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Flexible Social Housing as an Alternative to Mass-produced Housing in the Walled City of Famagusta

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Abstract: Social housing can provide sturdy and sustainable, shelter but its standardised design lacks individuality and compromises the experience of “dwelling”. This study analyses a social housing complex in North Cyprus and provides evidence that the original design of mass-produced housing can be adapted to individual and emerging needs. This is an answer to the standardization and loss of individuality. The results of this analysis are used to provide an alternative solution to the demolition of dilapidated social housing in the historic walled city of Famagusta. Built on the findings from the test case, it proposes that the social housing units in the walled city can also be rehabilitated to meet individual needs and that these alterations would contribute to the revitalisation of the area’s social fabric. In conclusion, it suggests that the adaptation of social housing should be integrated into the revitalisation of historic environments.

Key words: Social housing, housing and environment, flexible housing, historic environment, revitalisation

INTRODUCTION

Social housing is a basic need to rapidly growing societies and a challenge to authorities to provide shelter to low-income population. Many contemporary efforts have been spent to achieve residential satisfaction considering social housing as a very standardized basic need. Architecture with such strategies lacks the essence that could replace what was once considered as dwelling. Dwelling in the understanding of not simply providing a shelter but a place where it can evolve with its people’s needs and individual changes: a home (Bhatti, 1994; Norberg-Schulz, 1976, 1980; Kleinhans, 2004; Davis, 1995; Rapoport, 1994; Salama, 2007).

Social housing as an alternative to home in developing countries came to supply an affordable option for the low-income population (Lawrence, 1995, 1987; Van Vliet, 1987; Davis, 2006). These professionally designed environments provided by the authorities were not intended to enhance the changes of the residents living conditions over time. Cyprus in that sense is no different, despite social housing being a rare case in the northern part of the island.

The reasons behind the rare case of social housing in North Cyprus can be explained with the division of the island between the Greek and Turkish Cypriots after a conflict in 1974. This division led to the displacement of both communities. The Greek Cypriot majority settled in

the southern part of the island and Turkish Cypriots migrated to the north. A great number of the houses were abandoned by the Greek Cypriots after the conflict and they provided shelter for the Turkish Cypriot immigrants. Though originally owned by Greek Cypriots, an ethnicity distinct from the Turks, these houses served to similar social and cultural functions for the Turkish Cypriots who adapted them (Bogac, 2009). These abandoned houses, patterned after a semi-detached housing typology, replicated the rural and the traditional living styles of the towns and villages of the Turkish Cypriots in the south.

After the establishment of the Turkish Republic of Northern Cyprus in 1983, an increase in the population created the need for more housing. Social housing were built to meet this demand and to supplement an affordable home for the low income (Oktay, 1999; Hoskara *et al.*, 2009). In Famagusta, on the southern east coast of the island, the established social housing caused the city centre to shift from the historic walled city towards newly developed districts (Doratli *et al.*, 2001). This housing followed one of two models: vertical development (apartment buildings with 3-4 floors) and horizontal development (2-storey row housing). Although, the increase in social housing took place in the 80’s, there was a rare case of low-rise social housing previously introduced to the walled city of Famagusta during the 1950’s. Currently, these houses are in poor condition and have many unlicensed additions and extensions. Previous

proposals for the revitalisation of the increasingly deserted walled city of Famagusta have suggested the demolishing and replacement of this housing. This strategy was introduced to the municipality as part of a joint project with the UNDP-PFF (United Nations Development Program, Partnership for the Future) and UNOPS (United Nation Office for Project Services) (Doratli, 2011). This plan has not yet been implemented and as it will be proposed, the horizontal development of attached or semi-detached row housing could suitably replace the existing structures. The effectiveness of this approach can be established by examining similar social housing projects outside the walled city and by observing the cultural, economic, climatic and social impact of these structures on the individual user.

Consequently, this study raised two issues. First, it addresses the poor reputation of the social housing, especially its disregard for individuality. It suggests a solution to the brutally repetitive and mass-produced housing that was first proposed in the early 20th century and is now irreversibly embedded in the urban fabric of modern cities. The mass produced housings are a product of abstraction and indifference towards the human. On another level, the second issue addressed in this study is related to historic environments and the restrictions meant to preserve them; such restrictions can be an obstacle to addressing other social concerns. This study proposes that the revitalisation of the walled city of Famagusta should include the local residents and consider them as potential stakeholders. In order to do so, the replaced housing should meet the social, cultural, climatic issues specific to the region and majorly the individuality inspired from a test case. After addressing these two issues, it proposes that residents should be encouraged to continue living in historic environments and that the authorities should integrate changes to building codes into their revitalisation plans, as in the case of Famagusta. The objective of this study is to evaluate a test case of an already existing example of low-rise social housing that is more sensitive towards the socio-cultural, climate and individuality in newly developed areas of North Cyprus, against the social housing that were built in the old town of Famagusta. The social housing in the old town resulted in the deserting of the historic city from the local residents due to restrictions that limits alteration to social houses and prevent them to evolve in time. This test case will demonstrate the physical flexibility of these structures and their ability to evolve and grow over time to meet the needs of different users. Accordingly, the study will examine the architectural characteristics of both social housings outside the old city and inside it in order to identify the alterations that are undertaken by the

