

Physical space, social behaviour and socioeconomic changes in traditional neighbourhoods: A case study of the traditional city of Nablus



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ABSTRACT

This paper investigates the relationships among socioeconomic changes, physical space and social behaviour, particularly with respect to how they are simultaneously influenced by each other in traditional neighbourhoods and how their interaction within the same context is important for the design and development of the built environment, particularly in the developing countries of the Middle-East, where traditional neighbourhoods suffer from a state of serious decline. Although theories concerning this topic focus on the relationships between social behaviour and physical space, between social behaviour and socioeconomic status or between socioeconomic status and physical space, they still do not sufficiently explain the influence between these three variables within the same context, whether traditional or modern. Particular attention was paid to women because they were the main social group in the Middle-Eastern societies who was largely influenced by the process of modernization and development in traditional neighbourhoods in terms of culture, education and behaviour. The traditional city of Nablus in Palestine was chosen as a case study. The main data collection methods were the use of questionnaires, observations and interviews. In addition, several techniques, such as the use of photographs and sketches, and cultural and SPSS techniques were employed to describe and reflect the results of the study. The primary findings of this paper are that socioeconomic changes, social behaviour and physical space are influenced by one another and that the variables produced by this interaction are not fixed and dependent on one another.

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1. Introduction

Throughout the Eastern Mediterranean region, most of whose countries possess ample amounts of traditional neighbourhoods; local people used the inherited local know-how to shaping their built environment according to local needs and culture, benefiting from each variety's particular aesthetic, physical and geographical characteristics. In this regard, Jenks (2005) explained how the ideas behind the traditional neighbourhoods are important stand in the attempt to find sustainable urban form by reducing the dependence on the car and providing mixed uses, which keeps the neighbourhood secure and lively. In addition to that, Fairley (2002) claimed that sustainability of traditional neighbourhood can be enhanced

when the residential population is socially diverse (gender, education, income level....etc).

During the twentieth century, socioeconomic changes occurred in the traditional neighbourhoods worldwide and the urban form of these neighbourhoods was subject of concrete changes. The industrialization and intellectual change led to gradual changes in urban design strategies and ways of using urban spaces in traditional neighbourhoods. In the Mediterranean region, these changes occurred later, particularly as a result of the colonization process after the First World War. The emergent dominant powers, particularly Britain and France, demolished the existing structures of the defeated Ottoman ruling system and the systemic shifts they imposed had involved all aspects of society: law, administration, education commerce and lifestyle and this paradigm shift led to transformation in the local architecture and town planning (Nooraddin, 2004). Generally, the impact of these changes in the traditional neighbourhoods was visible in two aspects: 1) as a natural development process in the society where changes in the

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social status of residents occurred due to the mobility of residents; mostly higher status people left traditional neighbourhoods (Handy, 2010) to settle in the new established areas. This led to a state of decline, as is observed in several developing regions in the Mediterranean, including Palestine, and 2) as a revitalization and restoration process in the case of gentrification, where poor residents were replaced by wealthy residents (Lees, 2008), and this situation leads to development and progress in the traditional neighbourhoods, as is observed in several Mediterranean cities.

In both cases, changes limited the variety of inhabitants and influence the sustainability and social life of the inhabitants of traditional neighbourhoods. Social relationships between poor people (as in the first situation) are mostly stronger than those between wealthy people (as in the second situation).

As a consequence of these changes, the traditional neighbourhoods in the Middle East started experiencing new challenges in their physical space due to the new evolving socioeconomic and behaviour changes in the status of their inhabitants. This evolution was obvious in two interrelated areas: 1) in the urban form of the traditional cities due to the growth of their population and the expansion of the cities with new areas created with new types and functions of urban spaces, and 2) in the socioeconomic aspects of the societies as the social structure of the traditional neighbourhoods built on micro-communities, often sharing the same tribal or ethnic origin and mirrored in the spatial structure of the city as individual neighbourhoods, was replaced by the emergence of a single macro-community within which families of different origins are mixed and merged together (Bianca, 2000). Thus, a new lifestyle models, requirements and needs were developed, leading to social, educational, economic and legal changes within the civil society, particularly in relation to women's daily activities and their role in the society. This aspect was very clear in the new educational and professional opportunities that were offered, particularly to women, who became more visible in the streets (Ahmed, 1992).

