

# Artículo de investigación Plan organization in XX. Century housing architecture in North Cyprus

Plan de organización en el Siglo XX. Arquitectura de viviendas del Siglo en Chipre del Norte

Recibido: 13 de julio del 2019

Aceptado: 23 de agosto del 2019

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#### Abstract

The concept of housing in Cyprus was shaped with the effects of life cultures of different civilizations throughout the history of Cyprus, and plan organization underwent changes by those effects. Housing plans, shaped with the effects of various cultures in the XX. Century in North Cyprus, shows variances. The plan typology of the first quarter of the century still carried the effects of the XIX. Century Ottoman Period, and Inner Hall Plan scheme, bearing characteristics of Traditional Turkish Houses, was widely used. During the second quarter of the century, between 1925 and 1950, the Inner Hall Plan scheme of the previous period underwent changes. Besides rooms opening to the hall, a plan scheme appeared in which rooms were connected to the hall with corridors. 1950-1975 became a period in Cyprus, in which houses were designed by architects. During this period, the use of reinforced concrete carcass enabled more organic solutions in plan organizations. Thus, instead of traditional plan schemes, personal house plans were designed to suit the needs of users. The last quarter of the century was a period of economic hardships in North Cyprus. Therefore, economic housing construction became the norm, with standard plan schemes, rather than personal designs.

**Keywords:** Cyprus, Shelter, Housing, Plan, XX. Century

## Resumen

El concepto de vivienda en Chipre se formó con los efectos de las culturas vitales de diferentes civilizaciones a lo largo de la historia de Chipre, y la organización del plan sufrió cambios por esos efectos. Planos de vivienda, conformados con los efectos de diversas culturas en el XX. Siglo en el norte de Chipre, muestra variaciones. La tipología del plan del primer cuarto de siglo todavía tenía los efectos del XIX. El período del siglo otomano y el esquema del plan de la sala interior, con características de las casas tradicionales turcas, fueron ampliamente utilizados. Durante el segundo cuarto de siglo, entre 1925 y 1950, el esquema del Plan del Salón Interior del período anterior sufrió cambios. Además de las habitaciones que se abren a la sala, apareció un plan en el que las habitaciones estaban conectadas a la sala con pasillos. 1950-1975 se convirtió en un período en Chipre, en el que las casas fueron diseñadas por arquitectos. Durante este período, el uso de la carcasa de hormigón armado permitió más soluciones orgánicas en las organizaciones del plan. Por lo tanto, en lugar de los esquemas de planes tradicionales, los planes de viviendas personales se diseñaron para satisfacer las necesidades de los usuarios. El último cuarto de siglo fue un período de dificultades económicas en el norte de Chipre. Por lo tanto, la construcción de viviendas económicas se convirtió en la norma, con esquemas de planes estándar, en lugar de diseños personales.

**Palabras clave:** Chipre, Refugio, Vivienda, Plan, XX. Siglo

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## Introduction

One of the basic needs of humans, shelter, appears with the history of humanity and caves – natural shelters – were used first. Thus, people isolated themselves from natural conditions and wild animals. Through the historical process the notion of shelter underwent changes parallel to the changing and developing living conditions, finally reaching the notion of housing/dwelling designed and arranged to meet the contemporary needs of people.

Human history in Cyprus began with the Paleolithic Period (10,000-8,500 BC) and during this period people used caves as shelter. With the Neolithic Period (8,200-3,500 BC) people began to build their own shelters of circular plan, with a dome, named *Tholos*, using traditional materials (stones, trees, mud bricks).

Periods of different civilizations in the history of Cyprus brought out house planning organized with different life styles belonging to these cultures, thus creating a cultural heritage richness of housing architecture.

Samples of the historical periods of housing architecture observable today, can be followed from the Venetian Period (1489-1570). The subject of this research is made up of the house planning organizations showing differences in this period, followed by the Ottoman (1571-1878), the British (1878-1960), the Republic of Cyprus (1960-1964) periods, and finally the recent past. With the study carried out by four time periods, matched with different historical periods, plan typologies showing changes based on cultural differences in the XX. Century housing architecture in North Cyprus will be documented.

