Putting local communities in the driving seat of residential urban development processes: a study in Cairo, Egypt

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Abstract

Government-developed residential urbanism in the developing world has not satisfied the needs of local communities. The widely adopted top-down urban development has been blamed for this problem. Alternatively, this research discusses the main traits of the 'user-controlled' residential urban development processes. A theoretical model for this approach has been developed. To examine the relevancy of this model to local urban communities, field investigations about the practices and attitudes of some case studies representing the prevailing residential urban contexts in Cairo, Egypt were conducted. Based on these investigations a new amended theoretical model has been initiated. This would help putting local communities, not only in Cairo but also in other cities that are sharing the same urban conditions, in the driving seat of the residential urban development processes and contribute to a more sustainable urbanism.

Keywords: participation, user-controlled, residential urban development, Cairo.

1 Introduction

During the recent decades, the notion of 'user-controlled' housing has been proposed as a more appropriate participatory paradigm in which users, not designers, are given the responsibility for shaping their residential built environment [1–4]. Sanoff [5], Comerio [6] and Towers [7] are among many scholars who believe that those most directly involved with the housing *product*, the users, are best able to assume those decision-making processes. By the beginning of the 1990s, only a few practical and theoretical approaches for user-controlled housing processes in developing countries have been practised or

proposed including Housing as a ‘Generative process’ [8], ‘Supporting people’s place-making’ [9] and most importantly the ‘Self-selection process’ (SSP) [10]. Bhatt and Navarrete [10] determine four main concepts of the self-selection process as follows: first, there is no pre-conceived plan tailored to regulate the settlement development process. Instead, the locations of streets, open areas, and plots are determined in response to the requirements and aspirations of the residents but with a simple set of rules to ensure the development of a non-chaotic settlement. Second, an open plot-allocation system is proposed whereby families can freely select the location of their plots thus this permits them to cluster around immediate relations and group homes according to their particular preferences such as family and cultural ties, or trade and economic links. Third, there is no predetermined size or shape of housing plots based on economic classification of the residents. Instead, plot sizes, shapes and proportions are to be defined by the households themselves according to their needs and their ability to pay for the plot. Fourth, instead of planning and constructing the entire infrastructure at once, it should be gradually constructed.

2 A conceptual framework for ‘user-controlled’ housing

The main concepts of a proposed participatory framework for user-controlled housing processes in Cairo, the capital city of Egypt that has been severely affected by housing problems, are illustrated in Figure 1. In this framework the role of the central authority is to draw the outlines of housing policy, while implementation is the responsibility of the local authority. In any new public housing scheme the local authority determines the beneficiaries in a transparent manner to prevent speculation and corruption. The users, inspired by their values, needs and priorities should enjoy comprehensive control over the selection of plots sizes and locations. Additionally, they should have full control over the design and incremental construction of their dwellings according to their own financial capabilities and socio-cultural needs. Users should have control over internal and/or external modifications of their dwellings. Users can always seek technical assistance from design and building professionals appointed by the local authority. They also have the right to undertake work themselves in constructing their dwellings. Once they have begun working seriously on building their dwellings and therefore shown their commitment, the local authority should grant them ownership of their plot. Professionals have a guiding role only, with minimum intervention confined to the configuration process of urban spaces, which are formulated basically as a result of users’ self-selection of the sizes and locations of their plots.

In the research, two main questions are proposed for the case of Cairo: first; how are local communities involved in the housing processes? and second; what are their attitudes towards their participation in the main housing processes. The answers of these questions are to reveal the degree of relevancy between the local communities’ practices and attitudes towards their participation in housing processes and the proposed theoretical framework.

Figure 1: Main concepts of user-controlled housing processes (the Author).

Three case studies were selected representing the three main prevailing patterns of local communities in Cairo. First, is the 6th neighbourhood in the 6th of October city; a public housing scheme (PH). Second, is The Masaken Mohie scheme; a residents-transformed public housing scheme (TPH) and third is the Manial Sheha settlement; an informal housing settlement (IH). Data gathered from the case studies covered practices, experiences, perceptions and attitudes about the current housing processes. The case studies were extensively carried out using a mixture of qualitative and quantitative data collection techniques. The qualitative data included direct observations of the residents' practices concerning the housing processes where photographs, sketches and notes were used as recording tools. Quantitative data were obtained from the structured interview-aided questionnaires and the description of the built environment through recorded observations as well as some documentary sources. A total of one hundred and twenty households were selected as the research sample. This relatively limited sample size was mainly influenced by the research objectives as it allowed depth and richness of details of data collected but yet it was sufficient to be as representative as possible of the area studied.

