Learning from traditional built environment of Cyprus:
Re-interpretation of the contextual values

Ozgur Dincyurek*, Ozlem Olgac Turker

Faculty of Architecture, Eastern Mediterranean University, Famagusta, North Cyprus (via Mersin 10 Turkey)

Received 3 March 2006; received in revised form 29 June 2006; accepted 2 August 2006

Abstract

Last century witnessed the tragic results of ethnic separations between Turkish and Greek Cypriots, which were the two main communities of Cyprus Island. Both communities, that used to live mixed together on the same geography, shared the same history, culture, lifestyle and moreover the future. Nowadays, the bi-communal efforts on the Island, encouraged by the international society, provide the opportunity to union and heal the traces of the traumatic division. The new century promises a rapid increase in the welfare of Cypriots parallel to the solution of the political dispute. The sudden change in economical structure can increase the threat on the unique traditional environment as a result of unplanned and inevitable developments for fulfilling the rising demands. For the sake of having a contemporary living milieu, the traditional environment as the common architectural heritage of the Island can be revitalized, besides developing new appropriate architectural solutions in the light of the natural and cultural context. The Island’s housing tradition bears the opportunity to be learned from the tried and evolved architectural solutions. Evaluating these values parallel to today’s discourse, sustainable identity can be achieved by emphasizing especially the locality. In brief, this study tries to define the appropriate design principles for the contemporary housing developments and finds the ways of sustaining existing unique traditional patterns.

Keywords: Architectural heritage; Building traditions; Sustainability; Housing; Cyprus; Migrations

1. Introduction

Cyprus as one of the largest islands of the Mediterranean basin is distinguished with her unique traditional architecture from the rest of the surrounding environments. Parallel to the recent changes in socio-cultural, economical and political conditions of the Island; a rich system of traditions and customs as well as beliefs and values are struggling for validity [1]. In this respect, the physical and cultural continuity in the traditional architecture seized to develop in the mid of 20th century. These years coincided with the importation of foreign values and understandings as well as building materials and techniques into Cyprus. Since then, the traditional built environment was neglected and the traditional houses were mainly left to deteriorate over the time. It is upsetting to observe that Cyprus traditional architecture as a heritage of thousands of years is undergoing such a deterioration period. The early years that modern materials and techniques were imported to Cypriot architecture witnessed many successful modern building forms. However, after 1960s these improvements were replaced with mainly inappropriate designs in the cultural and natural context within the pluralistic approach.

Besides the above-mentioned changes due to the influences of global trends and developed construction technologies, which are commonly experienced throughout the world with different intensities, Cyprus also struggles with other vital difficulties. The Island is faced with a political dispute that toughens the revealed problems resulting with the severe threats on her unique traditional architecture. As a result of the conflict for over 50 years between the two major communities; Turkish and Greek

*Corresponding author. Tel: +90 3926301346, fax: +90 3926302365. E-mail addresses: ozgur.dincyurek@emu.edu.tr (O. Dincyurek), ozlem.olgac@emu.edu.tr (O.O. Turker).

0360-1323/$ - see front matter © 2006 Elsevier Ltd. All rights reserved.
doi:10.1016/j.buildenv.2006.08.007

1Modern architectural developments in the Island were thoroughly investigated in several research studies [2,3].
Cypriots, the Island suffers serious demographical changes. Since the financial activities of the Northern part were out of the international interests, the developments in the economy and consequently built environment remained limited. In this respect, the traditional fabric of Northern Cyprus comparatively preserves the unique character (Fig. 1).

Nowadays, after 30 years of international efforts, the Cypriots discuss the reunification of the Island seriously. The discussions about the future of Cyprus expressed the reciprocal interaction between politics and architecture. The discourse points out two important architectural developments; one of them being the demand for new housing stock due to the border alignment of the two new states; Turkish and Greek, causing possible internal housing stock due to the border alignment of the two new developments; one of them being the demand for new housing stock for these immigrants. As a result of these changes, the designers are expected to develop culturally and physically sustainable architecture both for the existing traditional and proposed contemporary built environments. In this respect, learning from the shared values and images is vital for creating “peaceful environments” and reflecting the “common Cypriot identity” that has been mutually developed by communities for over centuries.