It is believed that this study will be a resource for future scientific researches and studies on housing architecture of Cyprus, and will become a basis.

### Concept of housing and housing in Cyprus

A house is a shelter made of open and closed spaces, in which people dwell in order to realize their life activities and to protect themselves from natural effects. A house is also a feature with social, economic, and spatial content for the society, and is seen as the space with the smallest scale planning unit (Gür, 1993:5). The design of the house should be organized to meet the physical, social, psychological, and cultural needs of its users, and should provide spatial solutions suitable to living functions (Arcan, Evci, 1999:64).

People built shelters first by using branches and bushes, imitating caves (Ulkay, 1993:18-19). Later,

shelters were built in geometrical shapes created by strings of wooden beams.

Individual, social, cultural, climatic, and environmental factors have an important place in house planning (Gür, 2000:50). The life culture of users also gives a shape to the planning organization of the house (Turkan, 2006:90).

The history of housing in Cyprus begins with the Neolithic Age (8200-3500 BC). During this period, people created living spaces for themselves with shelters that they built using stones, trees and mud brick materials. It is known that there are two important dwelling placed in Cyprus in the Neolithic Age, one in Nicosia (Khirokitia), and the other in Limassol (Sotira) (Salihoğlu, 2006:28, 50).

During the Roman Period (58-392 AD), houses were built in the island with the Roman architectural characteristic Atrium (Serter, 1981:23). There is no information about the housing architecture of the Byzantine Period (395-1192), although remains of religious buildings can still be seen today. During the Lusignan Period (1192-1489), two-storied houses with yards were built, using cut stones and mud brick materials. In these houses, indooroutdoor space connection was provided with semiopen spaces, towards the yards. The Gothic arched doors and windows of these buildings have reached the present day with remains of that period. The Venetian Period (1489-1570) became a period of destruction in Cyprus. The building of Nicosia and Famagusta city walls were the most important activity of the period. Samples of houses from that period remaining today are very limited in number. Built with stone materials, houses were two-storied and with a yard. Indoor-outdoor connection was established with a porch with columns or arches.

The Ottoman Period (1571-1878) has been important for housing architecture in Cyprus. Examples of houses belonging to that period and still existing at present, display the characteristics of XIX. Century Traditional Turkish Houses (Anonymous, 1982:32; Dağlı, 1999:45; Gürkan, 2006:34; Turkan, 2006:91; Turkan, 2010:280). Initially, Outer Hall Plan was used as plan type of houses, and towards the end of the period Inner Hall Plan type was used.

#### Plans of XX. Century houses in North Cyprus

Effects of various cultures can be seen in Cyprus in the XX. Century, as it was in the previous centuries. These differences, also affecting architectural characteristics, showed their effects especially on the house planning organizations designed by the



life cultures of their users. The differences observable in the XX. Century housing architecture in North Cyprus can be observed in four quarters of the century.

#### 1900-1925 Period

Although this time frame belongs to the British Period (1878-1960) of Cyprus, the architectural effects of the previous period, the Ottoman Period (1571-1878) continued in housing architecture. With the continuation of the Traditional Turkish House characteristics of the Ottoman Period, Indoor Hall Plan scheme (Küçükerman, Güner, 1995:175; Eldem, S.H. 1984:18) was widely used. In this plan, composed of rooms lined up on both sides of the hall, a protrusion was also made with bay windows.

In these houses, generally with two floors and a slanted roof covered with tiles, there was a hall and living, eating quarters, kitchen and service places on both sides of the hall, on the first floor. The upper floor had sleeping spaces on both sides of the upper floor hall. The staircase was located at the hall. These houses, with pointed arches of Turkish Architecture, were built with the heaping construction system, using local materials of Yellowstone (sandstone) and mud brick. Timber was frequently used in construction elements, and in the roofs. Besides the bay windows, balconies with open sides and covered top also appeared as a difference and characteristic of the period. The facades were detailed with ornaments created with stone materials, in contrast to the plainness of the previous era Turkish Houses (Figure 1, 2).



