Velika IVKOVSKA

Comparative Analysis between the Istanbul House Plan Types and the Plan Types of the Ottoman Houses in the Panagia District in Kavala

Vergleichende Analyse des Osmanischen Haustyps in Istanbul und dem Panagia Bezirk in Kavala

ABSTRACT

This paper presents a view on the development of the Ottoman House floor plans and their characteristics presented through the examples of the houses built in Istanbul, the capital of the Empire, between the 17th and 19th century and their comparative analysis with the Ottoman houses built on the Panagia peninsula in the Ottoman town of Kavala, today's Greece.

The Ottoman House has its specific characteristics and a special place in the universal history of house types. This house, that later came to be referred to as the Turkish house, is a type of house that can be found within the territories of the Old Ottoman Empire, in the territories of Rumelia and Anatolia.

The goal of the paper is to conclude that the houses built in Ottoman Kavala, and that still exist in the old district of Panagia, have typical Ottoman floor plans amalgamated with local influences but can still be placed among the several typical architectural types of Ottoman House when analysing their floor plans. By presenting and analysing Kavala's urban development, morphology and floor plans, conclusions are derived concerning the characteristics, origins, and influences on the development of the Ottoman house outside the capital of the Ottoman Empire.

Keywords:

Ottoman house, typology of Ottoman house floor plans, sofali house, Vernacular architecture, Ottoman house in the Balkans, Istanbul houses, Ottoman Kayala

KURZFASSUNG

In diesem Beitrag wird ein Einblick auf die Entwicklung und die Merkmale des osmanischen Hauses gegeben. Zuerst wird das osmanische Haus in Istanbul, der Hauptstadt des Großreiches, beschrieben, das zwischen dem 17. und 19. Jahrhundert entwickelt wurde. Diese spezielle Grundrissform wurde von hier in allen Teilen des Großreiches verbreitet. In dieser Arbeit werden in einer vergleichenden Analyse die Gebäudetypen der osmanischen Stadt Kavala gegenübergestellt, die auf der Panagia Halbinsel liegt, heute aber zum griechischen Staatsgebiet gehört.

Das osmanische Haus hat mit seinen spezifischen Eigenschaften einen besonderen Platz in der Weltgeschichte aller Haustypen. Dieses Haus, das später als das türkische Haus bezeichnet wurde, wurde in allen Bereichen des alten osmanischen Reiches errichtet, und ist von Rumelia bis Anatolien verbreitet.

Das Ziel der vorliegenden Arbeit ist, dass die Häuser der osmanischen Stadt Kavala noch heute im alten Stadtteil von Panagia existieren, typische osmanische Grundrisse haben, aber mit lokalen Einflüssen gemischt wurden. Zahlreiche typische architektonische Details des osmanischen Hauses werden in der Analyse der Grundrisse aufgezeigt. Durch die Darstellung der städtebaulichen Entwicklung von Kavala mit der Morphologie der Grundrisse kann über die Eigenschaften schlussfolgernd über Herkunft und Weiterentwicklung des osmanischen Hauses außerhalb der Hauptstadt des Reiches Aufschluss gegeben werden.

Schlagworte:

Osmanisches Haus, Grundriss-Typologien des osmanischen Hauses, Sofali Haus, traditionelle Architektur, osmanisches Haus in der Balkan Region, Istanbul Haus, osmanisches Kavala

INTRODUCTION

This paper focuses on the development of the Ottoman House and its characteristics presented by way of examples of the houses built in Istanbul between the 17th and 19th century and their comparative analysis with the Ottoman houses built in the Panagia district in the Ottoman town of Kavala, Greece. Basing on an analysis of the floor plans of the houses conclusions can be derived concerning the characteristics, origins and influences on the development of the Ottoman house outside the capital of the Empire.

Ottoman urban culture as we know it from Istanbul, Bursa and in the more important Balkan and Western Anatolian towns, was spread over a large area of the Ottoman Empire – but not in all of it – in the surprisingly brief period from the end of the sixteenth century to the beginning of the eighteenth, expressing not only its ruling class but also vast segments of its composite society (Cerasi: 1998). The culture of town society – much in debited to town culture and yet so distinct from it – and hence it housing survived and even expanded its influence up to the first decades of the twentieth century, long after the court's elite production had been changed or abandoned (Cerasi: 1988).

Due to the rarity of datable old houses and the lack of detailed historical studies, scholars and architects have been concerned mainly with the typology of Turkish houses. Sedad Eldem Hakki pioneered the typological studies of the Turkish house. Based on the classification of the plans of the main floors, he presented schematic drawings of the Turkish house types. In his thesis (Aksoy: 1963) worked on the Turkish house and does not give a typology but it advances the concept of one of Eldem's types, the concept of the central space. Both authors explained the differentiation of the house typology by the influence of local tradition and climate (Doğan: 1995). Cerasi also deals with the formation of the Ottoman house and its typology related to its neighbouring countries. The vast territorial expanse of the empire included many house types within it. The typical Turkish-Ottoman house with its sharply defined characteristics that prevailed only in a core limited area of the empire, and though it had often been associated by scholars with Turkish ethnic elements. it included a large number of Slavic, Macedonian, Armenian, and Greek communities and craftsmen. Whether the Turkish-Ottoman house exited as a distinct type before the seventeenth century and imposed itself on the non-Turkish Balkan communities when they began to prosper, or whether the Ottoman house was a syncretic product of a multiethnic society from the seventeenth century onwards with the imperial court acting as a powerful catalyst is an open question (Cerasi: 1998).

In his work *Turkish Hayat House*, Kuban Doğan takes a different approach and finds Eldem's work lack in integral view, a morphological analysis of the totality of the house, and does not take into consideration the exterior configuration and sociohistorical analysis (Doğan: 1995). Doğan goes as far back to the first Turkic tribes and their arrival on Byzantine territory, their socio-historical characteristics and influences.

The reason why this paper compares Istanbul's and Kavala's houses is initiated in the previous chapters. Istanbul as the capital was spreading its influences to all the territories the Ottomans had conquered. In Kavala we find the amalgamation of all the

aspect that some of the most important scholars dealing with the topic of the Turkish House were and are working on: the typology, the climate, the geographical, the socio-historical influences that created the house. Kavala is taken as an example because of its importance in the Ottoman times. It was a town that was built on an empty land, with few, almost non existing architectural structures from the previous periods that could have strongly influenced the development of the town. Its importance was accented with the reparations Sultan Selim 1, Suleyman the Great and his Grand Vizier Ibrahim Pasha made on the Byzantine edifices already existing on the site, the aqueduct and the Byzantine fortress, but besides that the town was developed by the Ottoman Turks and it represents a typical Ottoman settlement uninfluenced by the previous historical periods which makes it a perfect example of arguing the matters that the above mentioned scholars are researching and particularly in this paper the relation, comparison between the floor plans built in these two cities.