2. An overview on the traditional settlements of Cyprus

The importance of Cyprus Island comes from her location being in the heart of cultural and economical routes of the Europe, Asia and Africa. By her strategic position, the Island has been attracting the interest of prevailing rulers throughout the ages. Certain world powers such as Phoenician, Egyptian, Assyrian, Persian, Helen, Roman, Byzantine, Arab, Frankish, Genoese, Venetian, Ottoman, and the British, respectively, ruled and settled in the Island. After the British colonization period, the Greek and Turkish Cypriots held the chance to rule themselves independently for only three years that ended up with a political dispute that still exists.

Multicultural accumulation of different sovereignties was reflected mainly in the urban areas of the built environment [5]. The dominant influences of the prevailing different cultures on the formal architecture in terms of administrative, religious, public and militaristic structures in the forms of Egyptian, Hellenistic, Roman, Islamic, Byzantine, Gothic, Renaissance, Ottoman Turkish and British Colonial Styles. On the other hand, domestic architecture in the urban context was moderately influenced by the mentioned styles. This context mostly represented the medieval-Ottoman synthesis [6–8].

The expression of the ethnical origin through the house form was widely observed in the urban fabric [9]. Furthermore, the religious buildings acted as the heart of

---

2In history, Cyprus is ruled by different prevailing powers of the world. The vague identity of inhabitants underwent various cultural and ideological impacts of these rulers. Since 16th century, two major communities have been living on the Island. These are Turkish and Greek Cypriots that Turkish Cypriots are Turkish speaking Muslims whereas Greek Cypriots are Greek speaking Orthodox Christians. After 1974, two communities were separated into two parts of the Island; Turkish Cypriots to North and Greek Cypriots to South.

3It is the general discourse that any proposal for the reunification will be in the same framework with the Annan Plan which was generated by and named after the UN Secretary-General and consequently approved by the UN Security Council but rejected by the majority of the Greek Cypriots. By the help of the international society, the reunification efforts are restarting in the close future. An increase in the international interests is expected by considering the tourism potentials of Northern Cyprus especially after the call for international investments by the UN Secretary-General in his report following the referenda.

4The harmonious togetherness of the Lusignan arches on the ground floor with the addition of Ottoman jutting oriel (or so-called cumba) on the upper floor of the same building is not surprising for any street. Particularly the capital city, Nicosia was structured with organic streets that were strongly defined by the houses in the Ottoman Turkish style.
the domestic quarters of the ethnical groups. On the contrary, the traditional rural architecture was developed as an appropriate answer to the environmental factors especially natural, climatic, and socio-economical parameters. The impacts of the imported styles on the traditional rural architecture of the Island were negligible when it is compared to the urban developments. In other words, the traditional rural architecture purely represents the identity of Cypriot Architecture[10].

The traditional rural forms were developed according to the response of the agrarian lifestyle, available local building materials and climatic conditions. In spite of religious, ethnical and regional (or local) differences, an agrarian way of life and economical production have been the primary determinants of shared rural traditions and consequent traditional rural architecture of the island[11] (Fig. 3).

While the accumulation of the high styles on the urban fabric expresses a strong connection between the mentioned geographies (especially Europe and Middle-east) and Cyprus, the genuine expression of the context in the form of rural architecture accentuates the Cypriot identity.

3. Traditional rural architecture as a representative of the Cypriot identity

Throughout the ages, the right architecture was developed in the rural landscape according to the needs of Cypriot peasants [12]. In order to understand the logic behind the traditional rural architecture, the series of spatial qualities in the form of closed, semi-closed and open spaces have to be identified. In the Island, the limited formation of closed spaces accompanied by semi-closed and the defined open spaces are clearly observed.

The formations of the rural houses are based on the modular combination of the structure in the buildings. The modules are evaluated by their spatial features, structural types, constructional techniques and materials [13]. The linear modular combination of spaces expresses the main development features of the rural house form. The modularity of the rural house ensures the flexibility as an answer to possible functional changes such as the family growth. This flexible understanding was reflected to the rural houses in the forms of removal or addition of spaces as well. The direct reflection of the modularity to the façade reflects the most known image of the Cypriot house as the arcaded prism (Fig. 4).

The limited amount of closed spaces were especially utilized for particular needs. Privacy for secluded facilities, and protection from severe environmental conditions, were the main factors that emerged the need for closed spaces. The semi-closed and open spaces which accompanied the closed spaces were predominantly used for all of the daily activities.

