The Weight of Space: Participatory Design Research for Configuring Habitable Space for New Arrival Women in Hong Kong

Jackie Yan-Chi Kwok
The Hong Kong Polytechnic University
School of Design, The Hong Kong Polytechnic University
Hung hom, Kowloon, Hong Kong
+ 852 61106685
sdjackie@polyu.edu.hk

ABSTRACT
When arriving to Hong Kong from China, the first difficulty of the new arrival women of the grassroots class is usually environmental stress. Their socio-economic situations often limit their expectations related to their living space. In order to enable the women to voice their views, our research group has organized participatory design research to invite new arrival women: (1) to offer comments of their existing living environment; (2) to give design directions of their preferred housing environment; and (3) to propose policy suggestion to the Government in respect to housing and community/neighbourhood planning. This paper introduced five research methods that our research group have conducted: (1) site observation and direct observation; (2) photovoice; (3) semi-structured interview; (4) visual simulation modeling workshops (for interior and exterior environment); and (5) in-depth interview. The paper wishes to demonstrate the validity of the methods used to promote participatory democracy in the context of urban living environment.

General Terms
Design, Human Factors.

Keywords
New arrival women, gender issue in planning, participatory design, habitable space, photovoice research, visual simulation modelling.

1. INTRODUCTION
The overwhelming majority of the Hong Kong population is made up of migrants from mainland China. According to the 2001 population census, 94.9% of the Hong Kong population, or 6,364,439 out of 6,708,389, is Chinese [1]. Since 1995, the daily quota of one-way exit permits has reached the number of 150. In the single year 2001, for example, there were 53,655 migrants from China [2]. If the admission policy remains unchanged with a policy of 150 mainland Chinese immigrants a day, by 2031, about 93% of Hong Kong population growth will come from migration alone [3]. In other words, new arrivals, meaning those who have resided in Hong Kong for less than 7 years and are yet to become permanent residents, will comprise the most significant portion of Hong Kong's population.

Based on a series of governmental surveys carried out on a quarterly basis, new arrivals come to Hong Kong primarily to be reunited with their families, comprising 98.5% of respondents reported in the first quarter of 2000 and 96.7% of 2002 overall, far outnumbering those for work and study. By sex, females constitute a much larger proportion than males, namely 77.4% of respondents reported in the first quarter of 2000 and 80.6% of 2002 as a whole [4]. Overall, most new arrivals are married women aged between 20 and 39, coming to join their husbands in Hong Kong [5].

Non-governmental organizations like the Society for Community Organization find that there exist many barriers faced by new arrivals, especially for middle-age women speaking dialects other than Cantonese. These barriers that have to be overcome include, in descending order of severity, living in a crowded place or in poor conditions, earning too little to support daily expenses, job seeking, inability to speak fluent Cantonese, and payment of high rent. In fact, new arrivals' median monthly household income was only HK$6,700 in the first quarter of 2002 [6]. This is a third of that of the general Hong Kong population in 2001 (HK$18,705) [7]. The Hong Kong Federation of Women's Centres also highlights social exclusion as well as the domestic violence that is confronted by new arrivals in general and women in particular.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

1 "New arrivals" refers to migrants newly arrived from mainland China to Hong Kong. It is a term used by the Hong Kong Government (for example, see Home Affairs Department 2002a, 2002b).
2. STRUGGLING FOR A HOME, STRUGGLING TO FEEL "AT HOME" IN HONG KONG

2.1 Immigration to Hong Kong: A Downward Life Trajectory

Dolores Hayden, in her book *Reading the American Dream*, conceptualizes the conventional mode of marriage as a "homemaker's labour agreement" [8]. In the cases we have studied, the marriage of some women from mainland China to men in Hong Kong is indeed an exemplary representation of such an agreement. Through marriage with Hong Kong men, some women expect to receive financial support in return for providing personal services and the nurturing of men and children. However, in many cases, such agreements are not implemented as the women expect. The young woman has to face great disillusion after the marriage: in reality the husband belongs to an economically disadvantaged group in Hong Kong. He may even be caught in a chronically impoverished condition. When the woman comes to Hong Kong with the children, she enters into a life trajectory that is drifting downwards: it is a life characterized by acute need, the whole family always struggling to obtain even the most basic daily needs.

When arriving in Hong Kong, the first difficulty new arrival women face is *environmental restriction and stress in the home space*. Usually, the whole family lives in the most dreadful conditions in Hong Kong, that is, in a small non-permanent partition room measuring 5m² to 8m² in an old building in a rundown district. Very often, the room has no windows. At "home", she has to face an array of environmental stresses such as crowding, noise, poor lighting, ventilation and hygiene conditions, and most seriously, lack of privacy. Though the living conditions are undesirable, the wife, being the homemaker, still has to perform duties of childcare, doing all the housework and offering emotional support for the whole family.