METHODOLOGY

The research was done using both quantitative and qualitative research methods. The methodology of theoretical analysis was prepared by a selection and discussion of theoretical and descriptive material, and by a detailed comparison of the theories in terms of their applicability. This method was applied to the Istanbul house development. It is a literature-based research consulting the theoretical work of the prominent architectural historians who have been dealing with the issues of the Turkish House, its origins, typology, social aspect etc. In case of Kavala the qualitative method was combined with the literature based research. Many field trips to Kavala were included in the research where interviews with local authorities and inhabitants were made. On site research of the houses and their current conditions were registered and documented. The comparative analysis was made based on the research made by Turkish authors for the Istanbul cases and the research made by the Aristotle University in Thessaloniki in 1998 on the houses in Kavala. Sketches as well as urban plans were used from the Municipality of Kavala for the purpose of following its urban development.

Morphogenetic structure of Istanbul house plans and Kavala's historic peninsula houses were examined through the development of the land plots conditioning the floor plans. The aim of this technique is to describe different aspects of relationship between the morphological structure of the man-made environments and social structures and events. The main theoretical argument is that the settlement patterns originate in the social life of the user.

1. THE OTTOMAN HOUSE

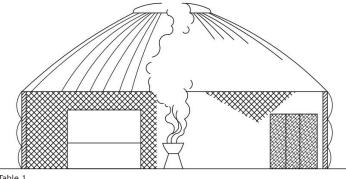
The Ottoman House with its specific characteristics has a special place in the history of house types all over the world. This special house was built in all territories of the Ottoman Empire, between Rumelia and Anatolia. The Seljuk's were the first Turks to invade the territory of Anatolia in 1071 and win over the Byzantine Kingdom. At the battle of Manzikert in 1071 the Seljuk's managed to conquer the Byzantine lands in Anatolia (today's Asia Minor). After the decline of the Seljuk's power and the Beylik period of ruling over the territory of

tipleri (1954).

Sedad Hakki Eldem gives a detailed description of the development of the Ottoman house and its specific floor plans in his book Turk Evi plan

The territory of Rumelia was the region of today's Bulgaria, Macedonia, Serbia, Bosnia and Herzegovina, some parts of today's Albania and

The word oda which means a room originated from the word *otağ* meaning tent.



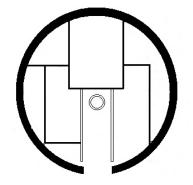


Table 1

Anatolia the Ottomans, by the end of the 14th century, the European territory of Rumelia was under their dominion (Kurran: 2012). In these territories the Ottoman house was established and started its development.1 It is believed that the Ottoman house's origins lie in Anatolia, from where they were spread over Europe via the newly conquered territory of Rumelia.2

The origins of the Ottoman house are still uncertain and a matter of researches. The Turks, who conquered these territories and originated from Middle Asia, were nomadic tribes who lived in tents³. After they arrived in what once was the Byzantine Kingdom they faced an already existing architectural structure and an existing culture on the land that formerly was a home of the Ancient Greek art and architecture. The question of how the nomadic tribe's tent evolved into a solid house is not answered, even today. If we assume that the Ottomans arrived on the territory of Byzantine culture where they found an existing architecture and used it as a reference in the development of their own house, we still cannot prove this assumption, because we do not have any material facts of how the Byzantine house looked like. The Byzantine House originated from the Roman House but we only have material facts of their religious buildings and their palaces in ruins, no material evidence of the Byzantine Houses is present and at our disposal (Eldem: 1984).

If we take a look at the tent that the Turkoman tribes used as their houses we can find similarities with the first Ottoman house which was a single spaced room (oda) and it was used as place for the everyday life (sleeping, eating, sitting), keeping the functional concept of the Turkic tribal tent otağ [Tab. 1]. Later the house continued to grow and slowly two, tree and four rooms were added, forming a new and bigger unit of a house. However, the functions embedded in the traditional room concept remained unchanged [Tab. 2]. This is one of the

characteristics of the Ottoman house, the oda or the room. Each separate room contained all the daily functions of the household unlike the Western houses where each room had its own defined single function, one for sitting, one for sleeping, one for

2. THE PLAN TYPOLOGY OF THE OTTOMAN HOUSE

Two social institutions, the two poles of attraction, between which the social life of the common man was organized, were the family and the mosque. Corresponding to the family is the urban institution of the mahalle (quarter) as a social and physical entity. The mahalle and the mescid constituted a single, compact, socially meaningful unity, a compartment of the city. The *mescid* was the spiritual and the functional centre of mahalle but the house constituted the base of the physical character, expressing family life in its socio-religious context. The division of mahalles according to the ethnic origin or religion of its inhabitants is historically attested, but there were also mahalles of mixed groups living together in the same quarter, especially in the commercial districts (Doğan: 2010)

The physical shape of the city, consisting of an organic accumulation of mahalles, was created by houses. The house appearance is directly influenced by the formation of the mahalles in the organic disposition of the street networks and the position of the woman in the society. For the woman, the house was her own isolated world because of her seclusion. In the mahalles there were a great number of dead ends or blind alleys, a characteristic of all Muslim cities, which had much to do with the Islamic concepts of family privacy and private ownership. The family was the vital cell and essence of urban society. A mahalle was a finite, complete unity, defined by social character and qualities, but not an urban entity with a geometrical concept (Doğan: 2010).

ODA

ODA

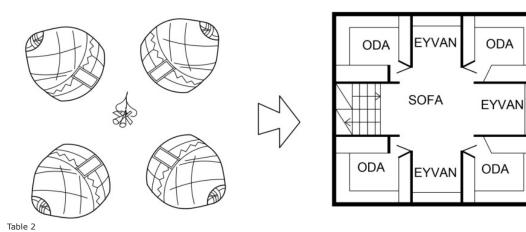


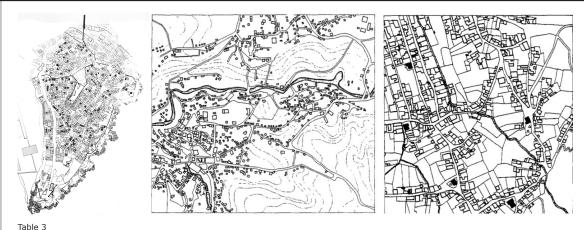
Table 1 Turkoman Nomadic Tent (Yurt) Plan and Section (Graphics by Velika Ivkovska, source: Dogan K. *Türk Hayatlı Evi*).

