

Analysis of residential outdoor spaces in Cypriot Towns¹

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Abstract :

In an urban environment designed to contain communities, residential environments should obviously be arranged to aid social interaction. Social variables predominantly determine any function potentially occurring in both public and private outdoor spaces. Thus, it is the social values that structure behaviour and help explain the use or non-use of such spaces.

The recognition of the significance of private outdoor spaces in residential environments leads us to explore these spaces from various perspectives. The quality of the private outdoor spaces in residential environments is related mainly with their physical and functional characteristics. The use of outdoor spaces in residential environments, which are affected by natural, artificial and behavioural determinants, sets one of the fundamental design intentions as far as their quality is concerned. This paper discusses the impact of the social values on the patterns of use of private and semi-private outdoor spaces in residential environments through the analysis and investigations of various cases in North Cyprus. The study concludes that the planning and design process should seriously consider social values to promote the quality of private and semi-private outdoor spaces in residential areas.

Key words :

Private and semi-private outdoor spaces, residential environments, cultural and social values, North Cyprus.

Introduction :

Studies of cultural differences in architecture and the interrelationships between culture and architecture have begun to receive attention in a major way primarily in the last decade or so. Following this tradition and considering the lack of interest in open spaces and their qualities, this paper presents an analytical work on the residential open spaces in North Cyprus and provides case studies to help exemplify and clarify the research outcome.

It should be recognised that, today, the problems of improving the quality of housing are more im-

portant than the problems of providing large numbers of people with housing. The inadequacy of too hastily built new cities forces us to rethink intensively the question of the quality of housing. In housing areas, planning the spaces around buildings, and the coordination of houses with each other in order to create public and semi-public open spaces are of great importance.

It is more understandable that in developing countries, the process of urban dynamics - rapid urban development as an outcome of the huge increase in population — destroyed habits, customs, functions and interests and unavoidably changed the use and the form of old city structures. However, in North Cyprus, a developing country on a Mediterranean island (Figure 1), where no similar dramatic changes happen, we are still faced with the deterioration of the architectural and urban environment. This is especially true in the case of housing environments: despite the opportunity of creating locally and traditionally appropriate settings, new parts of the towns include houses which have neither architectural nor social value in terms of these qualities. Especially because of the hot-arid climate of North Cyprus, outdoor open spaces in residential areas gain much importance. Therefore the study attempts to assess the current organisation and use of exterior spaces through the analysis of spatial and social aspects in relatively old houses.

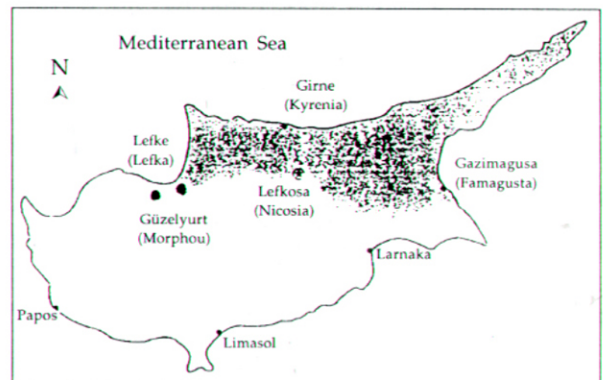


Figure 1

Map of the island of Cyprus and the main towns on the island

¹ This article is a more detailed and sophisticated version of a paper presented at the 24th IAHS World Housing Congress, 27-31 May, 1996, Ankara, Turkey, under the title 'A social-spatial review of exterior spaces in residential environments in North Cyprus'.

Research problems and methodology :

Providing sufficient number of decent housing is one of the most important problems in North Cyprus, an issue common to all developing countries. One significant problem regarding the use of housing schemes occurs more visibly on the formation and use of private, semi-private and also public outdoor spaces in the residential environments. Especially in the new social housing developments introduced by the government in 1987, to solve the housing problems of the low and fixed income citizens, neither the physical and aesthetic characteristics of the outdoor spaces nor their uses and functions have been considered as a design criteria in the design process. Therefore, these spaces lack visual as well as functional quality (Figures 2 & 3). They appear as isolated wastelands of space: Streets have become mere vehicular channels without any spatial definition and public use. Missing the right balance between the open spaces and built-up spaces, the general appearance of the housing areas has no identifiable character either. It rather displays a monotony and a view of a group of isolated concrete blocks. The lack of green elements in and around the new development is a major problem too².