occupants according to their individual needs. Such attempts aim to note essential considerations for any future social housing in the old city of Famagusta that may take place and identify ways to look at alterations as an answer to social housing that would create effective options for occupants and help sustaining the living environment of the deserted town.

SOCIAL HOUSING: ITS SPACES AND GENERAL USER VALUE

Numerous studies have shown that the abstract spaces promoted by Modernism are based on mass production and repetitive solutions that replace the experience of dwelling with Cartesian solutions. As Heidegger (2001) argued, dwelling is an act different from building and is based on using the environment to create social space (Perez-Gomez, 2006; Perez-Gomez and Pelletier, 1992; Norberg-Schulz, 1976, 1980). However, the mass production of vertical housing lacks the ability to evolve over time and adapt to rapidly changing human needs, both of which are prerequisites to the essence of dwelling.

The need for mass-produced housing in Europe emerged after the Second World War, when it became necessary to provide shelter for immigrants and refugees in a short period of time. The industrial and technological innovations occurring at the time facilitated the creation of more economical and efficient living environments. Although housing was once oriented horizontally, living environments now extend vertically. Apartment blocks replicating neighbourhoods could be multiplied mathematically to accommodate a larger number of people (Ferrari, 2011). Interiors were designed and optimised to meet basic and functional needs. This meant that places and spaces were treated as merely mathematical calculations.

For the users of these spaces, this approach creates dissonance between their diverse personalities and the homogenous spaces that they occupy. According to Bloch (1979) for instance, such forms are no longer differentiated humanely but geometrically and have therefore, become monotonous, alienated from their purpose and vacuous. Such living environments can affect the way people relate to each other. Since, dwellers of the modern cities are isolated with sealed existences, they are separated in their containers (Smith, 2001).

Such spaces are conceptualised as empty, neutral; they are containers a waiting to be filled with people and things and seem to be militarily uniformed (Lefebvre, 1991, 2000). They are dependent on “problem solving” (Smith, 2001) and continuously limit the “relational space”

of everyday life that is the “matrix and product of the social practice” (Lefebvre, 1991). Order, functionality and the erasure of reference points are the products of modern society which rely primarily on the logic of repetition of a singular identity (i.e., homogeneity).

THE DEVELOPMENT OF SOCIAL HOUSING IN NORTHERN CYPRUS

The criticisms of modern mass produced housing discussed above are no different in North Cyprus, although being a less densely populated region, it could not escape from the strategies to treat individuality with homogeneity. After the “Social Housing Law” was established in 1984, a total of 3,387 social houses were constructed on the island (Hoskara and Hoskara, 2007). Within Famagusta and in four new development zones, three multi-storey apartment projects and one low-rise housing project were constructed. The multi-storey apartments consist of separate blocks of five floors (Fig. 1). Each floor has two flats positioned at either side of a central staircase. Each flat has two balconies and contains three bedrooms, a living room, a kitchen and two toilets. The residents share a parking lot in front of the apartment and the ground-floor flats open onto a narrow side garden. Five to six apartment blocks are built side-by-side facing another row of blocks, with a service street running between them. The arrangement and number of the blocks changes from one area to another according to the nature of the site. In some apartment buildings, the ground floors are used as shops. More than twenty years after their construction, the buildings remain unchanged because residents are legally restricted from changing the facades. A few alterations including the enclosure of

balconies with glass or the introduction of variation in the colour and shape of the balustrades can be seen. However, even if the laws did allow alteration, it might be impossible for the owners to add or remove exterior components due to the nature of the structure. Therefore, the flexible alteration of this space to meet individual needs is limited.

The other approach to social housing is the horizontal development of low-rise row housing (Oktay, 2002). There are only two examples of this approach in the city, one is located in the walled city of Famagusta and the other one is located in a newly developed area. The one outside the walled city consists of attached houses that are configured in rows and reach up to ten adjacent houses long (Fig. 2). When the rows are arranged back-to-back, they are separated by small backyards and gardens. When these rows face one another, a service road runs between them. The rows are connected to a network of streets that dictate the length of the rows, including the number of the houses in each row and their positioning relative to one another. In total, around 150 units are organised in four major double-sided rows that overlook the parallel streets from two sides and are intersected by perpendicular streets that connect to the four major streets.