Within this context, the aim of this study is to investigate how people's behaviour, physical space and socioeconomic changes in traditional neighbourhoods in the Mediterranean region are influenced by each other. Although theories concerning this topic focus on the relationships between social behaviour and physical space, between social behaviour and socioeconomic status or between socioeconomic status and physical space, they still do not sufficiently explain the influence between these three variables simultaneously and within the same context, whether traditional or modern. In this framework, such an articulation is important for the design and development of the built environment. Particular attention was paid to women because of their status in Middle-Eastern societies, mainly concerning their privacy and its role in creating the built environment in traditional neighbourhoods. Also, women were the main social group who was largely influenced by the process of modernization and development in these neighbourhoods in terms of culture, education and behaviour.

The traditional city of Nablus was selected to conduct this research (Fig. 1). The study area is located in Al-Yasmeeneh neighbourhood (Fig. 2), which is considered to be a distinguished representative case within the traditional city environment. It yields strong evidence of continuous and well-developed human activity dating back to the Roman period (72 AD) right down to the present day. Still standing within the urban environment of this city is a great number of diverse physical features, socioeconomic and behavioural relations.

The main criteria used for the selection of this study area are diverse: (1) the richness of the area with evidences, which reflects various socio-economical conditions during the last century, (2) the quite alarming socioeconomic and behavioural conditions, (3) the existence of a reasonable number of still standing traditional

quarters, (4) Moreover, the rapid and largely unorganized urban expansion seen since 1994 within the area that seriously threaten the traditional structure of the city, (6) Nablusian society was among the first Palestinian community where women were assured their rights and liberation. The first women's society was established by women in Nablus in 1921 aiming to improve the situation of Palestinian women with regard to health, education, and economic and social opportunities (Odeh & Atallah, 1999).

In the course of the study, the traditional city of Nablus was visited, surveyed, documented and analysed. This facilitated a discourse regarding why the socioeconomic, physical and behavioural relationships in this city have developed in the particular way they have did, considering the impact of political, historical, aesthetic and functional factors on the city structure. The visits allowed the definition of the various variables of development, the formulation of a proper understanding for analysis using a number of key values and characteristics.

Several constraints were encountered throughout the fieldwork, such as the absence of people who had direct contact with the entire process of foundation of the present city structures and the lack of documented evidence relevant to the subject. Also, in many cases, the residents were not the original citizens of the area.

2. The traditional city of Nablus

The traditional city of Nablus is located in the northern part of Palestine and dates back to 72 AD, when it was constructed by the Roman Emperor Vespasian (Fig. 1). The structure of the city was transformed into one of Arabic and Islamic character in 636 AD.

During the Ottoman period, Nablus was one of the most economically active cities in Palestine and was a centre for local and regional trade and a manufacturing centre for soap, oil and cotton goods. The city was ruled by wealthy families who lived in palaces. The social structure of the city was based on social ties, and extended families shared courtyards.

Nablus, similar to many other Palestinian cities, underwent a slow process of modernisation beginning in the mid-Nineteenth Century, due particularly to the Ottoman land reforms that were introduced in 1839–1840. Thereafter, the city and its province were increasingly exposed to an imported culture and technology, and the nature of its society and traditional culture experienced fundamental changes reflecting a new matrix of needs, desires and modes of living.

One result of these processes was that new economic and political elite of urban notables was established, a class seeking its aesthetic archetype in the art of the so-called "noble society". By the end of the Nineteenth Century, an innovative architecture of various new and mixed styles was being imported and implemented on the fringes of Nablus "Traditional City" (Fig. 1b).

In 1918, the Ottoman Empire collapsed and the city was occupied by Britain. The development process that started at the end of the Ottoman rule continued, but this time it was dictated by policies imposed based on English planning and architectural concepts and forms. The new fashions and cultures that accompanied the car and other methods of transport, new requirements and needs leading to social, educational, economic and legal changes within civil society, particularly for women, as well as mass communication and cultural exchange, led to the favoring of modern architectural styles. The limited access of cars to the traditional city was a main reason behind the decision of many people, particularly the rich, to settle in the suburbs, where they began to construct new single-family houses. Simultaneously, people emigrating to work in the city found a proper place to settle inside the traditional fabric. This reallocation of population created a division between socioeconomic classes in the traditional and modern neighbourhoods



a



b

Fig. 1. The traditional city of Nablus, Palestine: a) A map showing the administrative structure of the West Bank of Palestine and the location of Nablus (<http://www.ochaopt.org>) b) A view showing the compact fabric of the traditional city of Nablus (in the middle) and the new urban expansion in the surrounding mountains.

(Abdel Hadi, 2004).