Based on these problems and conditions in North Cyprus, the social and spatial investigation on the private and semi-public outdoor spaces in residential areas is carried out through two pieces of work: the first one is the literature review and re-



Figure 2

Typical layout of contemporary multi-storey social housing in North Cyprus



Figure 3

A view of a typical contemporary multi-storey social housing area

search on the previous studies — in general and in North Cyprus in particular — on residential environments and the use of their outdoor spaces; the second work is the spatial and functional analysis of the outdoor spaces of a number of cases selected in different regions of North Cyprus. This part of the study is based on the comparison of the selected case studies in terms of architectural, spatial and functional characteristics taking into account the social factors.

In order to examine the outdoor spaces in residential environments, the research comprised several case studies selected in four old cities in North Cyprus, which are: Gazimagusa (Famagusta), Lefkosa (Nicosia), Girne (Kyrenia), and Lefke (Lefka). The reason behind this rapid selection — of the mentioned settlements — was the belief that housing environments in these settlements still possess their spatial characteristics pertaining to the traditional urban life. The selection of various examples from different regions on the island is also to understand how the houses with exterior spaces fit different social and cultural requirements, leading to the comparison of the organisation and use of outdoor spaces as well as the reflection of the social values on their formation. Throughout the study, each case is analysed in terms of its space organisation according to the Sun, to the street — the semi-private space as well as the types of uses and interior-exterior relationships. In this paper, the analysis of only two of the case studies, one from Lefkosa and one from Gazimagusa, are presented with a belief that the reader will get a brief idea of the overall picture.

² In fact, the problem is more crucial than observed here as it is pervasive in most of the new urban environments. In more specific terms, the placement of buildings in modern cities has been neither physically successful nor socially acceptable. Buildings have been designed with little concern for their relationship to each other or for the larger idea of the city. Spaces left between them have become undesirable and unlivable — in some cases even dangerous wastelands. Buildings have become individual monuments to their owners and their architects competing for individual attention and creating unusable space between.

Review and analysis :

Ever since Hellenistic periods, Cyprus had been noted for its highly developed urban life. The traditional urban pattern in North Cyprus has a Medieval character with well-scaled narrow streets and *cul-de-sacs*, a number of public buildings and organic open public spaces at the intersection of roads or in front of public buildings (Figures 4 & 5). Connecting a group of houses with each other and to a larger circulation artery, the street is the most rudimentary of intersections between the private and public domains. This familiar territory is almost an extension of the home where a multitude of group activities is accommodated within the limits of privacy.



Figure 4

Typical traditional urban pattern in old Cypriot towns
(Magusa/Famagusta)

Similar to traditional Anatolian towns, until the deterioration of the traditional life, the concept of neighbourhood — *mahalle* — has been of great importance in North Cyprus. The neighbourhood is not only a physical entity within the city but also a social unit providing social and economic cooperation among neighbours. Due to the characteristics of a very compact community, neighbourhood cohesion has always been very strong and widespread; families are related to their neighbours and neighbourhoods (Figures 6 to 10).