Table 2

Spatial organisation of a typical floor plan. (Source: Chieko Adachi. *Safranbolu* houses and life)

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The house type without a sofa was considered as a primal step into develop-ment towards the other 3 types. This house type consisted of a single room or more placed in a row with a passage for communication in front of the rooms. If there was a second floor, this passage took the form of a balcony, hence the development of the so called Hayat house, a primordial house type from which the other house types evolved. This house was adapted to the southern provinces where the climate was hot. Its importance in the development of the Turkish house is a source of research of Kuban Doĝan (1995). The difference between this type and the type with an outer hall is that in the case of the latter the hall is enclosed and treated as a part of the house while in the first one the hall is presented with the public space on the ground floor (the street) and the open balcony on the first floor.



The formal aspects of the Turkish towns streets was an outcome of the dwelling form which directly reflects the existence of the family life. The unimposing, modest houses had informal, asymmetrical floor plans dictated by their position on the street, thus dictating their floor plans and formation of the land plots (Doğan: 1995).

A characteristic of Ottoman town morphology was that the urban fabric was composed of not very large garden within the plot.[Tab. 3] The house plan was generated within the plot but encroached on the street, thus conditioning its architecture. The peculiarity of the Ottoman linkage of street patterns to the building type consisted in its development on an axis perpendicular to the street, articulating the volumes in a free pattern from the street inwards.

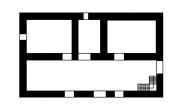
In the Ottoman house only the ground floor adapted to the site, invariably edging up to the street front, even when it was irregular (Cerasi: 1998). The concept of the room was something that defined the Ottoman house that later as it continued to develop it added other necessary features that also became elements of it. The storey of the house is one of the elements specific for the Ottoman house. The house has the ground floor that is usually built in stone

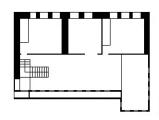
with entrance and small or sometimes no windows at all and the first floor or sometimes the last floor, in case of two storey houses, where every day life was conducting (Cerasi: 1998).

The stairs are another inseparable element of the Ottoman house. Until the 18th and 19th century they were located out of the external side of the hall. Later they were included in the floor plan inside the hall or between the rooms and started influencing the plan and gaining bigger importance and became wider and more spacious (Eldem: 1954). [Tab. 4]

Another element of the Ottoman house is the hall called sofa. The rooms always open into the hall. If the room was compared with an individual house then the hall can be compared with the street and all the houses open onto it. Depending on the position of the hall and the way the rooms open onto it we can determine the types of the Ottoman house [Tab. 5]. This is how the four types of the Ottoman house floor types are distinguished:

- House without a hall (sofasız)⁴
- House with an Outer Hall (dış sofalı) [Tab. 5/left]
- House with an Inner Hall (iç sofalı) [Tab. 5/centre]
- House with a Central Hall (orta sofalı) [Tab. 5/right]





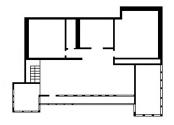


Table 4

Table 3 Town morphology of the residential urban tissue in: left: Kavala,

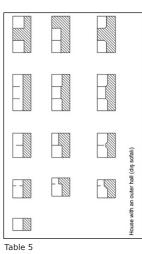
centre: Safranbolu, right: Sarajevo. (Source: Kavala by Kavala Intra Muros 1992; Safranbolu & Sarajevo by Velika Ivkovska)

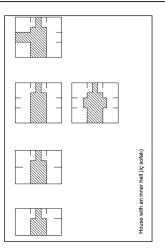
Position of the stairs in houses in Kastoria, Greece. (Graphics by Velika Ivkovska.)

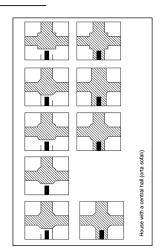
Table 5

House plan types with

left: outer hall, centre: inner hall, right: central hall. (Graphics by Velika Ivkovska).







The Ottoman house classification is made according to their plan and not according to their order in time or to topographic and climate conditions. The reason is that these types could not be attributed to certain periods or to certain regions, being independent of time and place. If a classification based on regional conditions⁵ had to be drawn up, it would have to be made according to the degree of progress and development of the towns and villages, in which the houses were situated (Eldem: 1954).

These four types of floor plans developed further, but kept the basic classification of the plan by the position of the hall. The various plan compositions were executed with divisions such as the *selamlik* and *harem* (Bertram: 2008) and junctions that allowed increasing of the number of halls in the plot. In smaller houses the plan was divided into two parts, simply by leaving one room or more for the *selamlik*. In larger buildings, however, the *harem* and *selamlik* consisted of separate buildings and the unity of the house was being held together by joining these two parts⁶.

The House without a Hall is the most primitive state of a floor plan. It consists of one room or more, placed in a row. In front of the rooms there is a passage. In houses with an upper floor this passage takes the form of a balcony.

The Outer Hall House [Tab. 5/left] type is the first advancement of the development of the primitive house. It was used in the Hittite and Hellenic houses existing in Anatolia before the arrival of the Turks, but was remodelled according to their own needs. At the end of the development these house consists of a hall and a suite of rooms facing the hall. This plan offers the possibility of enlarging the space by adding more rooms with a recesses (eyvan) between the rooms. This plan has some modifications when pavilions $(k\ddot{o}sk)$ are added and the main hall is subdivided with side halls to have access to the side pavilions.

The Inner Hall House [Tab. 5/centre] type presents the next stage of the development of the floor plan of the Ottoman House. This plan is the most widespread type in Turkey. It's development started by adding a further row of rooms on the outer side of the hall. The outer hall and the Inner hall house types continued to exist side by side until the 18th century but since then and particularly in the 19th century the house with the Inner Hall suppressed the type with the outer hall in most of the bigger towns (Eldem: 1954).