2.2 "I Am Not Myself, I Am Only a Homemaker"

Living in such an unhealthy and contagious intimate environment, she is exposed to the threat of sexual harassment from co-habitants or neighbours. In this situation, the woman can hardly feel that she is "at home". According to psychological environmentalists of the phenomenological approach [9], the home environment or the *dwelling* is the most primary and intimate setting for human beings. The home enables a person to develop his/her "form of life". Empirically speaking, the home place is somewhere one is nurtured, and one's health is taken care of in socially acceptable hygienic surroundings. "Home" is a place where one should be able to understand the real meaning of "living". The home setting encourages attachment and communications among members while at the same time defending the privacy of each individual member. Philosophically, according to Henri Lefebvre, referring to Bachelard, gaining a *place to live* (habiter) has the most fundamental meaning in the terrestrial life of human beings. Home is "a means of integrating thought, memory and dreams" [10]. Psychologically speaking, the home is supposed to be an emotionally supportive environment [11]. Space for leisure and recreation should also be possible at home.

Assuming such fundamental views in defining the need for a home for a human being, we can see that the living conditions of the new arrival woman can hardly be called a home. How can she "develop her own form of life" and initiate an integration of her "thought, memory and dreams" in such a cramped environment?

The housing unit she is able to get several years after her arrival in Hong Kong, like all public housing units, is not designed to suit individual human needs.

The public housing policy in Hong Kong aims, as the commentary of Lefebvre suggested (in respect to public housing policy in the western world), to provide as quickly as possible, and at the least cost, the greatest number of housing units. Such a living environment has only an "abstract and functional character": in Hong Kong, the facades of housing estates built during the same period of time are exactly the same everywhere [12]. The spatial layout of a *home* in the public housing unit is organized for an *average family*. In such a space, the woman can only assume the role of a homemaker. No one has ever imagined that a "housewife" might need a private corner for herself, either for her hobbies or for developing her personal lifestyle like music appreciation, reading novels, etc.

2.3 Gender Exclusion in Public Space

When the new arrival woman goes out into a *public space*, she is easily identified and discriminated against as the "other" by local Hong Kong people, because of her inability to speak Hong Kong-style Cantonese with a "proper accent" and her ways of interacting with people. Many of the Chinese women who participated in our design workshops have had the experience of being insulted in public places.

When considering the woman's daily trajectories and activities in the public space, we find that she is wasting her time and draining her energy travelling around the places she has to frequent every day. Public transportation planning, as Hayden observed in the context of the USA, is solely considered within an economic framework [13]. It identifies the most efficient urban locations for public and private investment as the focus for development: the transportation network is planned to coincide with the routes that are most efficient from home to work and to places of consumption. It completely ignores a homemaker's daily journey, especially those of homemakers belonging to the grassroots class. The parallel logic of transportation planning is conducted in Hong Kong. The housewife, who is doing unpaid work for the family, has to travel all day long (on foot), for example, to take the children to school and back home, to go to the market, to take the children to places for recreation (e.g. parks, community centres); from time to time she also has to take the children to medical clinics when they are sick.

However, the home place is usually not efficiently and economically connected to the social services and public amenities needed by grassroots class homemakers. If the woman lives in an old district, the streets are usually narrow, polluted and congested with objects and pedestrians: they are frequently very unfriendly to parents with children, even though markets, kindergartens, clinics etc. are located in the neighbourhood. When the family moves to live in a housing estate (generally in a new
town far away from the urban centre), the mother very soon finds that the neighbourhood in which the public housing is located is no better than the decaying district she has left behind. These housing estates are usually distantly connected to friends and relatives, to social services and economic activities [14]. Travelling around inside the neighbourhood by means of public transportation is too expensive, especially for families headed by single parents receiving Comprehensive Social Security Assistance (CSSA). Kam-wah Chan has correctly remarked that the isolated living space in the new town is "not a real choice, but rather a choice of lesser evil" [15].

3. RIGHT TO THE CITY, RIGHT TO BE AN URBAN DWELLER

In districts where the grassroots class is concentrated, the Government has observed serious deterioration of the family, which causes enormous social problems. In June 2001, the Consultant Team of the Department of Social Work and Social Administration at the University of Hong Kong published A Report on the Review of Family Services in Hong Kong -- Meeting the Challenges: Strengthening Families [16]. This report thoroughly reviewed family services in Hong Kong. It states that the issues of serious concern for our society are, firstly, the erosion of the solidarity of the family because of rising divorce rates and extramarital affairs, and secondly, the financial hardship faced by the lower class, caused by unemployment and the arrival of new members migrating from the mainland.