Case studies :

Lefkosa (Nicosia) :

Lefkosa (Nicosia), standing on the site of the ancient city of Ledra, lies in the geographical center of a vast plain called Mesaoria, between mountains. Early in the Lusignan period, Lefkosa had already become an important commercial and administrative center. During several changes of administration throughout history, it remained as the

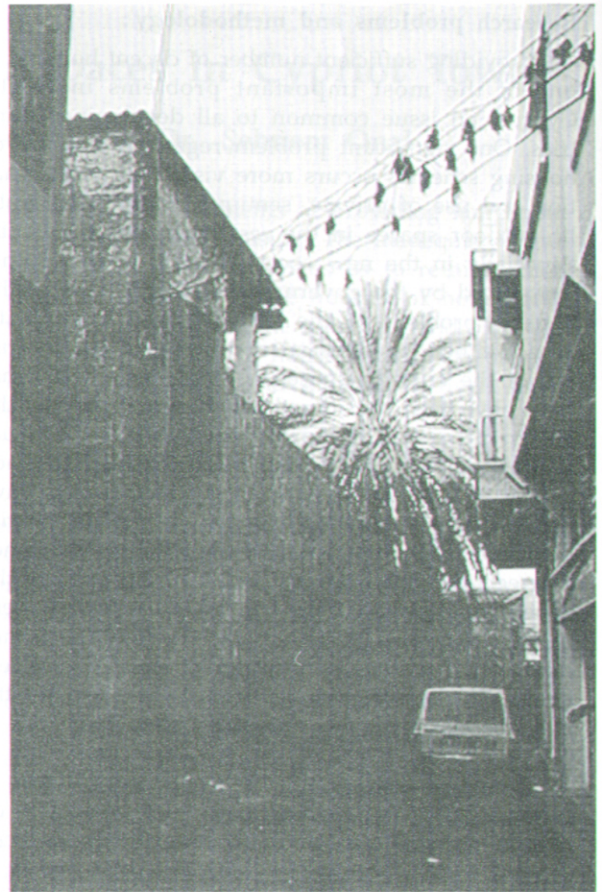


Figure 5

A view of a street in the older parts of Cypriot towns
(Magusa/Famagusta)



Figure 6

Lace-making in the courtyard

capital of Cyprus but meanwhile went through many physical changes. Even when Magusa temporarily emerged as the premier city of the island, Lefkosa on its fine open extensive plain, still appeared as a great city. Because of its healthy climate, it had become the residence of the king, bishop, prelates, nobles, barons and knights and was considered as

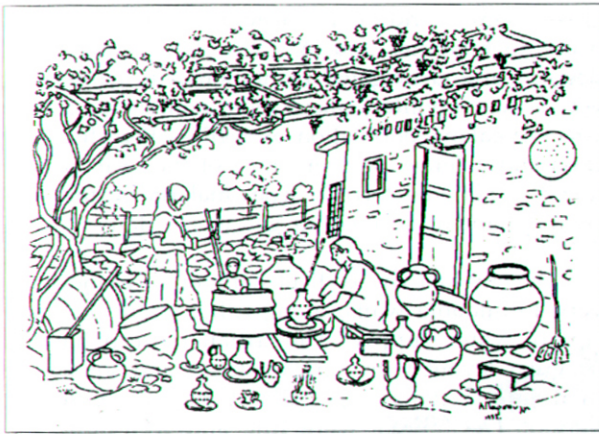


Figure 7
Pottery-making in the garden

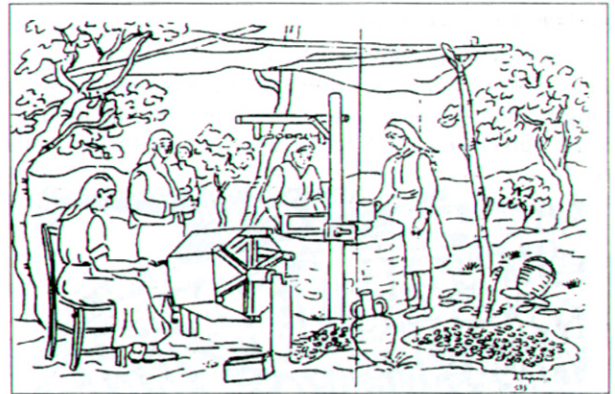


Figure 9
Socialising around the well



Figure 8
Basket-making in the courtyard with neighbours



Figure 10
Socialising around the street fountain

the most wealthy and important place of the whole island. The walled city of Lefkosa is a place where several old houses and historic buildings belonging to various periods are lined side by side. Visitors who saw Lefkosa during the Lusignan and Venetian periods spoke of quite a large — but not highly populated town with lots of ruins within the walls and inadequate fortifications. They were impressed by the extensive gardens with orange trees, date palms and pomegranates.