The urban design of the traditional city is based on territorial definition where six small independent neighbourhoods are defined: *Al-qysareyeh*, *Al-qarion*, *Al-aqabeh*, *Al-gharb*, *Al-habaleh* and *Al-yasmeeneh* that will be the field for this study (Fig.2b). Each neighbourhood consists of one large unit defined and separated from its surroundings by connected buildings and gates; it has a number of residential units clustering around the courtyards which are the focal points of these units, main public facilities such as mosque, public bath, fountain, in addition to a few shops to service the inhabitants and is connected with the main core by transitional streets.

The rules which govern urban design and urban use are informal ones based on the social relations and cultural values, particularly concerning the separation between commercial (public) and residential (private) functions.

The street network follows an organic approach with irregular layout of open, transitional, mixed and dead end pathways derived from a pedestrian scale and has sequence hierarchy in width and layout offering different degrees of accessibility (Fig. 2). The urban use is based on differentiation between residential and commercial zones, where as: 1) semi-public spaces include mosques, public baths, shops, schools, and medical centers that are also integrated into residential districts and are evenly distributed in the neighbourhood, and 2) semi-private space that: include spaces where interaction between private and public occurs, such as in residential entrances, courtyards, windows and roofs. These spaces are integrated as parts of dwellings and distinguished from the public sphere by materials and levels. Inhabitants of the dwellings are the principal users of semi-private spaces and strangers avoid entering these spaces without permission.

Currently, the traditional city of Nablus faces decline. The Israeli occupation in 1967 caused a long period of political and economic instability in Palestinian territories that were continuously exposed to Israeli policies of annexation and confiscation of land for colonisation purposes, constraining, among other issues, various aspects of development in the occupied Palestinian Territories. The unsettled political situation also encouraged the remaining higher income, educated old and young people, particularly women, to leave the traditional neighbourhood for security and wellbeing reasons. Although the inhabitants maintain strong relationships among themselves, they suffer from bad socio-economic situation as most of them belong to low or middle-income families, yet, most of them are old and have poor education. This situation affected the physical appearance of the city and most of its buildings are continuously deteriorating.

3. Theoretical approach

The relationship between physical space, social behaviour and socioeconomic changes has been addressed by various scholars in different ways. Various scholars explain how *Social Behaviour* is influenced by the *Physical Space*; however, they did not consider properly enough the influence of people's socioeconomic status on both social behaviour and physical space. In the context of traditional neighbourhoods, McLaughlin (2008) explained how the physical space in traditional neighbourhoods is concerned with social life of inhabitants. This was emphasized by Can (2012) and Nooraddin (2002) who also maintained that different hierarchical levels of spaces in traditional neighbourhoods encourage people, particularly women, to stay and interact in these spaces without being exposed much to the public sphere. The concept of