3 Relevancy of local communities' practices and attitudes to the concepts of user-controlled housing processes

3.1 Acquisition process

Almost none of the respondents in both the 6th of October City PH and the Masakin Mohie TPH had the opportunity to determine the size or location of

their housing units. In contrast, the majority of the respondents in the Manial Sheha IH (80%) were directly involved in determining the 'initial' sizes and/or location of their houses. The residents' control over the acquisition process of their dwellings, regarding size and location, was far constrained by availability and financial capability. In relation to the size of plot, many residents could not afford more than a small plot, which was as small as 35sq.m.

For residents' preferences and attitudes in the three case studies, the acquisition of an appropriate owned and self-selected housing plot to build a single-family house was the first preference (60.8%). A majority of the respondents in both the Manial Sheha IH (77.5%) and the 6th of October City PH (62.5%) preferred this alternative. Little less than half of the respondents in the Masakin Mohie TPH (42.5%) chose this alternative. Securing freedom of action according to the residents' needs and preferences was the most significant reason for choosing this alternative in each of the three case studies. Achieving a higher degree of privacy for the householders was another important reason. This indicates a considerable degree of relevancy between the respondents' attitudes and the concepts of user-controlled housing acquisition processes but given the fact that about one third of the interviewed residents preferred to acquire 'appropriate' housing units, not plots, this alternative seems considerable as well.

3.2 Design process

As expected a considerable majority of the respondents in the Manial Sheha IH (67.5%) had the opportunity to take part in the decision making process of the formation of urban spaces. Meanwhile, none of the respondents in the 6th of October PH and in the original setting of the Masakin Mohie TPH case studies participated in this process. The results of the residents' practices and attitudes towards their participation in the design of urban spaces suggests that the majority of them, no matter what sort of control they are practicing over this process, preferred to leave the whole process in the hands of professionals. The user-controlled process in which the configuration of urban spaces is to be controlled by residents and to be incrementally shaped, without predetermination, in response to their requirements, but with a guiding role by designers through piecemeal development of infrastructure and public services as well as the application of a simple set of rules, was not preferred even by the considerable faction of the respondents who believe that residents intervention in such process is essential (40.8%). Nonetheless, a sizeable minority of respondents (about one third) preferred to be 'consulted' by professionals during the design of urban spaces. This indicates a considerable degree of irrelevancy between the respondents' attitudes towards their involvement in the design of urban spaces on the one hand and the concepts of user-controlled housing acquisition processes on the other hand.

None of the respondents in the 6th of October PH and the Masakin Mohie TPH was involved in the design process of their housing units. In contrast, 92.5% of the respondents in the Manial Sheha IH were directly involved in this process. Half of the respondents in the Manial Sheha IH designed their houses with help from a local contractor or a builder (*banna*). Meanwhile, a

considerable percentage of the respondents (37.5%) designed their houses without help from professionals. Only a small minority of them designed their houses with help from an architect (5%).

The analysis of the results of the residents' preferences and attitudes showed that the majority, especially in the Masakin Mohie TPH and the Manial Sheha IH case studies (in contrast to the case of the design of urban spaces) preferred to have control over the design process of their dwellings while getting design advice and technical support from professionals. Sizeable minorities of the respondents wished to have control over the design process of dwellings without any help from professionals, or to select a preferred design from pre-designed alternatives. These results indicate a considerable degree of relevancy between the respondents' preference for their involvement in the design of their dwellings and the concepts of the user-controlled dwelling design process. It was observed that the relevancy of the concepts of user-controlled design of housing unit to users' attitudes and preferences increases as the amount of control already exerted by residents increases. (57.5% in the 6th of October PH, to 80% in the Masakin Mohie TPH, and reached 97.5% in the Manial Sheha IH).

3.3 Construction process

Only most of the respondents in the Manial Sheha IH (92.5%) have played a role in the 'incremental' construction process of their dwellings where most of them (80%) hired a local contractor (*banna*) who undertook construction work according to their wishes and under their supervision. A minority of respondents in this case study (10%) hired and supervised construction workers rather than contractors. For the majority of respondents the construction costs were self-financed where owners were building their houses incrementally according to the availability of financial resources and capabilities.