Streets were wide and straight and several big squares were to be seen. Although all the nobility on the island lived there, the unpaved streets made them think the place rural, despite the presence of many fine buildings. During the Ottoman period, most of the cathedrals and churches were well preserved through their conversion into mosques or usage for other public functions. Later, under the British rule Lefkosa not only expanded but most of its old buildings within the walls were demolished to provide space for the erection of new shops, houses and other buildings. Therefore a rapid de-

struction of the characteristic features of the town, including the housing structure, started.

Characteristic features of a traditional two storied Lefkosa house consist of a long, spacious arcade with a row of pointed arches facing an inner garden — an open-to-sky living space/courtyard, surrounded by high mud brick walls with several citrus and a date in it. Three large high ceiling and shady rooms with old doors are opened to the arcade. Almost every house has an orange garden with gigantic palms towering over the fruit trees; and beside these private enclosures, there are extensive public gardens within the boundaries of cities in which all sorts of fruits are cultivated. Usually these gardens are bounded by clay walls on the side of the street due to the privacy of the residents (Salvator, 1983). However, privacy is not a primary consideration for current users, and although the houses do not possess a front garden, inhabitants tend to take their chairs in front of their houses and get together in the street space whenever they wish. (Figures 11 to 13).

Gazimagusa (Famagusta):

In the 14th century, Magusa (Famagusta) was one of the largest, wealthiest and most prosperous cities in the entire Mediterranean World (Mandeville, 1322; van Suchen, 1350). An anonymous Englishman



Figure 11
Traditional urban pattern of Lefkosa (Nicosia)

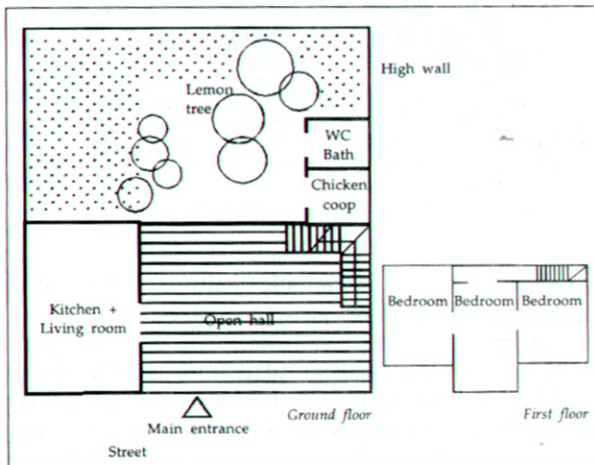


Figure 12
Plans of a traditional house in Lefkosa (Nicosia)

The house, shown in figures 12 and 13, displays the characteristics of a typical Turkish house. The orientation of the house was not determined by climatological concerns but by its relation to the street. The street is considered the public extension of the private house and used as a common outdoor room by neighbours. Monitoring street is a significant part of life (especially in old times) and so, at least one room is provided with the maximum view. The ground-floor wall, after being parallel to the street, forms the house by acquiring a rectilinear shape in the garden. A semi-open transitional space (sofa) sets the relationship to the street, the courtyard, kitchen and the upper floor. The courtyard, with its trees, flowers and small vegetable plot, is the closest relation the house has to nature. The use of the courtyard includes diverse functions such as sitting, receiving guests, drying foods, cooking with a wood fire, storing, washing and drying laundry, keeping pets, chickens, etc., and other types of house work. Bathroom is also accessed from the courtyard.

(1344-1345) found it 'a paradise of delight' with beautiful buildings and churches, high walls and a deep moat and irrigated plantations and gardens. It was a cosmopolitan place then, containing native Greek-speaking population as well as French ruling class and colonies of every race of the near East. It however suffered terribly from malaria by the 16th century, and it seemed to get worse daily.