The typical attached houses are of two types, although the difference is rarely visible, each unit is generally a cubical two-storey concrete building (Fig. 3). A typical house has got a backyard and a front garden, almost equal size and defined by a fence. Each house is separated from the other by a low concrete wall. The roof of each unit is low-pitched and made of red tile, contrasting with the white plaster of the concrete façade. Openings in the façade allow the ground floor facilities,



Fig. 1: The multi-storey social housing apartment development in Famagusta



Fig. 2: A view of low-rise social housing in Sakarya district

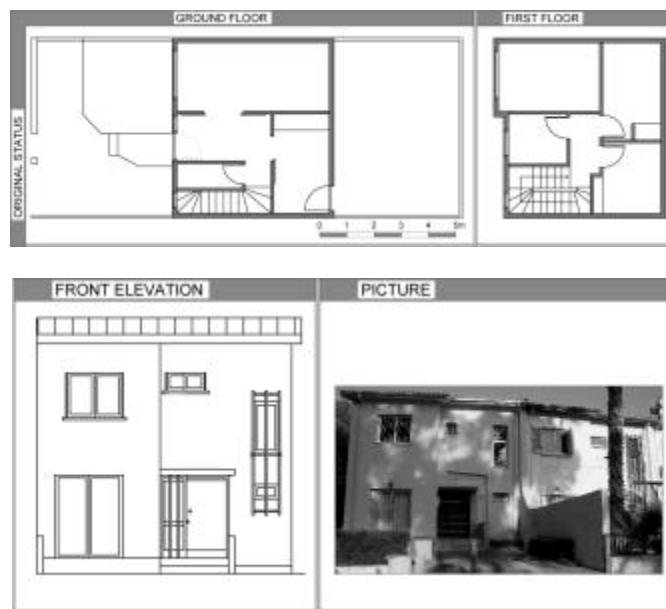


Fig. 3: A typical unit of the original social housing in Sakarya district

namely, the living room, kitchen and a small toilet, to open towards the outside gardens. Three bedrooms and a main toilet are connected by an interior staircase in the first floor. The buildings lack articulation on the façade except for a thin linear canopy that defines each entrance.

By exploring the streets on which these buildings are situated and recording the changes made to the buildings' physical appearance, it is observed that alterations expressing individual needs and personal tastes were made to the horizontal low-rise row houses in the Sakarya

district. As will be discussed shortly, in some cases, the original appearance of the house was not even recognisable.

ANALYSIS OF THE SOCIAL HOUSING SAMPLES IN SAKARYA DISTRICT (SHS)

All of the houses that had been modified were recorded and analysed and several samples were selected. This sample set allowed identifying similarities in the type



Fig. 4(a-f): Samples of extensions on the ground floor of the social housing in Sakarya district

and nature of the extensions and alterations made to the houses. To examine the buildings' alterations, the original blueprint of a typical unit was used as a reference point. After analysing the nature and extent of the physical alterations, examples with similar features were classified into groups. These general sampling groups revealed trends in individual needs as well as tastes and their evolution over time.

The alterations were categorized according to their similarities. They were then grouped under the following headings. It is worth mentioning that although, the alterations were categorised as being similar, the houses did not look identical:

- Spatial extension on the ground floor
- Spatial extension on the first floor
- Change of/addition to an opening's shape and size
- Changes to colour and/or material of the façades
- Changes to the entrance door
- Balconies, garages and canopies
- Details, furnishing and fences

Spatial extension on the ground floor: Most of the houses had an extension on the ground floor, which shows a common need to enlarge the living area including the living room and the kitchen. However, the differences in exterior appearance showed that these changes were made according to individual needs. There were a large variety of changes within this classification, including extensions in the front or back yard. Moreover, the extent of these changes reflected an individual's prioritisation of for instance, a garden or garage space. The locals tended to integrate the outdoor spaces into their daily activities according to the social, cultural and climatic factors of the region. However, the majority of residents reserved most

of the backyard. This allowed them to maintain their privacy and use the front garden area for parking. The sizes and forms of the ground floor extensions varied between being cubical, linear and angular. The roofs on the extensions were either flat inclined with red-tiles style similar to that of the original roof (Fig. 4).

Spatial extension on the first floor: According to the observations, the top of the ground floor extensions were used as semi-open spaces on the first floor and were often employed as balconies, terraces or, in rare cases, extensions of the bedrooms or bathrooms. The approach in ground floor extensions indicated a general user satisfaction with the size of the first floor bedroom. Enclosed alterations on the first floor were made in the front or back of the building, necessitating the extension of the original roofline towards the front or back of the house. However, in these cases, the major original features of the building were lost or had become barely recognisable (Fig. 5).