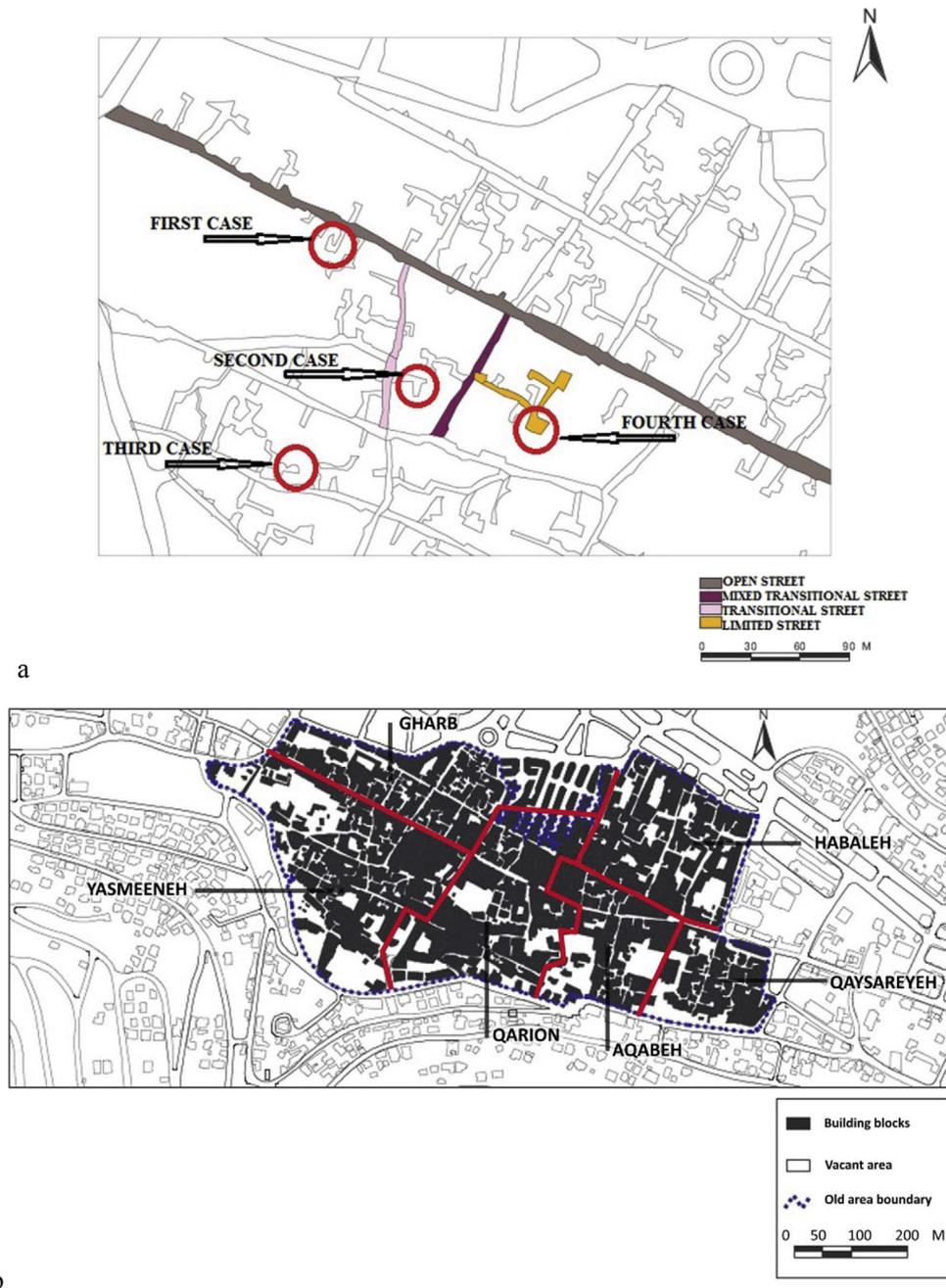


Fig. 2. The Traditional City of Nablus: a) locations of residential courtyards in al-Yasmeeneh district, b) location of al-Yasmeeneh district in the traditional neighbourhood.

territoriality considers behaviour which influences the security and maintenance of the physical environment, where the defined space gives its inhabitants the right of ownership and defence (Altman, 1975; Newman, 1972). The need for security is found to be an important need for women, which enhances their use of urban spaces (Bunston & Breton, 1992). Also, women's cultural need for privacy in the Eastern Mediterranean societies was behind the concept of territorial definition which is considered to be the main design concept that governed the physical space in traditional neighbourhoods (Hakim, 1986). Gehl (1996) discussed the relationship between social behaviour in urban spaces and physical conditions, arguing that individuals do not care about the physical conditions of urban spaces while using them for necessary activities unlike when they use the space for optional and recreational

activities. Despite the importance of his results, Gehl did not clarify the context where his results are valid and how his results are influenced by the users' socioeconomic status. For instance, in many cases of traditional neighbourhoods that are inhabited by poor people, as in the Middle-East, urban spaces are used intensively for social activities despite their bad conditions. Meanwhile, in other cases of traditional neighbourhoods that are inhabited by rich people, urban spaces are rarely used for social activities despite their good conditions.

Other scholars have explained how *Social Behaviour* is influenced by people's *Socioeconomic Status* without clarifying well enough how this influences *physical Space*. Moore (1983) explained that people interpret their physical environment differently, and accordingly behave differently, depending on their social status. Al-

Hemaidi (2001) elucidated how change in socioeconomic status of inhabitants (from poor to rich status) in Saudi Arabia was among the reasons which caused them to become isolated. A study conducted by Kira (1967) showed that the income level of people influences their needs and accordingly their behaviour. For example, Kira found that in the case of low-income groups, privacy norms are less important than for high-income groups. However, Kira did not consider the influence of gender and context on her results. For example, a study conducted by Al-Bishawi (2008) showed that the privacy needs of low-income women in traditional neighbourhoods are greater than the privacy needs of high-income women in modern neighbourhoods. In addition to gender and income level, there are other social factors which influence privacy need and behaviour. Newman (1979) maintained privacy need is influenced by family structure. For example, greater privacy and comfort is evident in houses used by single families than houses used by multi-families, where it is difficult to achieve a clear gradation of territories, as explained by Newman.