The city had an excellent harbour surrounded by very formidable walls, alongwith a more than adequate water supply. The urban pattern had an irregular layout with narrow streets and squares at their intersections, especially during the Ottoman period. The houses were fine and well-built, the roads well-kept and fountains of running water were found at every street corner. The remarkable feature of Magusa is that while fortification walls and churches have survived, there remains barely a trace of its domestic buildings. Housing in the old-walled city of Magusa covers one or two storied houses mainly with direct access to the street. They usually have very small inner courtyards where a number



Figure 13
View of the same house in Lefkosa

of interior rooms open into directly. Although there is no other alternative, private outdoor space in general, the street space is being used as an extension to the houses and perceived as communal outdoor rooms (Figures 14 to 16).

Results of the analysis :

Having examined the literature and analysed the case studies, the following results set out the main points of this paper.

The majority of older houses in North Cyprus are quite similar — in plan, architectural details and proportions and construction — to the houses built in the western and southern parts of Anatolia at about the same period³. They are usually not more than three storeys high and horizontal lines are dominant on the facades. As in the traditional Turkish houses, projections — *cikma* or *cumba* — give a unique character to the houses as well as to the streetscape along which they are located.



Figure 14
Traditional urban pattern of Gazimagusa (Famagusta)

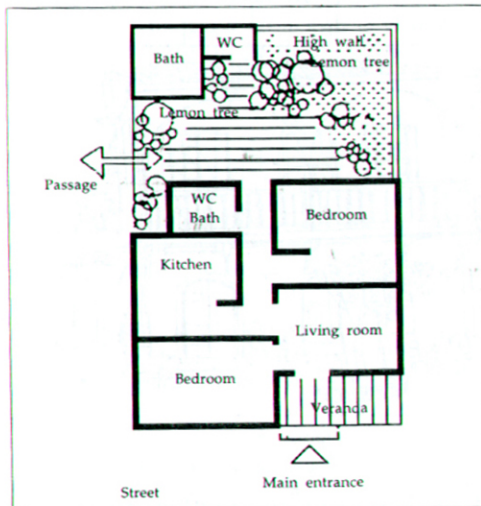


Figure 15
Plan of a traditional house in Gazimagusa (Famagusta)



Figure 16
View of the same house in Gazimagusa (Famagusta)

The house shown in Figures 15 & 16, displays the features of a simple Cypriot house. It has two alternative open spaces, one in front, and the other in the back. Its relationship to the street is provided through an open transitional-space (veranda) where the dwellers sit and receive guests while watching the street. The living room is entered through the veranda. The small courtyard behind the house comprises natural elements (trees, flowers, ...) and is used for a variety of functions such as sitting in winter, gardening, preparing food, etc. (drying laundry is done on the upper terrace). Bathroom facilities are entered from the courtyard. The courtyard has access to the courtyard of neighbour's house.

³ The Turkish house has some 500 years of historical background. It is the outcome of a tradition developed during the reign of the Ottoman Empire covering an area from Anatolia to South-eastern Europe. The influence of this tradition can also be traced to Cyprus, Cyrimea, Rhodes and Egypt (Eldem, 1968 : 11).

Despite their similarities, there are also some differences between houses in Anatolia and those in North Cyprus. These are mainly due to the cultural background of North Cyprus where two communities, the Turks and the Greeks, lived side by side for years. Although they did not mingle socially, they were influenced by each other indirectly and shaped their physical environment accordingly. The major characteristics of the traditional Turkish communities, such as segregation of sexes and privacy, for example, are not reflected strongly in houses in North Cyprus. Therefore, most of the houses are organically and directly linked to the street which itself became the semi-private communal meeting place extending from the house at ground floor level (Figure 19). The main door of the house opens from the street directly into a hall, which together with the adjacent rooms forms the daily living space of the house.