The semi-closed space, which acts as a transitional space, generates the backbone of the spatial organization of the Cypriot rural house. Beyond the circulation activities, the transitional space is utilized for leisure and domestic uses; moreover it is a regulator of privacy, climate, indoor and outdoor interactions [14] (Fig. 5). The existence of the transitional space dominated the development of the spatial organization of the Cypriot house. The absence of the semi-closed space in the house formation, dictates the open space to take over the circulation activity as well as particular domestic facilities. The spatial organization is fundamentally based on the relationships between the closed space and the transitional space.

It can be clearly observed that almost all of the transitional spaces are aligned to the east–west directions.
These transitional spaces which mostly have arcaded facades are facing towards south, without any exception. Through this tradition, the right decision for building orientation provides the highest climatic benefits [15]. The arcaded transitional space between indoor and outdoor spaces provides shade to the south wall as well as creating a cool and shadowy area in summer for daily activities and lets the sun go inside during winter. This semi-closed space is primarily used for functional requirements such as hosting guests, resting, sleeping, cooking, eating and laundry facilities as well as particular processes related to agricultural products, which mostly take place in the ground floor [16,17].

Mediterranean moderate climate and lifestyle, dictate the efficient uses of outdoor spaces. In addition to the usage of transitional space, open space as one of the important components of the domestic unit, was developed in the form of courtyard which guaranteed the privacy for and security of the outdoor facilities. The courtyard that used to play an important role in Cypriot life was used as children’s playground as well as parents’ space for doing their jobs; grapes, olives, tomatoes and carobs were cleaned and processed. Furthermore, other activities such as lace making, pottery making, basket making, bread making and
food preparation used to take place in this courtyard [18,19].

While transitional space in the form of semi-closed space provides transitions between indoor and outdoor, private and public, micro-climate and climate; open space in the form of defined private yard or so-called courtyard provides an appropriate atmosphere for daily activities [20].

Environmental consciousness is another important asset of the traditional rural house, besides spatial qualities in answering the functional needs. Benefiting from preferable summer breeze by achieving cross ventilations; avoiding from undesirable winter winds by creating physical closures on the required direction; preventing from direct sun rays while allowing the air flow by having shutters in the openings; and achieving a moderate indoor air quality by exhausting hot air through the upper ventilation holes are the primary climatic parameters of the space formation. Additionally, the use of the traditional materials such as stone and earth in the construction of the load bearing walls provided appropriate micro climate for the human comfort inside the closed spaces. In principle, the traditional thick walls acted as natural heat barriers. The adaptability to the changing topographical conditions by using available local building materials has to be pointed out as another positive feature of the Cypriot rural house.

While, the developments of rural houses on the flat topography are observed as particular prototypes and their variations without any topographical constraint; those on the steep topography are logically developed in relation to the topographical conditions. Thus, the fundamental types of the traditional rural house can be suitably adapted to different topographies [21,22].

Finally, the formal characteristics of the traditional rural houses can be interpreted mainly as; the modular combinations of cubic/prismatic forms; arcaded facades and semi-closed spaces/transition spaces; flat or slightly inclined roofs except in the central highlands of the Island; awareness of topography; moderate heights considering the human scale; respectful relations amongst neighbors and defined private yards.

4. Re-interpreting the traditional rural architecture in the design of contemporary context

The changing social needs in the Cypriot life inspire the designers to carry the architectural experiences one step further. However, inappropriate architectural practices, which correspond neither to the environmental factors nor to the social ones, are popular in today’s living milieu of the Island.

One of the design problems of recent houses is embodied in the space formation which neglects the environmental conditions. Open verandas with no shading devices or being positioned and oriented randomly without considering the benefits of south orientation; are easily noticeable examples of inaccurate design decisions (Fig. 6). On the other hand, it is possible to observe inappropriate functions located on the north direction that is suitable for very limited activities, instead of reserving this position for services likewise the similar approaches in the traditional practices.
Meaningless separations of indoor spaces are easily perceived in the recent house examples. In this respect, there are many spaces reserved for particular functions that are rarely used. These problems were not valid for the traditional rural houses due to the multi-functionality of a whole space as well as the formation of subspaces. Forming subspaces in the contemporary living environment can be achieved by the addition of level differences or flexible/mobile partitions and low panel divisions. Instead of dividing rooms with solid elements and obtaining rigid spaces, the furniture layouts can be designed for creating multi-functional, flexible and dynamic spaces. Furthermore, the fluidity of spaces can be aimed for enriching the spatial quality rather than repeating the solid box combinations in the recent Cypriot residential architecture.