In order to meet such unprecedented challenges, the report suggests that family service programmes aiming at protecting vulnerable families and strengthening family capacities should adhere to the following guidelines: "Strengthening families: child-centred, family focused and community based" [17].

This policy places most of its emphasis on the "one-stop" integrated service in view of strengthening family solidarity and the development of education opportunities for the younger generation. The report also mentions that special attention has to be paid to husbands who conventionally do not know how to express their grievances. It does not however suggest how social services should look after the mother as the "homemaker". On the whole, the mother is merely considered within the context of a career within the family, and not as an independent human being.

In the city centre, however, the Government continues to fabricate a glamorous image for Hong Kong. Recently, it has made tremendous efforts to (re-)build Hong Kong into a "world class city", that is, an international centre of finance, a popular tourist destination, and a host to multi-national companies [18].

Unfortunately, the re-organization and re-planning of Hong Kong into a magnificent global city have nothing to do with the grassroots population. From the stories told by the new arrival women, we know that the whole family (especially the housewife and the children) rarely goes to the urban centre where there is intense urban life. They find that everything is very expensive for them in the districts around the Victoria Harbour. They are restricted to the districts where they spend their ordinary school days. When the children are on holiday, the whole family will go back to their home town in China, where it is cooler, and more spacious. The mother can meet her friends and relatives, and the children will have lots of playmates.

Women who have come from the mainland, surviving at the peripheries of the city, either in the decaying old districts or in the colossal, shapeless, high-density public housing estates, can never "inhabit" in Hong Kong in the real sense of the term. "To inhabit", as Lefebvre proposes, means to take part in the social life of a community, village or city [19]. Framing the discussion in the context of the justice of urban policies, we also find that social policy planning and housing design in Hong Kong seldom takes the complexity of homemaking into account, not to mention the individual need (for space) of the woman. Chan has indicated categorically that, "literally, in Hong Kong there is no welfare service specifically designed to meet women's needs" [20].

Enlightened urban theorists, architects and planners have for a long time advocated a halt to such inhuman technocratic planning and governance of the city. Practically, we must advocate the concrete right of the human being as a city inhabitant. We must recognize, as Lefebvre puts forward, the right to live in a city: the "right to training and education, to work, to culture, to rest, to health, to housing" [21]. Opportunities should be given to everybody, as urban dwellers, to develop the capacity of understanding and creating a complex and transparent relation to the world (the environment and her/himself) [22]. To reflect on how human beings exist in an urban environment is the fundamental duty of policy makers. Lefebvre has indicated very precisely that, in principle, "we must make the effort to reach out towards a new humanism, a new praxis, another man, that of urban society" [23].

In the context of gender equality in urban everyday life and urban space, Hayden stated that home life must be rethought in the light of facilitating the life of the woman, as a homemaker as well as an individual: "Rethinking home life involves rethinking the spatial, technological, cultural, social and economic dimensions of sheltering, nurturing, and feeding people" [24]. When urban dwellers are bound to inhabit a multi-storey mass housing complex, tenants' lifestyles must be considered, thus "ensuring more pleasant aesthetic and social experiences" [25]. In the chapter "Domesticating Urban Space", Hayden gave a short history of the exclusion of the female gender from the (re)appropriation of public space. She advocated a political programme for the woman to "win access to safe, public urban space" [26]. She also firmly stated that "the presence of women and children in public space must be established as a political right" [27].

4. PARTICIPATORY DESIGN RESEARCH FOR CONFIGURING HABITABLE SPACE FOR NEW ARRIVAL WOMEN IN HONG KONG: THE CASE OF SHAM SHUI PO DISTRICT OF HONG KONG

4.1 Introduction

Sharing the views of Lefebvre and Hayden, we believe fundamentally that all citizens are active and knowledgeable individuals who have their own opinions on their ways of life. The main aim of our research on the living environment in Hong Kong is therefore to enable disadvantageous social groups to voice their views on the planning and renewal process of the urban living environment, as well as their housing preferences.
Starting in July 2001, our Research Group on Urban Space and Culture and the Boys' and Girls' Clubs Association of Hong Kong (Project for New Arrival Families) jointly conducted a study on the living environment of new arrival women living in the Sham Shui Po district.

