildings. Most of the time columns, column capitals, and bases of columns were again used for the same functions. While some of the construction elements, for example a marble block window with mouldings, could be re-used as a door frame, another part of the same marble block could be used as filler material in basement walls and in wallings.

Written sources indicate that during the Ottoman Period a large number of buildings were constructed in Iznik. Today, apart from the remains of some buildings, the following still represent the early Ottoman architecture: 3 mosques (Haci Ozbek Mosque, Mahmut Çelebi Mosque, and Yesil Mosque); 2 soup-kitchens (Nilüfer Hatun Soup-kitchen and Yakup Çelebi Soup-kitchen); 4 baths (two public baths and two private baths): Murat I Double Bath, Haci Hamza Double Bath, Ismail Bey Bath, and another private bath whose name is not known; tombs: Candarli Havrettin Pasa Tomb (outside the city), Seyh Kudbeddin Tomb, Yakup Celebi Tomb, Sari Saltuk Tomb (outside the city), Candarli Ibrahim Pasa Tomb, Candarli Halil Pasa Tomb, Kirgizlar Tomb (outside the city). When these buildings are examined carefully, it can be observed that references in terms of the materials and of the construction technology used, were made to the defence system and to the buildings from the Byzantine architecture still surviving as remains of constructions or as archaeological excavations. Also the building development prior to the Ottoman rule can display the characteristics of materials and construction technology which may refer back to the antiquity. In the construction of the city walls and of the towers, four types of walls were used: 1) facing of stone or marble; 2) rough walling of rubble and mortar with four courses of bricks, similar to "Opus caementium" [9]; 3) walling of two lines of brick and two lines of stones where bricks are laid vertically or at certain angles; 4) walling of complete brickwork. In the Church of Hagia Sophia, the walls were built of rubble and stone with courses of bricks and of complete brickwork. In Koimesis Church, the following types of walls were used: 1) brick walls; 2) alternate walling with five courses of bricks and four courses of rubble stone; 3) alternate walling made up of six courses of bricks and one course of cut stones^[10]. In the remains of Church A near Istanbul Gate were found alternate walls made up of four courses of bricks and one course of stones [11]. In Böcek Ayazma (Sacred Spring) there were rubble stonework with fillers of brickwork. Church B near the Roman Theatre had four types of walls: 1) one course of stones on the ground and then complete brickwork walls; 2) one course of stonework on the ground and then two or three courses of bricks and one course of stones: 3) one course of stonework on the ground and then four or five courses of bricks and one course of stones; 4) one course of stonework on the ground and then two courses of bricks, one course of stones with vertical bricks inserted in between stones^[12].

In almost all of the early Ottoman buildings in this city different versions of the above mentioned four types of walls were extensively used. On the surfaces of all kinds of wallings which were reflected onto the façades, two types of stones were used: rubble stone and roughly cut stone. Where rubble entered into the stonework, there were three versions of walls: 1) walls of one course of bricks and one course of stones in which vertical or standing bricks were inserted into the stonework (Murat IV Bath); 2) one, two or three courses of bricks and one course of stones in which vertical bricks were laid (Hayrettin Pasa Tomb); 3) irregular stonework walls in which horizontal or vertical bricks were inserted between courses of rubblestone (Haci Hamza Bath, Süleyman Pasa Madrasah, Ismail Bey Bath). And where rough stone cutting was used, there were two types of walls involved: 1) walls of three courses of bricks and one course of stones, where vertical bricks were laid, but where different courses of bricks were used in between, however few (Haci Özbek Mosque, Nilüfer Hatun Soup-kitchen, Mahmut Bey Mosque, the minaret of Hagia Sophia Church-Mosque, Kudbeddin Mosque with its minaret and tomb, Sari Saltuk Tomb; 2) walls of two courses of bricks and three courses of stones in which vertical bricks were laid (Kirgizlar Tomb). Wallings of one course of stonework and two or three courses of brickwork defined by roughly cut stones and bricks were used in piers, arches and pendentives. Complete brickwork was preferred in building the trunks of minarets, in domes, in pendentives, and in arches. Only one building in the city, Yesil Mosque, was built of cut stones covered with marble. Among the monumental buildings in the city, Çandarli Ibrahim Pasa Tomb and Çandarli Halil Pasa Tomb were the only examples built of clay blocks.