However, other scholars have explained how *Socioeconomic Status* is influenced by the *Physical Space* without clarifying adequately enough how this influences *Social Behaviour*. Smart Growth and Smart Energy (2008) and others explained how the characteristics of physical space in traditional neighbourhoods aimed to enhance the economic life of inhabitants. Although this description provides a clear idea about how the physical space in traditional neighbourhoods is concerned with people's economic life, it does not consider changes in the economic status of people and how these changes may influence the characteristics of physical space. A study by De Koning (2006) showed that new forms of mixed-gender coffee shops appeared in Cairo to meet the needs of upper-middle class women. Ghannam (2002) explained how women's access to public spaces in their neighbourhoods and their work in various activities influenced the transformation of urban spaces inside the neighbourhood. Despite the importance of studies conducted by Koning and Ghannam in clarifying how socioeconomic status of women influenced the physical space, the context where these studies are conducted is not considered properly. It is not clear whether the results of these studies are valid for traditional or modern context.

Although the above-mentioned scholars have investigated the relationship between physical spaces, social behaviour and socioeconomic status, most did not sufficiently explain how these three variables are simultaneously dependent on each other within the same context. In addition, the above researchers did not clarify whether their studies are valid for modern or traditional contexts. Although the three variables exist in both modern and traditional neighbourhoods, research has shown how these variables are different in each neighbourhood (Al-Bishawi, 2008; Nooraddin, 2002).

Therefore, this study aims to investigate the relationship between social behaviour, physical space, and socioeconomic status simultaneously in traditional neighbourhoods, which will help us to understand the design principles of these neighbourhoods and how these principles influence the social and economic life of the inhabitants. In addition, the role of women in influencing the physical space and social behaviour will be considered because of the serious changes in women's life and its impact on the physical space, as mentioned by several scholars.

4. Methodological approach

To analyse the physical space in traditional neighbourhoods in relation to people's behaviour and socioeconomic status, an environmental approach based on the concept of behavioural setting was used. For this purpose, the behavioural setting has three main

components: physical (design), social (use) and cultural (rules) (Al-Bishawi, 2008).

Design components include the spaces where the activities occur, their physical layouts, boundaries, shape, location and objects. Use components include activities in the spaces (type and time) and users (the socioeconomic status of users and the social relations among them). Rule components include both formal and informal rules that govern the physical form of public spaces. Formal rules include written rules that are concerned with the design and function of the space, such as written signs governing the use of the space and building codes and regulations. Informal rules include rules that are concerned with behaviour, such as restrictions based on religion, family and society.

In this context, the concept of behavioural setting is appropriate for analysing the physical form of the space in relation to people's behaviour in general and for analysing women's settings in relation to their socioeconomic status in particular.

The fieldwork was conducted in four stages; the first stage was a pilot study, while the other three stages involved collecting the required data.

- 1 The first stage was a pilot study. The aim was to obtain a general idea of the physical space, social behaviour and socioeconomic status of the traditional city of Nablus, in addition to choose a study area in the traditional city which is Al-Yasmeeneh neighbourhood (Fig. 2).
- 2 The second stage focused on investigating the relationship between the physical space and social behaviour through direct observations which provided information on different types of setting in different urban open spaces. In each setting, the observations covered the three main components of design, use and rules. Written notes and photos have been made to document these observations, and collected data were analysed in relation to the three main components: design, use and rules.
- 3 The third stage focused on investigating the relationship between physical space and people's socioeconomic status through both direct observations and interviews. The observations covered the physical characteristics of the studied spaces, including four residential courtyards (Fig. 2a). In selecting the courtyards, it was important to choose courtyards that presented differences in both their physical appearances and in the social relations among the families inhabiting the courtyards. The interviews were conducted with the inhabitants of the selected residential courtyards to investigate their socioeconomic status and the activities for which they use the courtyard.
- 4 The fourth stage focused on investigating the relationship between social behaviour and socioeconomic status using a standard questionnaire. The questionnaire sought data regarding the status and behaviour of women. Women's status covered socioeconomic data such as age, marital status, employment, income level and educational level (Table 1).

Women's behaviour covered the following 3 components: 1) the type of everyday life activity such as passing by, shopping, private (housekeeping activities), medical, service and religious, 2) the time of activity, which includes season, day, period, duration and frequency of activity and 3) the social relationships among users of the space, whether they are relatives, neighbours or strangers.

A total of 100 women were chosen, and a stratified cluster was selected from a random sample for the purpose of this study. The sample was distributed according to the context of the women's residence, with the following 4 representative types of streets: open, transitional, mixed and dead end streets. The questionnaires included questions about women's attitudes towards behavioural components, mainly the type and the time of activities and with

Table 1
Descriptive statistics of the respondent women.