The Central Hall House [Tab. 5/right] represents the third and last stage of the development of the Ottoman house plan. Here, the hall is situated in the middle of the house surrounded on four sides by rows of rooms. Among these rows of rooms there are one or two recesses (eyvans) made as cut outs to allow light into the hall. This house was most present in Istanbul. The similarities between the Turkish house⁷ (Doğan: 1995) type and the atrium type of house of the Greece-Roman era are not based on a process of transformation but are rather a result of coincidence. The fact is that the central hall house has its origins in Asia and that is where the plan of the Turkish house comes from. The central house plan was mostly used in the palaces and royal residences in Asia. The palaces and royal residences that were built in Central Asia and Iran with centralized plan since 12th and 13th century were introduced to Turkey with the construction of the Tiled Pavilion (Çinli Köşk) in Istanbul (Eldem: 1954). [Tab. 6]

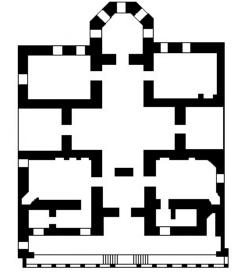


Table 6

3. ISTANBUL HOUSE'S PLAN TYPES IN THE 18TH AND 19TH CENTURY

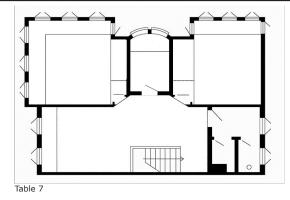
The regional classification of the Ottoman houses happened as a result of the different topographical, social and climate conditions. The Ottoman House has found its classic being from the Marmara and Rumelia regions and from places that were under the influence zones of these regions (Eldem: 1984). Out of these two central regions, Marmara dominated Rumelia, and Istanbul has dominated Anatolia. The Istanbul and Marmara regions have special importance among the seven main house types group regions: The Black Sea shore hinterland region; Istanbul and Marmara region; Aegean hinterland region; The Mediterranean region; Central Anatolia region; Eastern Anatolia region and South-East Anatolia region.8 The Istanbul House can be considered as a typical Turkish House while the house types of the other regions can be described as regional provincial types. Edirne comes also in the same group as Istanbul with the difference that the Edirne House type influence had spread towards Rumelia while Istanbul's Influence embraced whole Anatolia (Eldem: 1984).9

While analysing the vernacular house of Istanbul it is inevitable to analyse the whole Marmara region and its towns in order to understand the development and the influences of the development of the Ottoman house from Istanbul to the other towns of the region and vice versa. The material evidence of the Istanbul house we have today dates as early as the end of the 18th century because most of the material evidences from the previous centuries were lost in the great Istanbul fires and especially the one in 1660 (Baer: 2004)10. In lack of existing buildings the Istanbul House can be analysed also through the photographs, notes from visitors, paintings, postcards of Istanbul from the previous eras. Finding existing houses from previous centuries is very difficult since the town was under constant change of its looks, rulers and population especially after the Allied Occupation (Eldem: 1984). The Topkapi Palace buildings can serve as another source of insight of the vernacular structures and can give us more clear idea of the vernacular architectural structures. The most resourceful example are the structures of the harem section of the Topkapi Palace which represent typical vernacular architectural characteristics of an Ottoman domestic life even though it was built as part of the consumption needs of the royalty.

- 5 In his book *Türk Evi Osmanlı Dönemi*, Vol.1 S.E. Hakki gives a detailed explanation of the regional classification of the Ottoman house. There, he classifies the houses in seven groups. For more details on that see the refereed book; p. 30-32
- 6 Selamlik means greeting area and refers to the part of the house used by men for business and social relations with other men outside the family. Harem was the area of the house reserved for the family. Here, women and children live together with the men of their family. Men without a female companion or from outside the family circle were isolated from here as soon as they had passed puberty.
- 7 The term Turkish House denominates a distinct cultural realm, whereas Ottoman is a very general title which covers many dwelling traditions different from each other and related to recognizable cultural backgrounds.
- **8** See Eldem S.H. *Türk Evi Osmanlı Doneminde*. p.31
- **9** Ibid. p.31-32
- 10 Baer, M. D.(2004). The Great Fire of 1660 and the Islamization of Christian and Jewish Space in Istanbul. *International Journal of Middle East Studies*, 36(2), p. 159–181. Retrieved from http://www.jstor.org/stable/3880030

Table 6Tiled Pavilion floor plan.
(Graphic by Velika Ivkovska)

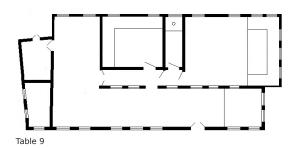
11 See table 6



The majority of the buildings in Istanbul that date from the end of the 18th and 19th century are the inner hall and central hall type. It is believed that very few possessed an open hall. Central and axial halls were more popular. It is easy to understand why the earlier plan types of Istanbul were quickly abandoned to make way for the inner and central hall type. The vernacular trends in Istanbul were innovative in comparison to those of the provinces. Istanbul's urban landscape was changing rapidly and houses were always "modernised". Thus, some house types could be still present in the provinces while abandoned in Istanbul for a long time already. The architecture in Istanbul had great influence on the Marmara region. In the nearby towns of this region, Bursa, Gebze, Izmit, we still can find houses dated earlier than most of the houses in Istanbul and it is from here, since it is possible to find material evidences, that we understand how the houses in the capital looked like in the centuries before the destructions of the great fires (Eldem: 1984).

If we consider the Tiled Pavilion (see below and table 6), built in 1472 and located within the Topkapi Palace outer walls, one of the earliest Ottoman "house" that is fully preserved it is here where we can gather a lot of information about the developing of the Ottoman house types. The pavilion was built by the Ottoman sultan Mehmed II as a pleasure palace or kiosk located in the most outer parts of the palace, next to Gülhane Park. The earliest remaining pavilion from the first building of Fatih, it shows the Timurid influence on the early palatial Ottoman architecture and decoration. Its crossaxial plan is to become the prototype for Ottoman kiosks and *yali* (water-front pavilions) in Istanbul (MIT:21016).

The building has a Greek cross shaped ground plan and is two storeys high, 11 although since the building straddles a declivity, only one floor is visible from the main entrance. The exterior glazed bricks show a Central Asian influence (Eldem: 1984). The square, axial plan represents the four corners of the world and symbolizes, in architectural terms, the universal authority and sovereignty of the Sultan. As there is no Byzantine influence, the building is ascribed to an unknown Persian architect (Necipoğlu: 1991). The stone-framed brick and the polygonal pillars of the façade are typical of Persia.



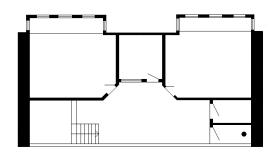


Table 8

A grilled gate leads to the basement. Two flights of stairs above this gate lead to a roofed colonnaded terrace. This portico was rebuilt in the 18th century (Classicyear: 2016). The great door in the middle, surrounded by a tiled green arch, leads to the vestibule and then to a loftily domed court (Necipoğlu: 1991). The three royal apartments are situated behind, with the middle apartment in apsidal form. [Tab. 2] these apartments look out over the park to the Bosphorus. The network of ribbed vaulting suggests Gothic revival architecture, but it actually adds weight to the structure instead of sustaining it. On both wings of the domed court there are eyvans, vaulted recesses open on one side.