Dissatisfaction of privacy needs, in the form of neighborhood proximity requirements and the open space and border definitions, is another important problem. Variety of building heights in the adjacent plots increases the privacy problems as well as forming obstacles for the neighbors to benefit from the sun, wind and view. For ensuring the privacy in the open spaces, the architectural or the landscape elements such as garden walls or vegetation can be proposed in the design of new settings. Changing privacy and constant climatic requirements of today’s society arouse the questions about current rules and regulations on the land use. The homogeneity among the building heights and the height and set-back ratios have to be re-evaluated according to the changing proximity needs. Even in the steep areas where the topography can be used as a tool to overcome the disrespectful architectural solutions in the neighborhood, unconsciousness of topographical potentials is observed instead of providing equality in terms of sharing the sun, wind, and view.

Considering the use of materials in the building practices of the island, reinforced concrete is the most widely used one since the mid of 20th century. In fact, the reinforced concrete structures reflect the general design approach in terms of the unawareness of material characteristics and the inappropriate solutions of materials in general. The interactions between the building materials and the climatic constraints are not properly interpreted. Together with correct precautions such as additional insulation materials and necessary constructional decisions, the climatic response of the new materials can be improved in comparison with the current ones. Additionally, the local traditional materials, such as stone and earth, can be developed and adapted for today’s conditions by considering their sustainable features.

On the other hand, the potential of new materials is a challenge for the designers to re-define the solid–void relationships in the envelope of the buildings. In spite of the potentials of the reinforced concrete, which is predominantly used in the recent Cypriot architecture as a building material and especially in the skeletal system, the existing openings on the envelope are neither based on the typology of the traditional facades nor benefited from the potentials of the materials.

Today’s modern building materials and techniques are being used in new architectural practices with the eclectic compositional character of past images. The consequent image conveys the ambiguity of the formal expressions. Series of reinforced concrete arches with different styles and dimensions are commonly observed in the modern built environments of Cyprus. The buildings have to be designed according to the nature of the building materials for reflecting the structural honesty.

At this point, the role of architecture can be emphasized in terms of providing livable and peaceful habitats. Hence the shared culture of Cypriots and consequently forms and images of this common culture can come forward as reflections of shared values and faiths among the societies. Therefore, iconic images of the traditional environment can also fulfill the social demands in sake of breaking the psychological walls of the Cypriots.

5. The continuity of traditional rural architecture in the context of cultural tourism

As it is mentioned before, the common future that will be built on the basis of the common past is naturally expected to ensure the tight binds between communities. Local values and the particular components of locality, which are the fundamentals for shaping the traditional architecture, can easily provide the conditions for the cultural continuity.

For the continuity of traditional environments, certain rehabilitation of environmental components, and a certain conservation policy should be developed [23]. The success of any policy of integrated conservation depends on taking social factors into consideration. According to Amsterdam Declaration [24], integrated conservation necessitates the adaptation of legislative and administrative measures as well as appropriate financial means. Conservation also requires the promotion of methods, techniques and skills for restoration and rehabilitation.

Any recommendation for conservation and continuity of the traditional environments should be based on the identification of the traditional house and settlement forms. The features of the selected places should be thoroughly analyzed. Consequently their particular characteristics should be determined by considering their role in the traditional context.

Renovation, re-functioning, or conversion of traditional buildings for contemporary uses is a tool for carrying the traditional environments into future both physically and socially [25]. Renovation examples in the Northern Cyprus were limited with the restoration and re-functioning of monumental edifices up to recent years. Certain examples in the housing scale were especially utilized for cultural facilities in the urban areas. The only example of house renovation was applied to a group of houses for tourism accommodations. This example is only limited by a single
street in one of the largest traditional villages on the Island, Dipkarpaz—Rizo Karpasso. The renovation project called “The Arched House”, taking its name from the unique example of the arched underpass which is one of the components of the group of houses, avoided the deterioration process of almost ruined buildings. In fact, the success of revitalization is positively affected from the condition of handling a place as a whole with precautions in the larger scale. In such cases, the proposals limited by only a point in the settlement cannot be effective enough while the surroundings physically and socially keep on decaying (Fig. 7).

On the other hand, the traditional rural settlement on the skirts of the Besparmak—Northern mountain ranges, Karaman—Karmi, preserves its unique character as a whole with special intentions. The houses are rented to foreigners that are mainly from United Kingdom and Germany, by long-term leasing. These new users are encouraged to restore and use them as houses and/or pensions. Although, all of the users are not natives, they commonly express a respectful attitude in adapting to the existing context and preserving the authentic character. Instead of spending a few days for entertainment, the opportunities of having property in Karmi provide the foreigners to spend their most of times to understand the context by living, participating and sharing (Fig. 8).