Age	80.1% Are middle aged (20–59 years old), 12.3% are young (10–19), and 7.6% are old (above 60).
Education	7% have no education\11% have elementary education 26% have primary education\40% have secondary education 6% have a diploma\10% have university education.
Income	84.9 are of low income level (less than 1600 nis (500 dollars)) 15.1% are of middle income level (1601–3200 nis).
Employment	80% are housekeepers 14% are students\6% are employees.
Marital status	66% are married \22% are single 8% are widows\4% are divorced.

Source: researchers

whom they prefer to use the public space. Data collected from the questionnaire were analysed statistically using the SPSS program. The following statistics were used:

1. Frequencies and percentages to describe women's status covered socioeconomic data, such as age, marital status, employment, income level and educational level.
2. Correlation coefficient was used to examine how behavioural components are relevant to women's status.

5. Results and discussion

The fieldwork results and discussion were classified into three themes. The first theme is concerned with physical space and social behaviour; the second is concerned with socioeconomic changes in the society and the physical space of traditional neighbourhood, and the third is concerned with socioeconomic changes and behaviour in traditional neighbourhoods.

5.1. Results of the observations: physical space and social behaviour

The observations showed that the relationship between physical space and social behaviour in the traditional city of Nablus is reflected through various means. Men sit, socialize and walk in the streets (Fig. 3a). Women, sit on thresholds in front of dwellings and socialize (Fig. 3b). Moreover, women prepare food for cooking and hang wet clothes in the street in front of their dwellings (Fig. 3c). People do their shopping while staying in the streets in front of shops (Fig. 3d). Women sit on the sills of windows and observe the streets. Neighbours socialize through windows and doors (Fig. 3e, f).

Results of the observations showed that characteristics of the physical space in traditional neighbourhood enhance certain behaviours, particularly social interaction between the inhabitants. This can be observed as related to the design components of the neighbourhood and the rules which govern the use of the neighbourhood. The compact structure, as mentioned by Jenks (2005) and McLaughlin (2008), and the existence of transitional spaces between public and private areas support community life in general, and women's social life in particular as transitional spaces allow for women to achieve their required privacy while observing the public sphere (Can, 2012; Nooraddin, 2002). Also, the narrow width of the streets enhances socialisation between neighbours through windows and doors, whereas the rules concerning vertical separation between commercial and residential functions enhances home shopping through windows located in the upper floors. This mixed use of streets keeps them lively and encourages inhabitants to observe the street through windows as Jacobs (1961)

explained, while the rules concerning control of vehicle access to the traditional neighbourhood encourages people to walk, sit, stay and interact in the streets. This result is consistent with that of Mountin (1992), who explains how the balance between pedestrians and vehicles supports social life in the streets. Furthermore, the small areas of the dwellings cause women to conduct many of housekeeping activities in the street and the small areas of shops cause people to do their shopping while staying and interacting in the streets. Also, the generous dimensions of the thresholds in front of dwellings enhance people to use these thresholds for sitting and socializing. Therefore, it is important to maintain the physical characteristics of traditional neighbourhoods, particularly those characteristics that enhance the social life of the inhabitants.

5.2. Results of the observations and the interviews: physical space and socioeconomic changes

To study the relationship between socioeconomic changes in the society and physical space in the traditional city of Nablus, the observations and interviews covered four cases of residential courtyards. The first case is a courtyard in a large house, which was inhabited by an extended and wealthy family (the Touqan family). The courtyard used to be well maintained and was used for gathering and the recreational activities of the family; currently, however, it is poorly maintained, accessible by strangers and no gathering activities take place there (Fig. 4a). The second courtyard was also inhabited by a wealthy and extended family in the past and used for socialization. Today, however, the courtyard is inhabited by members of the extended family, but they are less wealthy. The courtyard is well maintained, still used for different everyday life and gathering activities and no partitions exist inside the courtyard (Fig. 4b). The third case is a well maintained courtyard inhabited by an extended and wealthy family that is integrated into the inside spaces of the house as a large hall that is used for socialisation and gathering activities (Fig. 4c). The fourth case is a courtyard that used to be inhabited and used for everyday life activities by an extended, wealthy family; however, the courtyard is currently populated by several single and poor families (renters). Therefore, the courtyard was divided by partitions, and a toilet and a kitchen were included into the space. The physical form of the courtyard has changed, and the social life in the courtyards has changed with it (Fig. 4d).