The design of houses in North Cyprus is arranged around an inner courtyard — *avlu* in Turkish and *haoli* in local Cypriot Turkish⁴. The plan is quite simple and it consists of a series of wide spacious rooms lined around an open hall — *sofa* — which is reached by an open staircase and in some cases closed with wide glazed windows. The users of the courtyard were predominantly women and children in the past who spent most of their time there during the day. As an open space, the courtyard for the residents is the first and the most direct link with nature; it is a secure territory and work place providing a high level of privacy; and as a social area, it is the arena for recreation and hospitality. Considering the social and cultural factors, the use of the courtyard system has had certain advantages in a developing country like Cyprus. First of all, it is an appropriate solution for low-income house-type; it is the only 'breathing space' for such houses. Second, all other functions during the day are also concentrated here where there is plenty of light and breeze. Thirdly, the small adjacent rooms require this open space for their windows to open into without exposure to the street.

It is a unique social situation that residents in houses located along a street were usually relatives in the past. They had openings between their backyards and in these backyards they shared housework and got together for various social occasions (Figures 17 & 18). Children of similar ages played together and identified themselves with the street or the area

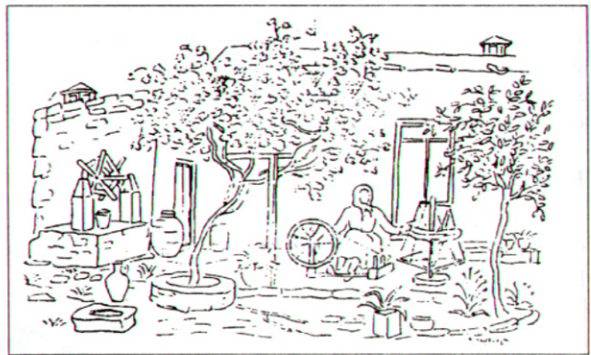


Figure 17

Variety of uses in the courtyard of a village house



Figure 18

Variety of uses in the courtyard



Figure 19

A rich family house facing the street

they lived in. Fountains of running water were found at almost every street corner where women met their neighbours and gossiped while getting water every morning and evening (Figures 9 & 10).

Generally in Cypriot settlements, there is a distinction between the houses belonging to the rich

⁴ In warm climates, the courtyard traps the dense, cool air in the centre of the house, facilitating ventilation and bringing down the general temperature inside. The function of shade is also performed by the walls enclosing the open space, while maintaining the courtyard's status as light-well for the building.

and the poor. The typical characteristics of a house owned by a rich resident is that it possesses a large *sundurma* — a semi-closed space at the back of the house — for daily functions/activities such as sitting, lace-making, basket-making, pottery work, etc. On the other hand, simple houses belonging to the poorer families do not have such spaces and they are simpler in their architectural details (Figures 6 to 8 and 23 to 25).

Conclusions :

The review and research on the social and spatial aspects of private and semi-private residential outdoor spaces in traditional areas of the cities in North Cyprus tend to support the view that certain social values and conditions affect the formation and use of such spaces. In the light of the analysis made in a number of houses, open-to-sky living spaces, usually in the form of open courtyards and back gardens, seem to be the heart of dwellings in North Cyprus. Besides, considering winter-summer and day-evening time conditions and also the interaction with the street space, some other types of outdoor open spaces such as verandas, patios, terraces, etc., which are used efficiently and regularly, are also

found in the older houses in North Cyprus. Thus, it can be stated that, the traditional house in a residential area in North Cyprus has two alternative outdoor spaces: one in front with a more extroverted character relating to the street space, and one at the rear with more privacy, more functional capability and maximum direct relationship with the interior spaces.

The traditional domestic buildings are generally located along the narrow streets within an organic urban pattern; and these streets within the old pattern — usually three-dimensionally defined unlike the contemporary examples previously described — become semi-private spaces for the residents. Almost in all houses, which are modest in size and architectural details, interior rooms are organised around a multifunctional courtyard, a private or semi-private outdoor space with a number of trees. Some of these houses have got direct relations and even sometimes direct access to the private courtyard of the neighbouring house.