The building has a typical inner hall floor type and was suitable for palaces and imperial mansions. In 17^{th} and 18^{th} centuries it began to be used more extensively and was also applied to houses with the object of giving each house, up to a certain degree, the character of a small palace. This type of plan has been applied to houses with a notable sense of measure and proportion and much progress was made in the development of house plans of this type that is considered as a foundation of the inner hall floor type plan that was excessively used especially in the 19^{th} century Istanbul as well as in the houses of the Rumelia province. (Eldem: 1984)

The Ottoman house development can be followed in three periods. The first period studies the oldest form of the Ottoman house and starts somewhere in the 16th century. During the 17th century the houses were generally built with an open hall. The houses who had the sitting area on the first floor usually had the stairs on the outside of the facade and accessed the floor through the hall. This stairs were sometimes located within the hall. The house in the Istanbul neighbourhood Halicioglu [Tab. 7] is a typical example of the Outer Hall floor type and the house type from the first period that also

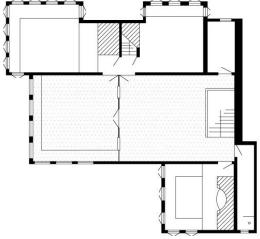


Table 10

Table 7Halicioglu neighbourhood.
(Graphic by Velika Ivkovska, source: Eldem S. H. *Türk Evi*

Table 8

Plan Tipleri)

House in Mevlanakapi, Istanbul. (Graphic by Velika Ivkovska, source: Eldem S. H. *Türk Evi Plan Tipleri*)

Table 9

House from the end of 17th century Istanbul has the outer hall type that was typical for the first period. Unfortunately very few of these houses exist today. Some of them were demolished and some of them were lost by the time. The plan, as it can be seen from the house had its additions, like the side hall in this example. (Graphic by Velika Ivkovska, source: Eldem S. H. Türk Evi Plan Tipleri)

Table 10

House in Bebek, Istanbul. Sometimes pavilions were erected at one or both ends of the hall. (Graphic by Velika Ivkovska, source: Eldem S. H. *Türk Evi Plan Tipleri*)



Table 11

included some elements of the second period like the doors of the rooms located on the angled cornered walls opening onto the hall. The stairs are located in the hall sliding on its outer facade.

The houses of the second period were typical for the whole 18th century. The house plan changed into the house with inner and central hall plan and the house with an open hall became unusual. This kind of hall was typical for Istanbul and spreads to the Marmara region. When the hall became enclosed more free arrangement of space was allowed. Rooms were now located at the corners of the house and were exposed to maximum light. The hall (sofa) could now be extended with a use of pavilion like verandas. These phases were the most mature vernacular developments of the house. The house from the second period had extensions resting on big props, frequent windows, and high upper course windows. In fact the first period house existed alongside the second period house for quite some time (Eldem: 1984). Many houses of this development still exist in Istanbul, such as the example drawn from Selma Tomruk, Istanbul. This house has three storeys and has a garden, both being typical elements of town houses. The sofa being located in one corner of the property, does not get any natural light, so recesses (eyvan) had to be added to this area [Tab. 11]. The ground floor is made of stone, while the two upper floors are a timber frame construction (Eldem: 1984).

The house with inner hall that were commonly in style in the second period had different modifications from the main type characteristics. Most common the inner hall plan is a plan where the hall is located in the middle of the house and rows of rooms are positioned on both sides of it. [Tab. 12] At one end of this hall the stairs were located [Tab. 13]. The entrances to the rooms were all located near the middle of the hall and were all opening onto it. In the house built in Haskoy we notice modification of the typical inner hall floor plan type, where the stairs instead of being

located in the hall and opening onto it, they are positioned outside the hall and between the rooms (Eldem: 1954)

The final development of the Ottoman house took place in the 19th century. The most common floor plan in the third period was the central hall plan. The halls started getting bigger in space and the stairs were given an important place in the plan. In this century baroque influences started to take its place within the house (Doğan: 1995). Baroque curves were being presented via an oval hall or curved doors that opened onto it. The central elliptical hall was popular, since it was presenting social status and was a symbol of lifestyle in the metropolis. [Tab. 14] This style was very much present in the Balkans, even at the period of the Empire style, that arrived in Istanbul at the beginning of the 19th century, when the elliptic halls started to disappear but were still present in the provinces.

4. HISTORICAL DEVELOPMENT OF KAVALA

The town of Kavala was first mentioned in the 7th century BC by the name of Neapolis, the new city, a colony of the people of Thasos, and then as a strong, independent city and a member of the large Athenian League. During the time of the Macedonian dynasty, King Philip, the father of Alexander the Great, annexed it from Athens and it became a port of his stronghold at Philippi. During the Roman period it became a major port and a much frequented staging port on via Egnatia. [Fig. 1] Neapolis was founded on a headland projecting into the sea which could be easily fortified. The name of the town was changed to Christopolis.

Towards the end of the 14th century Christoupolis was conquered and burnt down by the Ottomans and for some time the site has been abandoned. Eventually, the Ottomans repopulated it. The region was conquered by the Ottomans in ca. 1387 and from that year on until the 16th century, the town was named Kavala. It became a vibrant port due to the activities of the Ottoman Grand Vizier Ibrahim



18th Century. (Graphics by Velika Ivkovska, after: Eldem:

Table 13

House in Findikli, Istanbul. (Graphics by Velika Ivkovska, after: Eldem: 1954)

Table 14 Bebek, Istanbul. Plan of the Nispetiye Pavilion. End of 18th century. (Graphics by Velika Ivkovska, after: Dogan: 1995)

Table 14

Bebek, Istanbul. Plan of the Nispetiye Pavilion. End of 18th century. (Graphics by Velika Ivkovska, after: Dogan: 1995)