Change of/addition to an opening's shape and size: These alterations generally include the alteration of the original openings, new openings in the original façades or openings in the newly introduced spatial extensions. Alterations to the original openings were made by changing their sizes and shapes, as in the addition of a circular opening over an original window that resembles an arch. However, the extensions' openings were generally large and made of glazed glass, thus changing their original purpose from a door to a window or from a window to a door. Residents of houses located at the ends of rows sometimes added new openings to the blank sidewalls (Fig. 6).



Fig. 5: Samples of extensions on the first floor of the social housing in Sakarya district

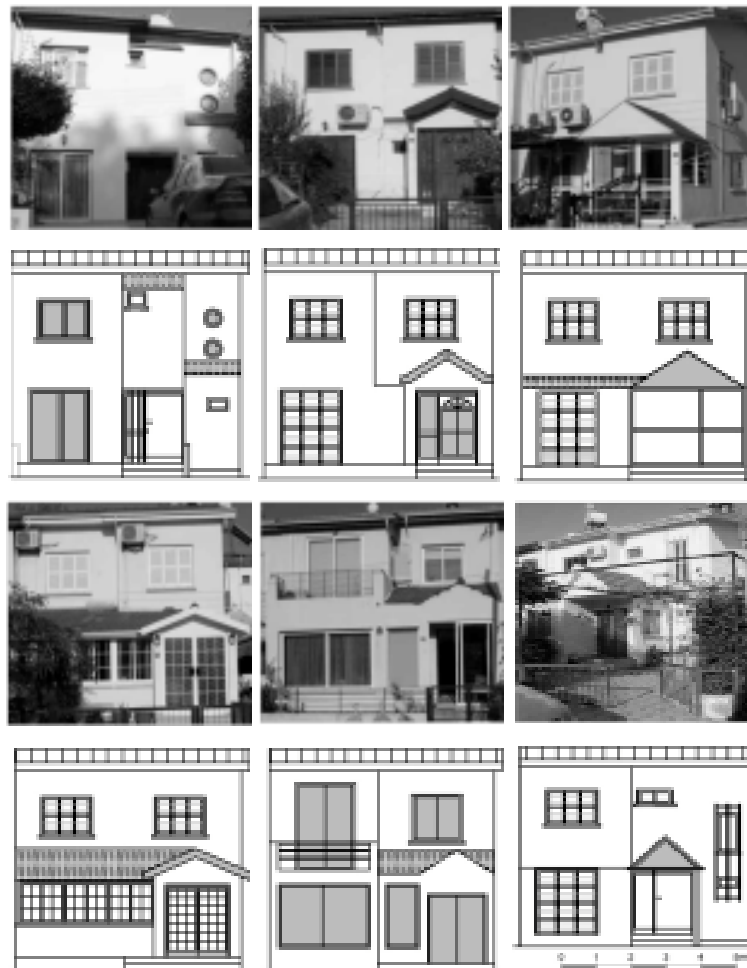


Fig. 6: Samples of alterations on entrances and openings of the social housing in Sakarya district

Changes to colour and/or material of the façades:

Although, some houses had no structural alterations or extensions, many buildings featured changes to the colour and texture of their façades. In some cases, stone cladding of the whole or part of the façade can be observed and the colour was generally that of natural cut stone in these cases (Fig. 6).

Changes to the entrance door: Attempts to emphasise the entry space revealed a common approach among the buildings. Whether by extending it outwards, adding a glass covered space with area with a roof or elongating the existing canopy to create a semi-open space defined with arches or columns or as part of the continuous extension of the living room, residents often made efforts to expand this area of their home. Even when none of the above changes were observed, minor alterations had often been made to the door itself, such as the replacement of a solid material with something transparent or translucent.

Balconies, garages and canopies: Semi-open spaces were lacking in the original layout of the housing. However, such open spaces are conducive to both the climatic and social conditions in Cyprus and are common features of the vernacular houses across the island. Residents created these spaces accordingly. Canopies covering the front area of the building were the most common alteration and these canopies have numerous uses, such as providing shade for parked cars or for social gatherings. At the same time, the lack of outdoor spaces on the first floor led to the creation of balconies which were typically made on top of the ground floor extensions and add variety to the buildings' outdoor spaces.

Details, furnishing and fences: Shutters, fences and garden walls are usually expressions of personal taste and their affordability makes their replacement a simple and inexpensive way to individualise a building. Therefore, people often modify these elements to personalise their home and to create difference. For instance, a wide variety of garden fence styles were used in the houses observed, with decorative wrought iron being the most popular. Additionally, some residents added extensions to the concrete wall that separates their building from that of their neighbour's for the sake of privacy.