Comparing the characteristics of the traditional residential areas and the exterior spaces formed

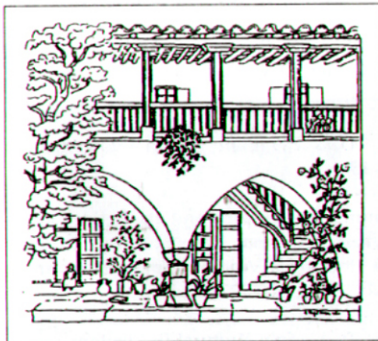


Figure 20

Courtyard of a rich family house: view to the *Sundurma*



Figure 21

Courtyard of a rich family house

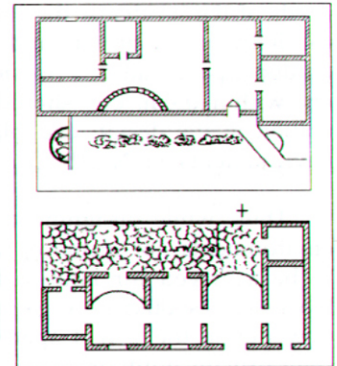


Figure 22

Plans of a typical Cypriot house with *Sundurma*

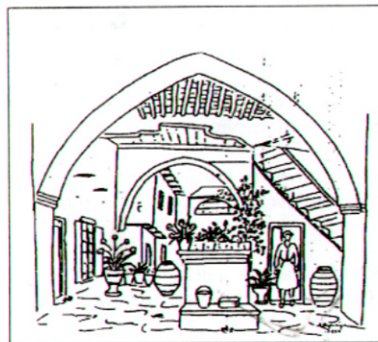


Figure 23

Sundurma as the entrance hall

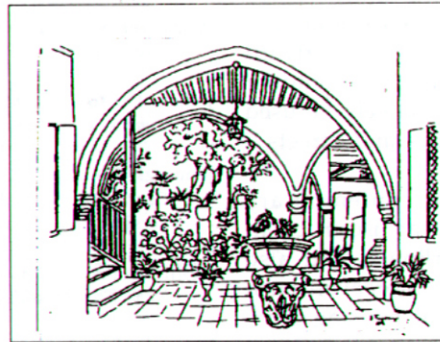


Figure 24

Sundurma with overhead enclosure



Figure 25

An ordinary Cypriot house with semi-private space

within these areas with the contemporary housing districts in North Cyprus, one realises that the new residential environments, composed of modern apartment blocks more than 4 storeys high, lack any defined exterior spaces which would enable the residents with an opportunity for social interaction. Usually, the new social housing environments are not planned in organic urban form but instead they are organised with no defined exterior spaces for common use. One reason behind this contemporary implementation is the increase in land prices and densities compared to the past.

The analysis summarised in this paper also indicates that, despite the general deterioration of urban environments in North Cyprus, the residents of older houses still continue the social life style regarding the use of their private and semi-private outdoor spaces, unlike the residents of the new housing environments.

Therefore, the unique characteristics of older housing patterns which existed in the past — such as neighbourhood identity and cohesion, interaction between the house and the street space, multi-functionality of private outdoor spaces due to the needs of the residents, the (three-dimensional) physical definition of private and semi-private residential outdoor spaces, and the existence of trees and greenery within them, etc. should be taken into consideration in the design and planning of new housing environments in North Cyprus.

Thus, while designing contemporary residential environments, for instance, when a grid pattern has to be achieved for land-cost reasons, the building blocks can/should be organised in such a way that they define the 'street space' so that streets create semi-private outdoor rooms for the residents with more security and privacy. Consequently, when a more flexible design is possible, the traditional concept of courtyard can be reinterpreted and modified in the multi-storey housing environments, and residential blocks can be arranged around a courtyard which will act as a private or semi-private outdoor space for the residents. Trees can positively be used for the definition of both courtyards and streets.

This kind of organisations in contemporary housing environments will be of great use in creating communal life and neighbourliness, and also bringing nature close to dwellings. Moreover, such an approach to design in new social housing environments will both increase the quality of living and also give identity to the physical environment in terms of architectural and urban characteristics.