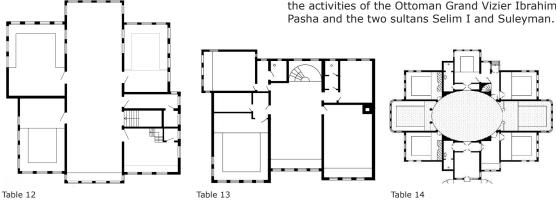




Figure 2

TABLE I: The Population of Ottoman Kavala:1478-1667

	ADLL I. THE TOPUIALI			
Source & Date	Muslim Hanes [Households] & Population	Christian Hanes [Households] & Population	Jewish Hanes [Households] & Population	Total Population
<u>BA: TT#7</u> : 88-9 [h.883= 1478]	12 hanes=60	75 hanes=375 8 bives=32	-	467 Mus.: 12.8% Christ.: 87.2%
BA: TT#70:3 [h.925=1519]	22 hanes= 110	61 hanes= 305 10 bives= 40	-	455 Mus.: 24.2% Christ.: 75.8%
<u>Piri Reis</u> [1526]	-	-	-	-
Kavala Fortress Garrison:*	Confirms existence of the new Fortress	-	-	?
BA:TT# 167: 31& 37 [h. 937= 1530]	16 hanes= 80	31 hanes= 155	-	445 Mus.: 65.2% Christ.: 34.8%
Kavala Fortress Garrison:**	42 neferan = 210	-	-	-
Servants of the <i>Imaret</i> of <i>Ibrahim Paşa</i> :	?	-	-	-
<u>Pierre Belon</u> [March 1547]	Muslims:	Greeks: ?	Jews: 500+	?
TK:TK# 194:v254 [h. 977= 1569]	81 hanes= 405	52 hanes= 260	30 hanes= 150	1,280 Mus.: 68% Christ.: 20.3% Jews: 11.7%
Kavala Fortress Garrison:***	61 hanes=305	-	-	-
Servants of the <i>Imaret</i> of <i>Ibrahim Paşa</i> :	32 hanes=160	-	-	-
<u>Evliya Çelebi</u> [1667]	-	-	-	5000 [1,000 hanes]

Located on Via Egnatia, Neapolis was primarily intended to secure commercial control of the straits between Thassos and the mainland and to exploit gold. (Source: www.wikipedia.org)

Figure 2

Ottoman advance in Europe and Asia Minor: Ottoman con-quests till 1451 (red); Under Mehmed II 1451-1481 (yellow); Under Selim I 1451-1420 (blue); Under Suleyman the Great 1520-1566 (green). (Source: www.wikipedia.org)

Table 15 The content of the Ottoman register (Source: Heath W. Lowry. The Shaping of the Ottoman Balkans 1350-1550 The Conquest, Settlement & Infrastructural Development of Northern Greece. 2008. Bahçeşehir University Publications. Istanbul. p.232)

Table 15

Piri Reis clearly states that the fortress of Kavala was built by Sulan Selim I who ruled between the years 1512-1520

Includes: 1 Dizdar (Comander), 1 Kethüda (Majordomo), 1 Imam (Prayer Leader), and 5 Topçus (Artillerymen), together with 34 Nefers (men) of the garrison.

^{***} Includes: 1 Dizdar (Comander), 1 Kethüda (Majordomo), 1 Imam (Prayer Leader), and 10 Topçus (Artillerymen), together with 48 Nefers (men) of the garrison.

5. THE OLD CITADEL - PANAGIA PENINSULA

The Panagia peninsula is where the old historic nucleus of Kavala is located. Its boundaries are defined by natural and artificial features as the cliffs, the harbour, the city wall and the aqueduct. The district consists of a number of sites, whose individual characters are a result of historical evolution, the configuration of the terrain and the way they are incorporated into the urban area of Kavala as a whole. 12 [Fig. 3] Although the Panagia district may be described as a unified urban unit, by a more detailed observation, districts and subdistricts can easily be distinguished. The Byzantine and post-Byzantine nucleus lies at the top of the peninsula, separated from the XVI century extension by the original fortified wall.

Inside the old nucleus five defined Ottoman localities can be determined except from the area on the top of the hill that is marked with the ancient $\dot{\mbox{\sc Byzantine}}$ walls and corresponds to the town of Christopolis. Four Muslim and one Christian district can be distinguished in the Panagia area. Husein Bey neighbourhood, Kadi Ahmed Efendi neighbourhood, Halil Bey neighbourhood, Panagia neighbourhood¹³ and the fifth sub district is the extramural part of the peninsula known as Ibrahim Pasha neighbourhood. [Fig. 4]

The present parcelling of the Panagia Peninsula dates from various phases in the district's development and traces of the traditional system of land distribution can still be seen. In most cases the boundaries of the plots are fairly free and



Figure 3

follow one another, a feature which is connected with the way in which the land-parcelling system evolved. Generally we might conclude that the continuous, unbroken lines correspond to earlier divisions and mark the original properties, while the broken ones and those forming narrow frontages come from later subdivisions of the original parcels (Kalogirou:1992). [Fig. 5] The urban core of the peninsula was subject to continuous changes but the main arteries are still existing, such as the Poulidou Street and the Mehmed Ali Street. However, the parcels in between changed constantly; a fact that can be noticed from the proposals for urban planning of the Peninsula commissioned by the Egyptians in 1911-1912, [Fig. 6], as well as in comparison of the urban development of the area through the decades. [Fig. 7]

- 12 Kalogirou N. Nomikos M. Papadopoulou T. (1992) Kavala Intra Muros: Spatial readings and Architectural Proposals. Kavala: Municipality Kavala.
- 13 Later this name was adopted as the name of the whole old peninsula.



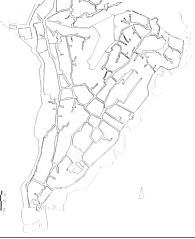




Figure 4

Figure 5

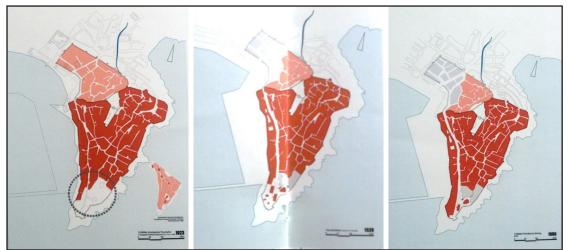


Figure 7

Figure 3 North-east aerial view of Kavala from the Panagia Peninsula (photographer Achil-leas Savvopoulos). (Source: Dimofelia Municipality of Kavala http://www.kavalagreece.gr/

Figure 4

en/?page id=33)

Urban Plan of the Panagia district, Kavala from 1923: Courtesy of the Municipality of Kavala, Sector for Urban Planning. (Source: Velika Planning. (Sou Ivkovska, 2015)

The urban fabric at the beginning of the 20th century (redrawing of the basic mas-ter plan Commissioned by the Egyptians in 1911-1912. (Source: Kavala Intra Muros: Spatial readings and Architectural Proposals. 1992. Demos Kavala. p.18)

Proposed street plan for the Panagia peninsula found in the Imaret archive, redraw ing of an unsigned color sketch believed to have been commissioned c.1911-12 by Egyptians. (Source: Kavala Intra Muros: Spatial readings and Architectural Proposals 1992. Demos Kavala. p.37)

Urban changes in the Panagia district in the 20th c. in 1923, 1939 and 1986. (Source: Kavala Intra Muros: mobility. 2006. p.18-19)