In the defence system of the city three different building technologies can be distinguished: 1) a layer of "inclined surface mortar", which was obtained by moulding the surface of the mortar layer between the materials making up the wall; 2) the "hidden courses of bricks", which was obtained by leaving a large gap for the mortar between two visible bricks and by pushing one of the bricks to the back in brickwork wall pattern; 3) the "box-work" pattern which was obtained by using vertical bricks at the sides of stones as well as in the upper and lower courses of the stones in stonework walling [13] "Inclined surface mortar" layers can be found in the Hagia Sophia Church the Ayazma Church near the Theatre, and in the Church near Istanbul Gate^[14]. The use of "inclined surface mortar" layer technique is believed to have belonged to the XI. century [15]. It is claimed that using "hidden courses of bricks" continued throughout the rule of the Roman Empire^[16]. From among these details in the building techniques, the use of "inclined surface mortar" and "box-work" walling could also be found in some of the buildings in the early Ottoman period. "Inclined surface mortar" was found in Kudbeddin Tomb and in Kirgizlar Tomb [17]. In alternate walling, bricks can be laid vertically, which gives references to the "box-work" walling, used sometimes persistently and sometimes arbitrarily. And the "depressed bed" technique found in Ismail Bey Bath is believed to, be a characteristic trait of the alternate walling used in Byzantine architecture [18].

The formation of the façades, which developed together with the materials and the technology used in the constructions, gives references to Byzantine architecture with certain characteristic traits. In some examples of Byzantine architecture, especially in those of the later period, the façade was given an active expression by using certain elements. One of these was to use bricks or alternate blind arches on massive façade^[19]. The only example of this to be found in Iznik is Hayrettin Pasa Tomb. In all periods of Byzantine architecture, the material for ornaments used in alternate walling both at the city centre and in the provinces was brick^[20]. The only building where bricks were used intensively as ornaments on the façade is Nilüfer Hatun Soup-kitchen. Octagonal and circular rosettes were dispersed on the wall surfaces not following a definite programme of ornamental patterning; labyrinthine weaving, herring-bone mesh between the arches, checker-board mesh on the arch panels and on the back of the arches, and one course of bricks or one course of saw-teeth remind the brick ornaments used in alternate façades in Byzantine architecture. From among these various choices for ornamentation, only the use of bricks found on the back of the arches was intensively used in the other buildings in Iznik with alternate walling. Another formation which comes from Byzantine architecture is two or three rows of saw-teeth eaves found in those buildings in Iznik which have alternate body walling. A formation similar to the central axis of the narthex in the Byzantine church re-emerges in Yesil Mosque and in Mahmut Bey Mosque. In both of these mosques, there is a door without leaves but with a marble frame placed between the two arches in the middle congregation hall. It is interesting to note that this same formation is found in Yesil Mosque, which gives more references to the Seljuk tradition with its plan-scheme, ornaments, and materials and that this is the first representative of monumental buildings with a central dome in Ottoman architecture.

The buildings in Iznik, although giving references to the Seljuk architecture with their planschemes and their ornamental patterns, also show marks of the local architecture or Byzantine architecture in terms of their moulding technology, materials, and of some details used on their façades. It can be concluded that the impressions taken over from the East in various ways and the traditions pertaining to this area have met and merged here and they have sometimes been used side by side. On the one hand, regional/Byzantine influences carried over from the local building tradition through the building masters and also influences of eastern origin brought in by artists invited from the East have shaped the physical space here by creating a common resulting product.

2. REFERENCES

- [1] Atsiz, Asikpasaoglu Tarihi, 1970, 46p.
- [2] Ibn Batoutah, Voyages d'Ibn Batoutah, Volume 5, MDCCCXIV, 325p.
- [3] Raby, J., "A Seventeenth Century Description of Iznik-Nicaea", *Istanbuler Mitteilungen*, Band 26,1976, 166,168p.
- [4] Divitçioglu, S. Osmanli Beyliginin Kurulusu, 1996, 79p.
- [5] Schneider, A.M., Karnapp, W., "Die Stadtmauer Von Iznik (Nicaea)", *Istanbuler Forschungen*, Band 9, 1938, 10p, Abb. 2, Tafel:1, 2, 14.
- [6] Schneider, A.M., "Die Römischen und Byzantinischen Denkmaeler Von Izinik-Nicaea", *Istanbuler Forschungen*, Band 16, 1943, 13-16p, Tafel 5.
- [7] An old photograph of the building allows us to draw this conclusion: Otto Dorn, K., "Das Islamische Iznik", *Istanbuler Forschungen*, Band 13, 1941, 18p.
- [8] Atsiz, Asikpasaoglu..., 46p.
- [9] Kahya, Y., *Istanbul Bizans Mimarisinde Kullanilan Tuglanin Fiziksel ve Mekanik Özellikleri*, ITÜ Institute of Sciences, Unpublished Doctorate Thesis, 1992, 17p.
- [10] Peschlow, U., "Neue Beobachtungen zur Architectur und Ausstattung der Koimesiskirche in Iznik", *Istanbuler Mitteilungen*, Band 22, 1972, 150p.
- [11] Eyice, S., "Iznik'te Bir Bizans Kilisesi", Belleten, Cilt XIII, 1949, 38p.
- [12] Yalman, B., "Iznik'te Kilise Alt Yapisi", VIII Türk Tarih Kongresi, 11-15 Ekim 1976, 1979, 462-463p.
- [13] Schneider, A. M., Karnapp, W., "Die Stadtmauer..., 9p.
- [14] Schneider, A.M., "Die Römischen...", 12p.; Eyice, S., "Iznik'te Bir Bizans..., 38-39p.
- [15] Semavi, E., Son Devir Bizans Mimarisi, 1980, 101p.
- [16] Schneider, A.M., "Die Römischen...", 37p.
- [17] Otto Dorn, K., "Das Islamische..., 35, 77p.
- [18] Ersen, A., Erken Osmanli Mimarisinde Cephe Biçim Düzenleri ve Bizans Etkilerinin Niteligi, 1986, 45p.
- [19] Eyice, S., Son Devir..., 126p.
- [20] Ersen, A., *Erken Osmanli*..., 46p.