Figure 1- The Plans of The House Addressed Zahra Sokak No:3, Arabahmet / Lefkoşa (Author)





Figure 2- Elevation of The House Addressed Zahra Street No:3, Arabahmet / Nicosia (Author)

#### 1925-1950 Period

This period is when the British Period was the most effective in Cyprus. Although it is a period of change in housing architecture, the planning organization of this period is seen in the changes of Ottoman Period Indoor Hall Plan scheme.

The plan, besides being in the shape of rooms on both sides opening to the hall, is also in the shape of a scheme formed by rooms joining the hall through a corridor. Thus, a different plan typology of the period was created. The bay windows of the previous periods underwent changes and were designed as open space balconies. More flexible solutions were brought to the spaces closed from outside, which were seen on the ground floors of Turkish Houses, and indoor-outdoor space relations (street, close environment, neighborhood etc.) were provided with balconies. Polygonal planned rooms are also of the changes of this period.

The houses of the period were designed mostly as single floor, nonadjacent form, made of local cut stone, however, in city centers with a historical texture, they were built in the adjacent form and two floors.

The facades had no coating, and were ornamented by processing and elaborating stone materials. The ornamented stone columns used in the front face of houses, door and window frames, and corner engravings make up the front façade difference of this period (Figure 3, 4).

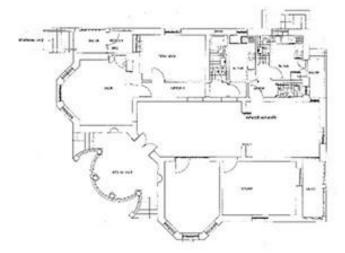


Figure 3- Plan of The House Addressed Şerif Arzık Street No:38, Köşklüçiftlik / Nicosia (Author)



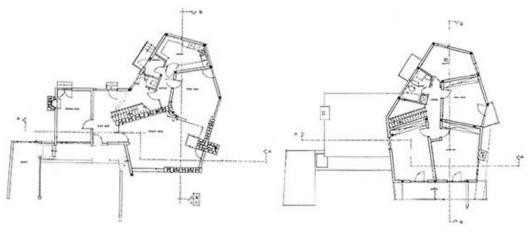


Figure 4- Elevation of The House Addressed Şerif Arzık Street No:38, Köşklüçiftlik / Nicosia (Author)

### 1950-1975 Period

This is the period during which house designs in Cyprus began to be made by architects. Starting with the early 1950s Cypriot architects began to complete their education and practices abroad and return to the island to provide architectural services to the islanders. Thus, instead of traditional plan typologies in the construction of houses, specially designed plan organizations to meet the needs of users began to be seen, as a significant difference compared to previous eras. The use of concrete skeleton systems used in the island during these years also provided flexibility in plan schemes, and enabled more organic solutions. The functional designing of spaces making up the plan scheme is also a difference in this period.

The organic formatting of plan schemes also brought movement to facades. Besides slanted roofs, flat, concrete rooms were also widely used in this period. With the wide use of contemporary construction materials, such as bricks, iron beams, and aluminum, traditional materials were used mostly for aesthetic objectives such as indoor or outdoor plating, fireplace plating, and ceiling plating (Figure 5, 6).