Figure 8

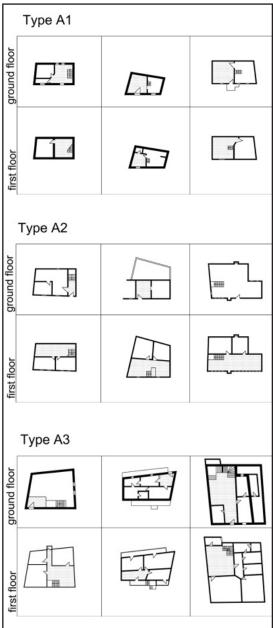


Table 16

The map was designed following the framework features from 1962. (Source: Kavala Intra Muros: mobility. 2006. p.22-23)

Figure 8

Table 16 Type A house plans. (Graphic by Velika Ivkovska, source: Kavala Intra Muros: Spatial readings and Architectural Proposals. 1992. Demos Kavala. p.30)

6. THE HOUSES IN THE PANAGIA **PENINSULA**

The residential blocks in the Panagia district are of various shapes and sizes. Most common and typical block shape is the oblong one, embedded with the network of roads running down the slope. These residential blocks tend to be narrow, their width takes up two plots, or sometimes only one. Those residential blocks that have one side faced toward the city wall or faced towards the sea differ from the typical residential blocks that are surrounded on all four sides by streets because they are not bounded on all sides by streets. Those in the district's north extension are of particularly varied and indeterminate shape, especially those on the outskirts. Access to those properties, which are inside the blocks, are the typical tiny dead ends (cul-desac) so specific for the historic centres of many parts of northern Greece (Kalogirou:1992).

An examination on how the buildings are positioned in the urban fabric shows that they are organized in two ways: either as free standing units or in linear disposition along an axis. [Fig. 8] The relations between the buildings determine the overall profile of the district, most important of all being the direction of the building's main axes (Kalogirou:1992).

In the Panagia peninsula, in order to achieve plenty of sunlight and a good view, the axes are at right angle to the slope of the ground and this uniformity reinforces the impression of a homogeneous whole. This and the intense built on the peninsula add to avoiding fragmentation and creating the unified whole.

7. TYPOLOGY OF THE HOUSE PLANS

A typological and morphological examination of the buildings makes it possible to assess their particular qualities and characteristics. A research conducted by the University of Aristotle lead to certain conclusions about the typology of the houses. By a close examination of the plans three basic types were set: types A, B and C.

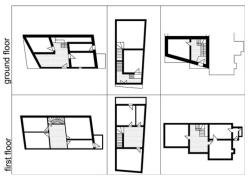
The type A is a house with two rooms; one closed one semi-open. The most simple type in the Panayia district is the two storey building with a closed balcony- sitting room and a vertical access in a form of a staircase (Type A1) [Tab. 16]. This balcony is actually the outer hall that we find in the first period of the Ottoman houses in Istanbul. The other more common is the A2 type with broader front, usually with 2 rooms next to each other and an enclosed area (balcony-sitting room) where the stairs are located. [Tab. 16] The A3 type is with even broader front and has 3 or more rooms in a row fronted by a spacious sitting room. [Tab. 16] From the floor plan analysis of the A type we can conclude that this type of a house has an outer hall which is closed and from which we access the room or the rooms. The stairs are placed inside this hall.

Type B is essentially a product of evolution of the parcelling system and successive division of urban land. The buildings are two storeys, narrow-fronted structures presenting a limited area towards communal spaces. It is an urban type with transitional features (Kalogirou:1992). [Tab. 17]

In this case the sitting room which gives access to the other rooms does not have the major role that it has in the A type but sometimes can be so

Type C





ground floor

Table 17 Table 18

narrow that the rooms are positioned on either side of it and that way does not receive any direct light. In this type of a house we notice a transformation of the hall into a some type of a corridor since it space became so narrow that only hosted the stairs and allowed access to the rooms. The term that is used for the hall here is the sitting room that in the B plan type lost its function. The stairs lead to a smaller enclosed room that is sometimes at the centre of the house but its dimensions and position do not suggest a function of a hall since its very small dimensions and no functions in it at all (Kalogirou :1992).

The type C is probably more recent and is more urban in character [Tab. 18]. It comprises two-storeys, is box shaped and can have a wide front. Some additional morphological features are visible. One feature that is in common to all variations of this type is the internal central sitting room with the rooms positioned symmetrically on either side of it (Kalogirou :1992). There are usually two rooms on either side and they all open into the sitting area which runs through the length of the house with the stairs usually at the back. The type C presents the inner hall floor plan as we presented in the examples from the second period of the development of the Ottoman house in Istanbul. The long inner hall spreads in the middle of the house and



Table 19

the position of the stairs is sometimes at one end of it or in the middle. This type of house plan corresponds to the split belly floor type (*karnıyarık*) which is a modification of the house with an inner hall that corresponds with the type B that is used by the Greek scholars. [Tab. 18]

Given the examples from the plan types in Ottoman Kavala we notice that the central hall plan does not appear in the typology of the houses in the town. If the style itself presented nobility and social development, then we can conclude that the town kept its provincial character.

The Mehmed Ali house can be presented separately, because of its owner's importance not just to Kavala but also to the Ottoman period and the Egyptians whose last dynasty he ruled. The house was owned by his maternal grandfather and Mehmed Ali lived here after his parents' death (Lowry: 2011). Probably in the eighteenth century Mehmed Ali's house was one of the town's very important and obviously few mansion houses. Typologically the house is a traditional broad fronted two storey residence with a linear layout of rooms. It has an enclosed *hayat* (balcony) with cantilevered bay windows on its south end on the first floor, auxiliary areas and covered courtyard below. [Tab. 19]

The house of Mehmed Ali is one of the few remaining residences in Greece which preserve the separate men and women's quarters (selamlık and harem respectively), which were some of the chief characteristic of the Turkish Houses of the well situated families. Additions and alterations have not affected the basic typological coherence of the building (Kalogirou:1992). The house, today a museum, presents a typical Ottoman mansion. It was built on the steep terrain on the east side, lying on a solid rock over which a stone ground floor was built above which lies the beautiful light wooden top floor with incredible plasticity of the bay windows. [Fig. 9]



Figure 9

Table 17

Examples of the Type B houses. (Graphic by Velika Ivkovska, source: Kavala Intra Muros: Spatial readings and Architectural Proposals. 1992. Demos Kavala. p. 30)

Table 18

Examples of the Type C houses. (Graphic by Velika Ivkovska, source: Kavala Intra Muros: Spatial readings and Architectural Proposals. 1992. Demos Kavala. p.31)

Table 19

Floor plans of the Mehmed Ali's Figure house made for its reconstruction in 2001. (Source: Velika Ivkovska, 2014)