By comparing these changes with the structure of the original buildings, the variety of alterations to the buildings indicated the following:

- The ability of mass-produced, repetitive housing to sustain the meaning of dwelling by adapting to the changing needs of its individual owners

- Even minimal changes to these structures showed that owners are able to personalise their homes which is an example of individuals' need to create difference than others
- Changes were made according to individual tastes and needs instead of being shaped by the building's structure

The test case discussed above demonstrates how social housing can cultivate difference and offer flexibility, both of which are necessary for the essence of dwelling. Accordingly, this study questions if the flexible social housing that allows alterations is applicable in the walled city of Famagusta.

THE SOCIAL HOUSING IN THE WALLED CITY OF FAMAGUSTA

Located in southeast Cyprus, the walled city of Famagusta was founded in the mid 7th century and came under the reign of Lusignan, Genoese, Venetian, Ottoman and British rulers until the establishment of the Cyprus Republic in 1960 (Langdale, 2010). The city had been influenced by many civilisations and its harbour has strategic importance to trading routes in the Mediterranean Sea. As a result, the walled city has various heritage sites, most of which have been altered or have deteriorated over time. Especially during the British period, new buildings were constructed on empty land and some of the old buildings were replaced. The city still has a predominately medieval character due to the fortification walls and the monumental buildings that are densely clustered around the main square. The city is organised along a densely built main axis running from the Land Gate in the southwest of the city to the Sea Gate in the southeast. There is also a main square with a cathedral and some public buildings. The rest of the city is characterised by narrow organic streets, one-and two-storey houses from different periods and open lands in the southeast, north and northeast.

The social housing in the walled city of Famagusta is located north of the city and was built between 1958 and 1961 to provide affordable housing (Fig. 7). Consisting of 53 units and distributed across five separate blocks, 150 people occupy this social housing, according to the latest statistics from 2005. However, these units are not for sale; instead, they are leased. The lessees can reassign the house to their children or can offer it for rent by paying a minor monthly fee to the municipality (almost 8 US dollars a month). The lessees are allowed to construct extensions to the original building only in areas not visible from the street. The regulations do not permit any change that alters the historic character of the structure.

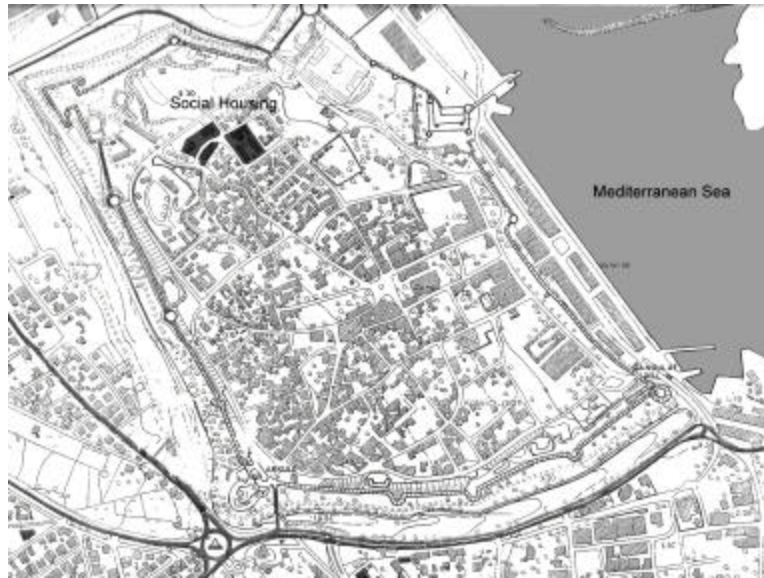


Fig. 7: Location of the social housing in the walled city of Famagusta



Fig. 8: A view of the social housing in the walled city of Famagusta

Case study: analysis of the social housing in the walled city: The social housings in the walled city referred to as the “Municipality Housing” or “Belediye Evleri” (BE) in Turkish, are similar to the low-rise developments; yet, they are composed of two separate floors (Fig. 8). The rows are not consistent in their orientation, size and relationship to each other. There are between 6-9 units on each floor and the rows are arranged perpendicular to one another as well as back-to-back, creating an open space

between the rows. The units on the first floor are accessed through open stairs at either side of the blocks and are linked by an open corridor at the back of the row. The units on the ground floor have direct access to the street and the units on the first floor have balconies that overlook the street.