The results of the observations and the interviews indicated that physical spaces that are used by people of higher income and extended families are better maintained and less divided than spaces that are used by people of lower income and single families. These results can be viewed as related to the different privacy needs of different families and sense of belonging. In spaces used by lower-income groups and single families, greater privacy is



a



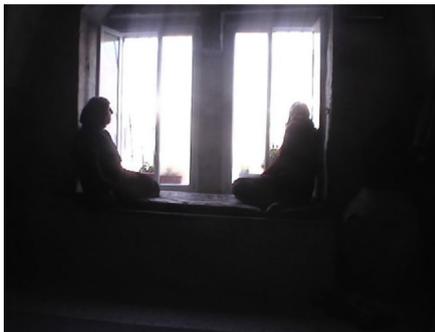
b



c



d



e



f

Fig. 3. Examples of illustrations showing the results of the observations made regarding the relationship between physical space and social behaviour in the traditional city of Nablus: a) Men sit in the street, b) Women sit at thresholds, c) People hang their wet clothes in the street, d) People do their shopping while remaining in the street, e) Women sit on the sills of windows f) Mixed-use activities in the street.

achieved than in spaces used by higher-income groups and multi-families (Newman, 1979). The sense of belonging to the space is greater for spaces used by extended families that own these spaces than for single families who are mostly strangers to each other. This may cause the spaces used by extended families to be of better physical condition than spaces used by single families (Altman, 1975). In addition, division of the spaces can be viewed as related to the change in the use of these spaces and the need for new services in the house (kitchens, toilets, etc.), which influences the aesthetic quality of these spaces negatively. This is consistent with the findings of Rapoport et al. (1980), who explains how the same users of the space may change the appearance of the space to facilitate the activities that they tend to conduct in this space.

Therefore, considering the social relationships between individuals and the ownership of space, in addition to the changing requirements of life, can contribute to the maintenance and sustainability of the physical space in traditional neighbourhoods.

5.3. Results of the questionnaire: social behaviour and socioeconomic changes

Results of the questionnaire showed that there is a relationship between different behavioural components and women's socioeconomic status. The significant behavioural components and women's status are summarised in 5 tables. Table (2a) shows that there is a positive significant relationship between old women and behavioural components concerning type of activity (religious activities) and social relations among users (neighbours), which indicates that old women are more concerned about using public spaces for religious activities and they also care more about relationship with their neighbours. Table (2b) shows that there is a positive significant relationship between married women and behavioural components concerning type of activity (medical and service activities) and social relations among users (relatives). This result indicates that married women care more than other women

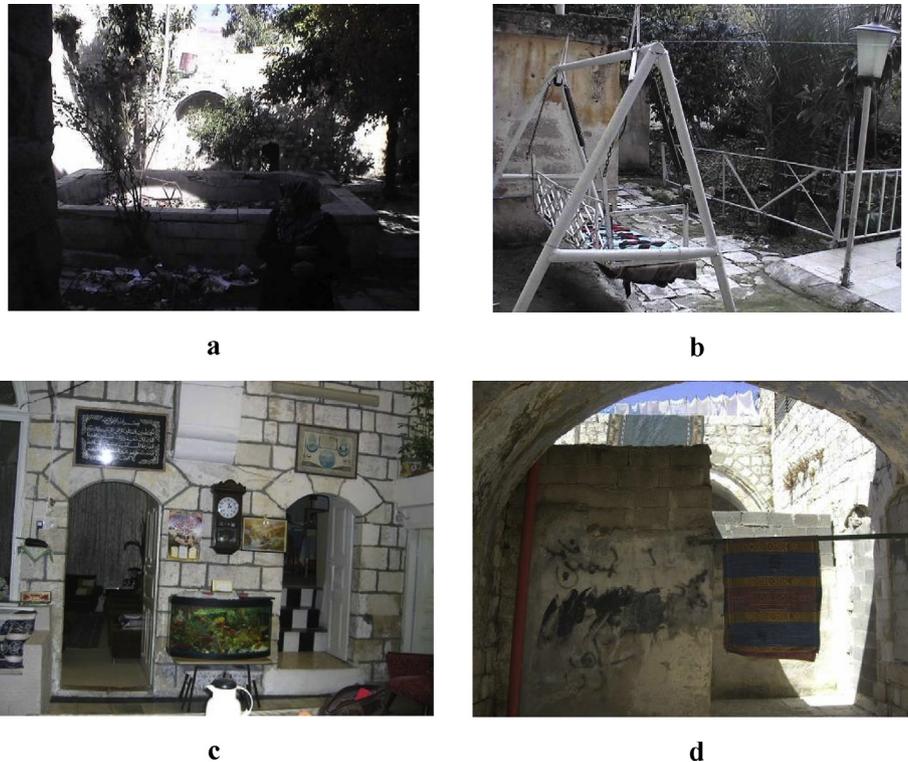


Fig. 4. Selected cases of residential courtyards in the traditional city of Nablus: a) First Case, b) Second case, c) Third case and d) Fourth case.