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References :

- Atun, Hakki (1971), 'The Influence of Ottoman Architecture in Cyprus', in *Milletlerarası Birinci Kıbrıs Tetkikleri Kongresi, Türk Heyeti Tebligleri* (The First International Congress of Cypriot Studies), 14-19 Nisan 1969, Ankara, pp 265-268.
- Durrell, L. (1959), *Bitter Lemons of Cyprus*, Faber and Faber, London.
- Esin, Emel (1965), *Aspects of Turkish Civilisation in Cyprus*, Turk Kulturunu Arastirma Enstitusu Yayini :14, Ankara.
- Gunnis, Rupert (1973), *Historic Cyprus: A Guide to Its Towns & Villages, Monasteries & Castles*, K. Rustem & Bro, Nicosia.
- Gurel, S. et al (1994), *Landscaping Parameters*, Architecture and Planning Publication Center, Dawood College of Engineering & Technology, Karachi.
- Eldem, S. Hakki (1968), 'Turk Evi Plan Tipleri', *Encyclopedia Britannica*, Vol. 5, p 13.
- Erpi, Feyyaz (1991), 'Community Culture and Its Reflection on Vernacular Architecture — Three Case Studies: Turkish, Greek and Levantine Housing in Anatolia', in *Architecture & Behaviour*, 'Vol. 7, No. 3, pp 205-222.
- Fedai, Harid (1996), 'Kıbrıs Türklerinin Kültürel İlişkilerinin Tarihi' unpublished manuscript for *Tetragon*.
- Gurkan, Hasmet (1987), *A Glance at Historic Nicosia*, Gelisim Offset, Nicosia.
- Imamoglu, V. (1992), *Geleneksel Kayseri Evleri*, Turk Halk Bankasi Yay., Ankara.
- Jeffery, George (1918), *A Description of the Historic Monuments of Cyprus*, Government Print Office, Nicosia.
- Jennings, Ronald C. (1993), *Christians and Muslims in Ottoman Cyprus and the Mediterranean World, 1571-1640*, New York University Press, New York.
- Keshishian, Kevork K. (1978), *Nicosia: Capital of Cyprus Then and Now*, The Moufflon Book and Art Center, Nicosia.
- Luke, Sir Harry (1957), *Cyprus, A Portrait and an Appreciation*, Harrap, London.

Morozzo Fierro, M. Donatella (19..), *Report on the Historic Centre of Nicosia*, U.N.D.P.

Oktaç, Derya (1995), *Designing For Choice: Evaluation of the Environmental Qualities in Social Housing Complexes in North Cyprus*", *Proceedings of XXIII. IAHS World Housing Congress*, 25-29 September 1995, Singapore, Vol. I.

Salvator, Archduke Louis (1983), Levkosia, *The Capital of Cyprus*, Trigraph, London.

Solsten, Eric (1993), *Cyprus: A Country Study*, Library of Congress, Washington.

Storrs, Sir Ronald and O'Brien, Bryan Justin (1930), *The Handbook of Cyprus*, London, Christophers.

Ταρεούλη, Αθηνά (1963), *Κυπρος, Εκλοεεie 'Αλφά'*, I. M. Σκζikh, Αθhnai (Vol. A/B).

Sources of Figures :

Figure 1

Solsten, E. (1993), *Cyprus: A Country Study*, Library of Congress, Washington.

Figures 2 & 4

Originals at the City Planning Department, Gazimagusa.

Figures 6 & 10

Ταρεούλη, Α. (1963), *Κυπρος, Εκλοεεie 'Αλφά'*, I. M. Σκζikh, Αθhnai (Vol. A/B).

Figures 11 & 14

Originals at the City Planning Department, Gazimagusa.

Figures 17 & 25

Ταρεούλη, Α. (1963), *Κυπρος, Εκλοεεie 'Αλφά'*, I. M. Σκζikh, Αθhnai (Vol. A/B).

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