The Sham Shui Po district is a decaying urban district in Hong Kong that the Urban Renewal Authority has identified as one of the districts for renewal. Out of the approximately 55,000 new arrivals coming to Hong Kong every year, approximately 10 percent, or some 6,000, settle in Sham Shui Po [28]-[29]. Most new arrivals live in non-permanent partitioned rooms in flats inside run-down buildings. After several years, they are able to obtain units in public housing estates.

Involved in a long term struggle to gain a home, as well as to gain a feeling of being at home in Hong Kong, how do the women see their rights as urban dwellers? How do they assess what Lefebvre describes as the basic right to live in a city, that is, the "right to training and education, to work, to culture, to rest, to health, to housing" [30]?

With these questions in mind, we invited 10 new arrival women who had lived or were living in the district to participate in our research on the living environment for homemakers.

4.2 Research Design and Methods
Our Research Group, composed of urban theorists and researchers, endeavoured to apply the method of "Participatory Action Research" to investigate the living environment preferences of this deprived group [31].

The socio-economic situations of most new arrival families often limit their expectations and decisions related to their living environment. In order to enable the participants to voice their views on the living space and to participate in the planning and construction of their own living space, our research was thus divided into 3 stages: (1) via the methods of observation, semi-structured and in-depth interviews, we tried to understand the living experience of new arrival women and how they cope with the disadvantageous environment, both physically and socially; (2) by using the method of "photovoice" (see paragraph 4.3.2), we invited the new arrival women to voice their views of their living circumstances via cameras and photos; (3) by using different sets of modelling kits, we invited the new arrival women to participate in design workshops to reveal visually their opinions on their expected habitable environment, including both interior and neighbourhood space.

4.3 Overview of the Research Stages

4.3.1 Phase I: Pilot Study and Identifying the Problem
In the initial stage, we conducted background research and direct observation in the Sham Shui Po district -- the district where our 10 informants/participants first settled when they arrived in Hong Kong. We then began to undertake site observation in the district. Our definition of observation of the site follows what Henri Peretz called "observation" at the "pre-research stage": "sociologists use the term 'observation' when, to study a social environment, they linger in the places defining the environment to be studied for some time in order to inform themselves about the habitual usages of these places, but do not immerse themselves in the events occurring in these places for a long period of time or in a systematic manner" [32].

Moreover, prior to the intensive interviews with the 10 informants/participants, we conducted direct observation of the users of the site: we wished to observe the social behaviours of the individuals or groups in the site on which the research was to be conducted. We also tried to note by observation their ways of interacting with space in their everyday lives.

After this initial stage of the research, we started to work with these 10 families, employing the photovoice method in order to enable them to articulate their perception of space and living.

4.3.2 Phase II: Photovoice as a Participatory Research Method
Photovoice consists of two major components: (1) individual photography by the participants, and (2) discussion of the photographs. In the words of Wang and Burris (1997), photovoice
uses the immediacy of the visual image to furnish evidence and to promote an effective, participatory means of sharing expertise and knowledge [33]. In addition, photovoice is a participatory method, not of counting things up but of drawing on the community's active lore, observations, and stories, in both visual and oral terms. Thus, we employed this method to encourage the participants to be aware of, and then to identify and comment on their living environment with spontaneity.

We entrusted automatic cameras to these 10 new arrival women and their children. We asked them to take pictures of their own living environment, as well as aspects of their daily lives, showing and telling us about the places they frequented, and the places they liked and disliked. They also told their stories and comment on the places they had photographed. In this way, they participated in the study by directing us to their social interactions with both the environment and significant people.

Consequently, from the photographs, three layers of meaning were revealed: (1) comments on the physical living environment, (2) the rhythm of everyday life, and (3) the image of the self and their families. We find that it is extremely significant that the photovoice method gives voice to those people whose views are often overlooked or discounted. Photography also serves as a powerful medium of expression for marginal groups who are not capable of using authoritative means of presentation and expression such as writing. In this research, we learned to put the marginal women at the centre, and treated them as experts on their own life and experience. To communicate with them, we needed time to obtain their trust. We also needed to become listeners and learners, and respectfully invited them to participate in our project and share their lives with us.

We believe the living environment should be looked at in its totality. Apart from seeking concretely to understand the everyday life situations of new arrival women and the behaviours they and their children exhibit in relation to the characteristics of the environment, we were ultimately also searching for the ways in which they were able to evaluate and construct their expected habitable environment.

4.3.3 Phase III: Semi-structured Interview

We used the methods of semi-structured interview and in-depth interview to construct a comprehensive picture of how the participants as homemakers led their everyday lives. Through the different types of interviews, we tried to identify their real needs and aspirations in respect to the living environment. To initiate the discussion with the participants, we designed a questionnaire focused on the investigation of their living patterns and the places they usually frequented. Almost 40% of the questions were of the open type in order to give the participants sufficient freedom to talk and to reflect on the theme: "the everyday life of the homemaker and the living environment".