Each units have a total area of approximately 20 m² which includes the living room, a kitchen counter, toilet and a bedroom. These areas open to either side of the

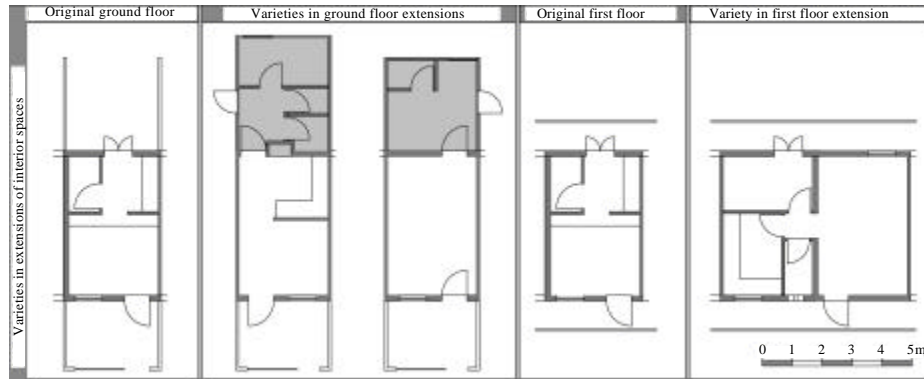


Fig. 9: Variety in extensions of interior spaces of the social housing in the walled city of Famagusta



Fig. 10: Extensions to the backyards of the social housing in the walled city of Famagusta

block. The buildings were designed in the “modern style” which is clear from the projecting concrete beams, flat concrete slabs and roofline. The façades of the units are separated by a projecting wall to create privacy.

The small size of the units has prompted residents to enlarge their living space by expanding towards the backyard or hiring the adjacent unit and connecting the two units from the interior (Fig. 9). These changes have not been made to every unit and some of them provide insufficient space for the number of occupants when that number exceeds four people. In an interview with one of the owners, it is observed the four occupants (the parents, the son and his spouse) live in an 18 m² house with one bedroom. The general restriction against alterations in the walled city applies to both historic and relatively new buildings, regardless of their historical significance. The occupants cannot make extensions or alterations on the side of their unit that faces the street because these changes would be visible from the road. Additionally, the units on the first floor do not have the

opportunity to do extensions to the backsides of the buildings because these units back up to a circulation corridor.

Currently, the social housing appears chaotic and is reminiscent of squatter settlements and slums (Fig. 10). The residents of the ground floor units, who are allowed to expand towards the back of the building, extend in that direction as far as they can. This leaves little space for a person to pass between the two extensions in the back-to-back rows. In addition, this expansion in all available directions limits the users from using the rear portion of their property as an outdoor space or garden, regardless of the fact that the rear area offers more privacy than the front yard. The density of these additions (which were annexes more than additions) also reduces the quality of living in these areas because air circulation and exposure to light are diminished.

The rear annexes were generally used as bathrooms and kitchens, enabling residents to retain the use of the living room due to its proximity to the street and the

entrance. The relocation of these facilities requires alterations to be made to the existing infrastructure, including water tanks, pipes and drainage and waste systems. Such services were relocated to the roofs of the extension and this apparatus created a chaotic appearance that can be seen by neighbours.

RESULTS AND DISCUSSION

The analysis of the condition of the social housing in the walled city (BE), in relation to the test case outside the walled city (SHS), highlighted differences in the alteration tendencies. One of the reasons that restricted the owners to alter their buildings was due to the protection measures for the walled city which were initiated in 1931. The listing and preserving of monumental historic buildings was accomplished primarily under the authority of the Department of Antiquities. Following this action, the city's fortifications and moat were declared conservation areas in 1989 and in 1999, 346 buildings were listed (Doratli, 2011). Attempts to protect the walled city were enhanced by the "Revitalisation Plan for the Walled city of Famagusta" in 2005 (Famagusta Municipality, 2005). This plan was a result of collaboration between the UNDP-PFF and the Famagusta Municipality. The plan proposed 58 projects for revitalising the walled city and the "Belediye Evleri" (BE) project was one of these. In the revitalisation plan's report, article 6.78-6.82 states that the poor condition of the houses of the "Belediye Evleri", including the area to its west, should be replaced with new housing projects (Famagusta Municipality, 2005). This proposal was justified by the small size of the units and their poor condition led this area to be inhabited only by low-income residents.

In this section, the study proposes to replace the existing "Belediye Evleri" (BE) with social housing that was supplemented by the government to attract a variety of people into the area, as stated in the report. However, replacing the existing housing with low-rise structures is proposed in order to maintain the skyline and the physical characteristics of the buildings and the use of attached housing as an alternative is recommended.