_

^[1] Atsiz, Asikpasaoglu Tarihi, 46p.

^[2] Ibn Batoutah, Voyages d'Ibn Batoutah, Cilt 5 (Paris, MDCCCXIV), 2:325.

Raby, "A Seventeenth Century", s.166,168.

Divitçioglu, *Osmanli*, s.79.

Schneider, A.M., Karnapp, W., "Die Stadmauer von Iznik (Nicaea)", *Istanbuler Forschungen*, Band 9, 1938, 10p, Abb. 2, Tafel:1, 2, 14.

Schneider, A.M., "Die Römischen und Byzantinischen Denkmaeler von Izinik-Nicaea", *Istanbuler Forschungen*, Band 16, 1943, 13-16p, Tafel 5.

An old photograph of the building allows us to draw this conclusion: Otto Dorn, K., "Das Islamische Iznik", *Istanbuler Forschungen*, Band 13, 1941 18p.

^[8] Atsiz, Asikpasaoglu Tarihi, 1970, 46p.

- ^[9] Kahya, Y., *Istanbul Bizans Mimarisinde Kullanilan Tuglanin Fiziksel ve mekanik Özellikleri*, ITÜ Fen bilimleri Enstitüsü, Basilmamis Doktora Tezi, 1992, 17p.
- Peschlow, U., "Neue Beobachtungen zur Architectur und Ausstattung der Koimesiskirche in Iznik", *Istanbuler Mitteilungen*, Band 22, 1972, 150p.
- [11] Eyice, S., "Iznik'te Bir Bizans Kilisesi", *Belleten*, C.XIII, T.T.K, 1949, 38p.
- Yalman, B., "Iznik'te Kilise Alt Yapisi", VIII Türk Tarih Kongresi, 11-15 Ekim 1976, 1979, 462-463p.
- Schneider, A. M., Karnapp, W., "Die Stadmauer..., 9p.
- Schneider, A.M., "Die Römischen...", 12p.; Eyice, S., "Iznik'te Bir Bizans Kilisesi", *Belleten*, C.XIII, 1949, 38-39p.
- [15] Semavi E., Son Devir Bizans Mimarisi, 1980, 101p.
- [16] Schneider, A.M., "Die Römischen...", 37p.
- Otto Dorn, K., "Das Islamische..., 35, 77p.
- Ersen, A., Erken Osmanli mimarisinde Cephe biçim Düzenleri ve Bizans Etkilerinin Niteligi, 1986, 45p.
- [19] Eyice ,S., Son Devir..., 126p.
- [20] Ersen, A., Erken Osmanli..., 46p.

1.Savunma sistemi 2.The Istanbul Gate3.The Yenisehir Gate4.The Lefke Gate5.The Göl

Gate6.,7.Kapi8.RomanTheatre9.Roman Gebalk 10.Church of Hagia Sofia 11.Church of the Koimesis12.Church of the A13.Church of the B 14.Church of the C15. Böcek Ayazma16.Mosque of Haci Özbek17. Imaret of Orhan 18.Tomb of Kirgizlar19. Mosque of Haci Hamza20. Medrese of Süleyman P.21.Imaret of Yakup Çelebi22.Tomb of Sari saltuk23.Mosque of Yesil24.Imaret of Hilüfer H.25.Mosque of Kudbeddin26.Mosque of

Çelebi22.Tomb of Sari saltuk23.Mosque of Yesil24.Imaret of Hilüfer H.25.Mosque of Kudbeddin26.Mosque of Seyh Esrefoglu27.Mosque of Mahmut çelebi28.Minare Kalintisi29.Tomb of Ç. Hayrettin Pasa30.Tomb of Ç. Ibrahim Pasa31.Tomb of Ç. Halil Pasa32.Bath-House of H. Hamza33.Bath-House of I. Murat34.Bath-House of Ismail Bey35.Bath-House37.Mosque of Kumluk/Agalar38.Tomb of Huysuzlar39.Tomb of Ahiveyn 40.Tomb of Alaadin Misri

41.Tomb of Musa Baba