All the similar rural settlements might not be as lucky as Karmi; therefore the awareness for the architectural heritage has to be motivated. Furthermore, the guidelines for conservation of settlements have to be defined.

While considering limited tourism activities of the Northern part, Southern Cyprus economy predominantly depends on tourism. Most known tourism centers of the south, such as Ayia Napa and Protaras show the examples, where tourism has negative effects on the locality, in contrast to the Karmi example, which reflects the consciousness between tourism and sense of place relations. Ayia Napa and Protaras examples were originally small traditional settlements and then they have been converted to completely unfamiliar environments for entertainment in the framework of mass tourism. Although, the uniqueness of the places and their traditions motivate the tourism activities in general, one can hardly notice the local values in these tourism points as a reflection of the Cypriot culture. Especially considering the Cypriot identity, the Cyprus Island bears high potentials in terms of cultural tourism.

Many scholars, emphasize the importance of the history and culture in the tourism developments for the regions [26–28]. Tourism, like other activities cannot be restricted to simple pastime and physical motion such as relaxing, resting, swimming, sun-bathing, practicing sport, but has to include intellectual, cultural and spiritual experiences. Historical environment is accepted as a challenge tourist product. Since the cultural and historical heritage does not only belong to the country it exists, but also to the whole world and all human beings; the tourism activities should support the continuity of these cultural and historical assets. The essence of cultural tourism lies in recognizing an area’s unique qualities and making the best cultural and economic use of them.

Additionally, tourism activities are more and more moving towards cultural tourism because tourists prefer to live in the authentic environments with locals. Almost all of the successful cultural tourism applications in the world are based on the contributions of local people. Without a
doubt, the local culture cannot be achieved anymore in a place predominantly managed by the foreigners with foreign employees serving for foreigners.

In the traditional environments, breaking the vicious circle of deterioration and decay, needs a successive conservation and revitalization that involves complex relationships between a variety of multi-dimensional factors in physical, social, cultural and economic terms which are far beyond the scope of pure preservation [29]. The physical recommendations, considering different scales, may include protection of natural resources as well as maintenance of heritage resources using internationally acceptable criteria and standards on conservation. The existing pattern should be accurately investigated. Beyond the aesthetical and typological analysis, the physical expression of the traditional environments has to be examined by counting the influences of the culture, economy, nature, climate and time. After the identification of the pattern, the unfamiliar physical additions should be liberated. The most common interference in Cypriot rural traditional architecture is closing the arcaded transitional spaces with reinforced concrete additions or expanding the unit laterally or vertically with foreign and inappropriate forms (Fig. 9). Without adequate and appropriate function, any conservation might fail to live. In this respect, the physical recommendations have to be supported with social, cultural, economical, as well as educational parameters. These criteria are important for having the contribution of locals with their cultural backgrounds as well as being a part of the tourism economy. Instead of tourism industry dictating its own realities and conditions to the local environments, the locality should be interpreted and developed within the concept of authenticity. The tourist should be a part of the local life instead of being only an observer.

Proposing new buildings that are in harmony with the existing traditional environment is as important as the rehabilitation of the old fabric. The new buildings or contemporary additions in the historical settings should include cultural values in the new design concept. This can be achieved by using new technology and materials besides the traditional ones. The concept of cultural continuity in the traditional environments can only be realized by fulfilling current requirements by using today’s tools and methods without losing the local original character and spirit.

6. Conclusion

Nowadays, the interests of the international society are attracted; and these interests provide a remarkable acceleration on the building activity on the Island. Cyprus, the center for growing tourism attraction in the Mediterranean basin, is faced with the threat on her unique natural and traditional environments unless appropriate precautions are proposed. While answering the increase in the building demands for housing and tourism purposes; conservation and continuity of traditional environments have to be considered primarily.

In brief, the responsibility of designers is to find the ways of analyzing and interpreting the rural housing tradition for the continuity of the tried, developed and evolved design principals in the traditional architecture. Doubtlessly, the past experiences suitably respond to the cultural and environmental needs of the context. Hence, climatically responsive, environmentally sensitive, socio-economically adaptive, culturally conscious building forms can be created. Instead of merely copying the traditional architectural elements without questioning the concept behind them, the new designs have to surpass the existing ones in the light of a new understanding. The re-interpretation and re-use of shared images and values can transfer the regular houses to Cypriot homes.

References