about relationship with relatives and the use of the public space, particularly for medical and other service activities. Table (2c) shows that there is a negative significant relationship between employed women (with higher incomes) and behavioural components concerning time of activity, which indicates that employed women are less concerned about the time of using the public space. The result also shows that there is a positive significant relationship between employed women and social relations among users (strangers), which indicates that employed women feel more

comfortable with strangers. In other words, these women do not care as much about neighbours and relatives. Table (2d) shows that there is a negative significant relationship between educated women and behavioural components concerning type of activity (religious activities), which indicates that educated women are less concerned about religious activities than women that are less educated. Finally, Table (2e) illustrates that there is a positive significant relationship between women's income level and behavioural components concerning type of activity (private activities) and social relations among users (strangers). This result indicates that women with higher incomes perform more freely than women with lower incomes while using the public spaces for private activities, and they feel more open minded regarding the presence of strangers in these spaces.

These results indicate that women who are less concerned about modern urban life (married, more conservative, older, lower-income, and less educated women) are more integrated into the social life within traditional neighbourhoods than women of higher status. Traditional neighbourhoods were constructed to meet women's traditional role in domestic sphere mainly as being mothers and housekeepers rather than women's role in public spheres and after they were integrated into the economy and participated in different fields. However, the traditional forms and functions of spaces inside traditional neighbourhoods satisfy the desires of lower-status individuals more than those of higher-status individuals (Abdel Hadi, 2004; Al-Bishawi, 2008). Therefore, individuals who are more concerned about modern life are potentially inclined to the following:

1. Move and look for other places to live beyond the borders of the traditional neighbourhood, leaving the neighbourhood to individuals of lower status as explained by Handy (2010). This contributes to the decline in the physical space of traditional neighbourhoods.

Table 2

Behavioural components of significant relationships with women's status.

Use component	Correlation
Religious activities	0.196**
Neighbours	0.151*
a) Behavioural components of significant relationships with women's age.	
Activity	0.234*
Medical activity	0.251*
Service	0.208*
Relatives	0.202**
b) Behavioural components of significant relationships with women's marital status	
Time of activity	-0.151*
Strangers	0.264**
c) Behavioural components of significant relationships with women's job status	
Religious activities	-0.253**
d) Behavioural components of significant relationships with women's educational level	
Private activities	0.269**
Strangers	0.201*
e) Behavioural components of significant relationships with women's income level	

** Significant level at $\alpha = 0.01$. * Significant level at $\alpha = 0.05$.
Source: researchers

2. Stay inside their homes and become isolated, which contributes to the decline in social life inside traditional neighbourhoods as elucidated by Al-Hemaidi (2001).

The observed differences between individuals of different socioeconomic status indicate that keeping the traditional neighbourhoods either for lower status inhabitants or higher status inhabitants to live in will influence the sustainability of these neighbourhoods negatively. This raises the following question: How can the rehabilitation and the renewal of traditional neighbourhoods be carried out in such a way that it enhances social interaction between different-income inhabitants and allow for sustainable living conditions?

The sustainability of traditional neighbourhoods can be enhanced through social mixing as maintained by Fairley (2002). Therefore, there is a need to renew and rehabilitate the traditional neighbourhoods in such a way that it enhances social mixing and allows for their sustainability.

6. Conclusion

This paper provides us with important findings about the relationship between socioeconomic changes, social behaviour and physical space in general, and in traditional neighbourhoods in particular. The results of this study indicate that the three variables are none-fixed and dependent on each other. The interaction between these variables should be studied simultaneously within the same context, which is important for the design and development of the built environment. The relationship between these three variables can be summarised as follows:

- Social Behaviour both influences and is influenced by socioeconomic changes and physical space. Social life can be enhanced when the spaces are inhabited by individuals of low status or relatives, or by providing open (less divided) spaces of good appearance.
- Physical space both influences and is influenced by socioeconomic changes and social behaviour. The physical conditions of the spaces can be enhanced when the spaces are inhabited by their owners or individuals of high status or when the spaces are used for social gathering rather than services.
- Socioeconomic status both influences and is influenced by social behaviour and physical space. Individuals of high status care more about the physical conditions of the space and less about social relations than do individuals of low status.

Therefore, it is important to consider all these variables during the design and development of the urban environment, either traditional or modern and with particular attention to the serious changes in women's life and its impact on the physical space.

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