As found in the SHS test case samples located outside the walled city, the residents were still able to express individuality and to adapt the structures according to their cultural, climatic and personal needs. The variety in the alterations made to these structures, from major to minor, indicated that the owners were able to establish their own identities without subverting the regulations. For instance, none of the alterations changed the original height of the buildings or

altered the rooflines. Though variety could depend on owners' tastes and economic status as well as their needs, individuality could be achieved by attention to minimal details and by making affordable changes to the original structure. Attaining such results would not have been possible if the original project had not been designed around certain need-based parameters capable of accommodating a wide range of user types, including single users and families. The existing spaces could be reorganised to achieve privacy in both the horizontal and vertical dimensions and to allow for alterations for both the physical characteristics of the building and its use (e.g., the change of use from housing to markets).

These measures would improve occupants' quality of living which is usually compromised in social housing. Moreover, they would resolve the contradiction between the concepts of home or dwelling and the standardized notion that social housing interferes in the way people occupy their houses. Social housing needs to be re-imagined instead of being a system in which occupants are homogenous, with similar demands and needs, it should be thought of as a place where personal preferences can be expressed in the social, spatial and aesthetical terms.

Using the low-rise development as an example of the flexible adaptation of built space, the "Belediye Evleri" could be replaced with a new structure using the SHS test case as a model to ensure that the cultural, social, climatic and personalised needs of future occupants are met. The following criteria were found to be important:

- Living rooms and kitchens were sufficiently large in the SHS whilst in the BE's the 18 m² first floor were too small
- Direct relationships between outdoor and indoor spaces were essential and attained in the SHS, whilst sufficient balconies and private gardens in the BE's were lacking
- Sufficiently large semi-open spaces in the SHS, where the balconies on the BE's first floor were too narrow
- Visual connection with the outside was attained in the SHS, however, the paucity of openings on the elevation of the BE's ground and first floor was problematic
- Sufficient amount of daylight and ventilations were achieved in the SHS, however, the proximity of the buildings to each other due to the BE's ground floor extensions limited light and air reaching the building
- Exterior appearance, including cladding or colour, as a means of expressing difference and therefore, individualism were only traced in the SHS

- Emphasis on the entrance doors by defining an additional enclosed or semi-enclosed space in the SHS appeared to be lacking of such opportunity in the BEs because they overlooked the main street
- Use of furnishings to individualise the appearance of buildings were only traced in the SHS

After assessing the above criteria and their associated considerations, it became evident that the current condition of the BE is not only an expression of the physical shortcomings of the building but also of the typology in which attached units are occupied by different users on each floor. For instance, providing a second floor may not be a panacea but it would guarantee that the residents of the first-storey units do not have to overlook and invade the privacy of the ground-floor occupants' open spaces.

However, for such an improvement to be implemented, the rules and restrictions of the building code must be flexible. The restrictions and regulations within the walled city do not currently allow any sort of change or alteration and residents are therefore, unable to make these modifications to their structures. In the following section, it is proposed that more flexible restrictions would not only guarantee a supply of sustainable housing but would also contribute to the revitalisation of the walled city.

Social housing as a tool to sustain the revitalisation plan for the walled city: Each quarter of the walled city of Famagusta contains buildings that date back to different periods. Among the historic and architecturally significant buildings in the city are those that belong to the early period of the last century. Although, they are modern in nature, being relatively new and built primarily of concrete, they are subject to laws that prohibit any changes to the façade of a building. Except for maintenance purposes, alterations to the height, size of openings, materials or any visible parts of a building are not allowed. There are very few works of contemporary architecture within the walled city after 1980s because around this time, many people emigrated from the walled city to new districts. Today, the walled part of the city is primarily of interest to tourists and has some commercial and entertainment facilities for locals, such as restaurants and coffee shops. After a certain period of the day and by the closing of the shops, this part of the city is deserted. Accordingly, the revitalisation plan aims to bring people back to the walled city but its implementation is hindered by the restrictions of the “Antiquities Law” and “Town Planning Law”. As a result, this plan remains unimplemented except for the restoration and maintenance of old historic structures.

In the walled part of the city, sufficient housing is lacking not only in quantity but also in quality and this may explain why the walled city has been largely abandoned. Accordingly, it is proposed that the revitalisation plan should allow housing to have a variety of functions to make it attractive to a wide range of users. However, any social housing development that would replace the BE should follow certain criteria suggested by the findings of the test case (SHS). These criteria would allow residents to customise their environment (at the unit level) and therefore, satisfy individual needs related to culture, climate and privacy. It would also take into consideration future residents' needs and make the development more sustainable over time. To accomplish this, the following should be considered:

- Mass social housing should be provided by the government and not the private sector. This would guarantee affordable rates for users with a wide range of incomes
- The units' sizes should be variable enough to attract different user types, including families (current statistics report that 41% of residents are single and 11% are widowed)
- A variety of basic needs and facilities (such as markets and communal services) should be supported and integrated at a close proximity
- The repetitive, attached model of housing can be mass-produced and is cheaper and faster to construct
- Modular solutions should allow people to control their use of and orientation to open space
- Roof space should be allocated to one owner (even if the building consists of one or two storeys). This allows spaces to be shaped and arranged according to individual will and need without creating an obstacle in the view of the residents above or disturbing the privacy of the residents below

However, for such criteria to be implemented, the laws and regulations for property in the walled city need to be made more flexible at least in the relatively newer parts. The inability to reconfigure buildings by law may explain the act why old cities like Famagusta are being abandoned. Yet, when these spaces are allowed to evolve, as was observed in the SHS, this act can be reversed. Therefore, restrictions, rules and regulations that are conservative in their approach are only furthering this area's decline. In reality, the historic significance of the area in question is less than other parts. Implementing the criteria obtained through the test case in the social housing of that area would not alter its character.

Meanwhile, the spirit of Famagusta and historic cities in general cannot be maintained by empty monuments. Without the presence of adapting the conditions of historic buildings to present living standards and in empty lots introducing new buildings is inevitable since, a setting is considered “historic” when buildings have common/similar characteristics. Designs for new social housing should use these structures as reference points. However, historic districts usually contain buildings with differing characteristics that nevertheless represent the conditions and aesthetic sensibilities of the time in which they were built. Maintaining continuity over time is important to creating and preserving the character of historic districts. The appreciation of historic towns as evolving entities raises the question of how this process should be managed in the present.

In the case of Famagusta, a town that has been influenced by the presence of several cultures, the historic walled city contains buildings from different periods representing not only the characteristics of their time but also of different cultures, ethnicities and religions. However, there are parts of the town, primarily in the north, where the density of buildings is lower and, in some sections, the historic buildings are of limited significance. It is important to state that a range of design approaches should be employed according to the environment’s degree of significance. Furthermore, significance should be determined by public consensus. Thus, the actual character and historic context of a place become important considerations when new guidelines for construction are formulated through the revision and re-evaluation of current laws.

CONCLUSION

Social housing is an optimal, efficient and economical means of providing shelter to people. However, standardised solutions eliminate differences between individuals and conceive them as a homogenous mass. In Famagusta, this approach caused the meaning of dwelling to become obsolete and replaced social spaces with spaces dominated by a Cartesian logic. These spaces did not accommodate the changing needs of the inhabitants over time and were abandoned as residents sought a better standard of living. In many cities, the migration of people towards newly developed areas leads old settlements to be abandoned. The situation in Famagusta is no different. Being a walled city with historic buildings, the houses that exist within its walls do not meet the requirements of today’s users. Moreover, property laws established to preserve the historic character of the city restrict homeowners from making alterations to their property.

Using a test case of social housing outside the walled city (SHS), it was found that a balance could be achieved between retaining the character of a structure and allowing individuals to make alterations to it. The variety of changes observed among the similar units revealed the importance of customisation to occupants. These changes address needs related to climate, privacy, culture and social considerations that are specific to individuals and change over time. However, this flexibility cannot be easily attained in the walled city of Famagusta’s relatively new housing districts. The plan to regenerate the walled city should acknowledge that the revitalisation of local housing needs to be integrated into the entertainment and commercial establishments in the area. When new housing replacing the BE is introduced to this area, certain criteria should be followed to ensure the sustainability of the new structures allowing the housing supply to evolve with the changing needs of the populace.

Different studies argued that mass produced social housing that are not adjusted according to occupants life-style would lead into generating less sensitivity towards socio-cultural issues (Rahman, 2002; Laquian, 1983). This had drawn the attention of many researches, as mass production cannot solve the crisis of housing. To this end, the study on social housing in Cyprus illustrates the ability of residents to change mass-produced housing into a distinctly personalised and adaptive place, a place to call home. There are many places in the world in which the idea of “home” is not attainable and the ontological phenomenon of dwelling must therefore, be made achievable even in mass-produced structures. The methods utilised to obtain such results must be based on the philosophy that architecture is an expression of people and their life patterns.

As in other studies of social housing, this study is context sensitive in terms of the social, cultural, climatic, economic conditions and patterns of land vacancy. Generalisations from this study should therefore, be made cautiously. This study also provides general criteria for the improvement of social housing rather than defined design guidelines. While this study proposes that the restrictions in the walled city be made more flexible, it does not recommend that they should be removed entirely; the lack of adequate and comprehensive regulations could turn the social housing into squatter settlements characterised by chaos. The study can contribute to further interests for redefining the rules, regulations and policies for new social housing projects in historic environments.

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