Concerning the residents' preferences and attitudes, it was found that more than one third of them, with the majority in the Manial Sheha IH and sizable minorities in the 6th of October PH and the Masakin Mohie TPH, preferred to have control over the construction process of their dwellings while getting technical support from professionals. Almost a same percentage of the respondents preferred to have partial help from the government while keeping control over the internal construction and finishes. At the mean time, leaving the whole construction process of dwellings in the hands of the government was a preference chosen by only a sizeable minority of respondents especially in the 6th of October PH, followed by the Masakin Mohie TPH, while it was almost neglected by the respondents in the Manial Sheha IH. These results suggest a high degree of relevancy for almost one third of the respondents, between the respondents' preference for their involvement in the construction process of their dwellings, and the concepts of the user-controlled dwelling construction process. Meanwhile, almost another one third of the respondents showed a moderate or partial relevance to the user controlled housing concepts. No relevance to these concepts was observed for the other third of the respondents. It was observed also that this relevancy increases in the Manial Sheha IH where the residents already have full control over this process. The residents in the Masakin Mohie

TPH, who have already enjoyed partial control over the construction process, tended to prefer neither to have total control nor to be excluded totally from the process. In the 6th of October PH only a minority of the respondents preferred to have full control over the construction process. Self-finance for the construction process, instead of depending on governmental loans, was the method preferred by the majority of the respondents who chose to have full or partial control.

3.4 Extension and/or alteration process

Respondents in the 6th of October PH were not involved in any extensions for their houses. Meanwhile, half of the respondents in the Masakin Mohie TPH and the majority of the respondents in the Manial Sheha IH (90%) have extended their houses. In the Masakin Mohie TPH, about half of the respondents who have extended their housing units have done so mainly by collectively building additional stacks on the external front or rear open spaces between the housing blocks. A sizeable minority of them have built extensions for their housing units on the roofs of their housing blocks or on a constructed metal cantilever or on the public open spaces in the front or at the rear of facing ground floor housing units.

In the Manial Sheha IH case study, the respondents either added a floor or more to the original houses (45%) or increased the built-up area of their plots (45%). The majority of them sought help from local contractors or educated professionals, to design these extensions. In the Masakin Mohie TPH, where the nature of many extensions was simple, almost half of the respondents who have extended their housing units have designed these extensions themselves. The other half of the respondents in the Masakin Mohie case study who have extended their housing units have either sought help in design from building workers or local contractors, or designed the extensions collectively with their neighbours. Depending on the sort of extensions more than half of the respondents in this case study hired and supervised local contractors to construct the extensions under either users individual or collective supervision. The results also revealed a high degree of co-operation between the residents who have undertaken extensions, and the professionals they have selected, to help them with both the design and, more significantly, in the construction of such extensions. All extension works were financed by the residents themselves without financial help from any government agency.

The analysis of the results of low-income residents' preferences and attitudes towards their involvement in the extension of their dwellings showed that the majority of them (especially in the Manial Sheha IH) preferred to have control over the extension process of their dwellings by different means such as buying a plot to build a new house, adding more floors to their existing house, making a collective extension to the residential blocks or even building an extension on adjacent external public spaces. So, this suggests a high degree of relevancy to the concepts of the user-controlled housing extension process. This relevancy is more significant in the Manial Sheha IH than in the Masakin Mohie TPH, while it is less significant in the 6th of October PH.

Concerning the internal changes to dwellings, the residents' practices and attitudes revealed that the majority of the respondents in the three case studies

preferred to take responsibility for the alteration process with minimum dependence on professionals or local authority officials. Seeking advice for alterations from professionals was more significant in the Manial Sheha IH than in the Masakin Mohie TPH and less so in the 6th of October PH. These results also indicate a high degree of relevancy between the residents' practices, preferences and attitudes and the concepts of user-controlled houses change and alteration. Finally, and based on the above findings, Figure 2 summarizes the proposed amended user-controlled model.

Figure 2: The amended user-controlled housing conceptual framework in Cairo (the Author).

4 Conclusions

Investigation of the three local communities case studies in Cairo revealed that the higher the degree of control residents already have over housing processes, as in the case of the Manial Sheha informal housing, the higher the degree of relevancy to the concepts of user-controlled housing processes and vice versa. Also, the relevance to the concepts of user-controlled housing processes was found to vary from one process to another where, it seems that the more immediate the context of the decision-making process, the higher the degree of

relevancy. The majority of the respondents' preferences and attitudes towards their participation in the design, construction and alteration of their own houses were found to be more relevant to user-controlled concepts than that of the design of urban spaces. The research ends up with proposing an amended relevant theoretical framework that is envisaged to be the base for putting local communities, not only in Cairo but also in the cities of other Arab countries, in the driving seat as a way of realizing more sustainable residential urban development.

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