Ground Floor Plan

First Floor Plan

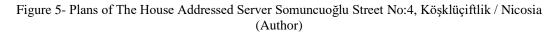




Figure 6- Elevation of The House Addressed Server Somuncuoğlu Street No:4, Köşklüçiftlik / Nicosia (Author)

#### 1975-2000 Period

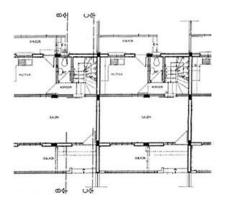
After the first years of this period, land prices becoming disproportional with the purchasing power of people due to the economic problems of North Cyprus, made it very difficult to purchase private houses designed to meet the needs of users. As a solution to this problem, buildings of high rise or low rise, with standard plan schemes came up. Hence, high rise and low rise housing units, not suitable for user needs became a compulsory solution to the housing needs of the period within both the state's social housing policy, and the private sector's mortgage style build-and-sell policies.

The standard plan on high rise apartment type residencies are made up of the daytime section of a living room, kitchen, and toilet joined by a hall or corridor, and the night section of usually three bedrooms, and a bathroom-toilette. The plan organization of low rise standard houses is made up of living room, kitchen, and a toilet on the ground floor, and usually three bedrooms, and a bathroomtoilette on the upper floor.

The simplicity in standard plan schemes of the period is also reflected on facades, and plain façade characters without movement appeared. While slanted room cover is used in low rise standard houses, flat, concrete roofs dominated high rise apartments.

Parallel to the standardization of plan organizations, contemporary, but economic types of building materials are used as standard.

While a small number of functional, and environmentally compatible houses designed to meet user needs are seen towards the end of the period, the standard plan schemed houses, the result of economic difficulties, preserved their importance until the new millennium (Figure 7. 8).



Ground Floor Plan

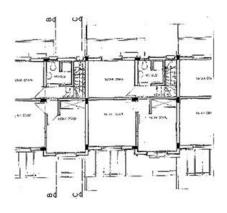




Figure 7- Plans of The Social Houses Addressed Park Street, Taşkınköy / Nicosia (Interior Ministry of TRNC)





Figure 8- Elevation of The Social House Addressed Park Street, Taşkınköy / Nicosia (Author)

## Conclusion

As a conclusion of this research into the plan organization in the XX. Century house architecture in North Cyprus, the effects of various cultures throughout the history of Cyprus is also observed in the different time slices of the XX. Century as the change of architectural characters. Thus, differences in the house plan organizations in the XX. Century, shaped by the effects of life cultures are brought to light, by dividing the century into quarterly periods and examining them.

During the British Period in Cyprus, between 1900 and 1925, the use of the Traditional Turkish House Indoor Hall Plan scheme of the Ottoman Period continued in the house architecture of the Turkish population of the island, with the effect of their life culture. Besides bay windows, balconies were also used towards the end of the period. Local material of cut stone (sand stone/yellow stone) was mainly used in construction.

During the 1925-1950 period, Indoor Hall Plan scheme underwent changes, and the plan was created with spaces joined by sofas, halls, or corridors. Thus, a different plan typology appeared. Protrusion on upper floors was made by open space balconies instead of bay windows. The facades were ornamented with masonry.

The years between 1950 and 1975 became the period in which housing architecture in Cyprus was designed by Cypriot architects. With the transition from traditional to modern, houses were planned to user specifications. With the use of concrete skeleton construction system in this period, more organic plan schemes were obtained. These schemes, reflected on facades, brought movement. During the last quarter of the century, from 1975 to 2000, economic difficulties in North Cyprus affected the housing sector as well. Instead of user friendly designs, houses with standard plan schemes and more economic solutions were built. High and low rise standard buildings by both state and private sector met the housing needs of the people with long term payment conditions. The standard plan typology of the period consists of daytime and nighttime standard sections lined vertically in low rise buildings, and horizontally in high rise (apartment type) buildings. During the last years of the period, houses are seen designed to meet personal needs, and having authentic plan organizations.

The impressions reached through this research revealed that plan organization in housing architecture in the XX. Century in North Cyprus showed changes with the effects of various periods lived in the island. Factors such as the life styles of cultures throughout historical periods, their political and social structures, economic and technical resources shaped and directed lives of people, and these effects displayed themselves in the planning of living spaces.

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