Figure 9

Bay windows of Mehmed Ali's House. (Source: Velika Ivkovska, 2014)

DIFFERENT EXAMPLES OF HOUSES IN THE PANAGIA PENINSULA





Houses on Pulidu Street (Source: Velika Ivkovska, 2014)















Types of bay windows, and consoles as methods for straightening the top floor plans (Source: Velika Ivkovska, 2014)

DIFFERENT EXAMPLES OF HOUSES IN THE PANAGIA PENINSULA





Different types of bay windows, methods for straightening the top floor plans (Source: Velika Ivkovska, 2014)







Mehmet Ali's House bay windows (Source: Velika Ivkovska, 2014)



Mehmet Ali's House (Source: Velika Ivkovska, 2014)

8. CONCLUSION

The Ottoman vernacular style in general had undergone three major stages. Very little is known of the domestic forms from the 15th and 16th century. This is why an analysis of the development of the Ottoman house types cannot be taken further back than the 17th century. The development can be followed in three phases that correspond to three distinct types. The first phase is the 17th century house, the second is the 18th century and the third is the 19th century. These phases are believed to have their roots in Istanbul and then spread over the Marmara region and had their secondary influences in the further geographical territories of the Ottoman Empire. Some of the types from previous periods still continued to live parallel with the contemporary style, but mostly these older house types prevailed in the provinces. That is why this three period division of the types by centuries can only be applicable to Istanbul.

From the development of the urban area of the Panagia Peninsula it can be concluded that a constant impact on the urban fabric has been occurring through the decades after the Ottomans lost the rule over this town. The impact of the fabric is noted as dramatic and had affected the view of the area from sea and also the internal routes.

The Ottoman houses have undergone changes and modifications. From analysing the floor plans we can follow the development of the house and determine few types of floor plans. Some of them correspond to the earlier development of the area due to their lack of space and modest development in its interiors. As for the houses with wider floor plans we can conclude that they firstly were built probably in the later centuries of the Ottoman dominion, when the tobacco industry was in its bloom. This allowed a prosperous urban community and the rich families were by then able to build bigger and more spacious houses on larger properties instead of the small and often shady previous houses. The specifics of the terrain and the location of the settlement had a direct impact on the typology of the houses, too. They became a mixture of the Ottoman house type and traditional positioning of the house on the property according to the terrain. The richness of the architectural elements that can be seen in this location are of exceptional importance since they show the ways how the builders in those times were solving problems in order to design and build houses that would provide not just the basic needs for shelter but also commodity, view and light.

The Ottoman house that developed in Istanbul had its influences not only to the Marmara region but also to Edirne, that had its influences spreading in Rumelia. It can be concluded that it was actually the influence of the capital that came through Edirne into the Rumelia region. The Ottoman house in Istanbul had its development stages across the centuries, which we can trace back to the 17th century. The Istanbul house had its 3 major phases of development that happened in the 17th, 18th and the 19th century where three floor plan types were being developed, the outer, inner and central hall plan types, each favoured in each of the three following centuries. Sometimes the older style was still being built when the following style was already in use. Over time, the older style used to vanish, giving way to the new house type. This was not the case with the provinces, though. Kavala, being also one of the Ottoman provinces, just like most of

the towns in Rumelia, still kept its previous styles. This is why the division of the style development by centuries can only be applied to Istanbul but not to the other provinces of the Ottoman Empire.

Istanbul, being the metropolis, had its own lifestyle and specific vernacular architecture that developed with the more powerful and wealthier inhabitants, but also with the glory of the capital itself. In the case of the town of Kavala the most respective and noble house was Mohamed Ali's house, the founder of the Egyptian dynasty. His house is the only one in Kavala built as a mansion with the specific architectural characteristics of a wealthy family. The other houses in the old city of the peninsula that are preserved, kept their "provincial" characteristics. However, also the morphology of the terrain was an important shaping factor, which led to a different outlook of house and property than in Istanbul. Being densely populated, the plots were very small, sometimes narrow, and also positioned on the sloping terrain, that added to the difficulty of having wider or at least clearer forms of plots. This was not the case with the houses that were built by the middle and the end of the 19th century when the tobacco industry started to flourish in Kavala. By then, foreign traders settled in the town and built their houses and brought with them western influences. But these houses were not built in the old district of the peninsula since it was already overcrowded. The parcels of the houses in the Panagia district remained untouched and the houses kept their original floor plans. In this area the central hall plan did not exist until the end of the 19^{th} century. Several houses with an inner hall were built but they had their entrance from the upper floor which was something that was due to the topographical specifics of the plots. This specificity was not based on Ottoman influences or characteristics, but was rather a functional element.

In the Panagia district all Ottoman house elements are visible till today, the urban fabric kept its Ottoman organic structure with interventions made in later centuries, following the needs of the new life styles as well as the general development of the town. It is not negotiable that the Panagia district in Kavala was a typical Ottoman town with its urban and architectural specifics of an Ottoman one. Kavala was a fresh, new Ottoman town build on an empty plot and no local or previously existing influences could have made an impact on the house development. There was no settlement and no life on the Panagia peninsula for nearly a century, from the Ottoman conquest in 1391 until 1478 when earliest mention of a village/town named Kavala was found in an Ottoman tax register. This is why Kavala is a good example of an Ottoman Town from which we can learn about the Ottoman urban planning and house typologies outside the capital Istanbul. By comparing Istanbul and Kavala house types it can be concluded that in Istanbul there was a strict distinction between house types of certain periods whilst in Kavala, also house types from previous centuries coexisted at the same time. This fact, however, is a typical fact in provinces generally.

It can be concluded that the denomination of the floor plans used by the Greek scholars where they refer to the house types in the Panagia peninsula in Kavala with "A", "B" and "C" are actually the three floor types that are widely accepted by the scholars when classifying the Ottoman House plan typology. The type "A" corresponds with the Outer Hall type, type "B" belongs to the inner hall type floor plan and finally type "C" is the house with the elongated

hall, a subtype, the split belly floor type (karniyaik). The oldest floor type "A" corresponds to the earlier centuries of the Ottoman rule and is an outer hall two spaced dwelling with one room and a hall on the top floor. While in Istanbul the previous style was changed with the next following the century development, in Kavala, depending on the size of the plot and wealth of the owner three floor types continued to coexist.

Acknowledgements

"This paper has been presented with the support of the Turkish Cultural Foundation. The contents of the publication are the sole responsibility of the author Velika Ivkovska and can in no way be taken to reflect the views of the Turkish Cultural Foundation."

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 (accessed on 01.04.2015)

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