Conducting semi-structured and in-depth interviews (see Phase V), the researchers were allowed to obtain a fuller picture of how the participants lived their lives as homemakers within the living environment.

Through frequent discussions, the participants were also able to discuss their views on the living environments fluently, holistically and in simple terms, and to present their needs and aspirations.

4.3.4 Phase IV: Model Making Workshops

In order to assist the new arrival women and their children to voice their comments and suggestions for a more appropriate living environment, we borrowed Sanoff's method of participatory action research [34]. This method aims, by using modelling kits, to engage the participants in visualizing (1) their behavioural patterns at home and in the public space, and (2) their preferences for interior home and exterior neighbourhood environments.

Following Sanoff's research model, we used two modelling kits to simulate a furnished interior (to the scale 1:10) and public space components (to the scale 1:500). The first kit enabled the participants to construct their ideal homes, while the second set enabled them to construct their ideal public and communal environments.

Ideal interior space design workshop

To start the workshop, we introduced the purpose of the project to the participants and explained the idea of user-centred design,
stressing the freedom given to them to decide what kind of interior space they would like to have. The researchers (including the researchers, space designers, social workers, and research assistants) and participants (including mothers and children) were partners in the workshop, and the researchers refrained from manipulating the course of the design process.

In the workshop, we tried to enable the new arrival families to express their ideals on living space by making models. The modelling kit included partition walls, floorboards, basic furniture, basic electrical appliances and green plants reduced to the scale of 1:10. Each individual family (mother and children) designed (made a model of) their own ideal home interior. The processes included: (1) Family members discussing furniture arrangements; (2) Initializing the design process with a floor-base; (3) Setting up walls with different types of window size; (4) The design and negotiation process; (5) Decorating the home with paintings, green plants and other materials; (6) Finalizing the interior design model.

Figure 4a. The components (furniture) of the modelling kit for the ideal interior space design workshop.

Figure 4b. The components (floor-base) of the modelling kit for the ideal interior space design workshop.

After designing their ideal home, each family representative came to explain their design ideas. Through these workshops, we also came to understand the needs of the users, the value and aesthetics of their designs, and the relationship between their designs and their subject positions as females and mothers.

Altogether, we conducted ten workshops, each lasting about an hour.

Figure 4c. The participants (mother and children) built their ideal home under the help of the facilitators.

Figure 4d. An example of the ideal home model built by a family.

Ideal public environment design workshop

The Research Group designed a 3-dimensional site planning kit to the scale of 1:500. The site planning kit consisted mainly of components representing basic social institutions, infrastructure and recreational facilities. On a plastic mat, a sphere of 20 minutes' walking distance (divided into 5, 10, 15, and 20-minute concentric circles) was graphically represented.

Before starting the workshop, we introduced the participants to the purpose of the project and explained the idea of user-centred design, stressing the freedom given to them in deciding the community environment they needed.

The first section of the workshop served to arouse the consciousness of the whole family about how a local neighbourhood should be constructed according to their needs. The children were asked to draw their preferred local neighbourhood on blank sheets, while the mothers were asked to use the facilities-amenities checklist to prioritize the proximity to
the home block of the facilities and public amenities. After a brief discussion of their preferences, we started the workshop.

Figure 5a. A girl drew her preferred local neighbourhood. Her mother (sit next to her left) used a provided checklist to prioritize the proximity to the home block of the facilities and public amenities.

Figure 5b. The components (furniture) of the 3-dimensinal site planning kit for the designing of the ideal public environment.

Figure 5c. The participants (five families combined into one group) built their ideal public environment under the help of the facilitators.

Figure 5d. A family was taken photo in front of their created ideal public environment.

The Research Group first set up the plastic mat representing a sphere circumscribing the temporal-space order of 20 minutes’ walking distance. The five families, combined into one group, then placed the home block at the centre. They started to plan public amenities and facilities, recreational spaces, schools, and the positions of bus stops, taxi stands, mass transit stations, etc. on the spatial-temporal sphere on the mat. Positioning the home block at the centre, they started to build a model of a local neighbourhood. They placed the public facilities and amenities according to their preferred proximity to the home block (with regard to the walking distance). They co-operated with each other in making a model of their ideal public environment. Altogether, we conducted two workshops, each lasting three hours. Once the public environment model was constructed, the families were invited to explain, discuss and assess their ideas. Through their explanations, we came to understand the problems of current housing planning and its relationship to the inhabitants' daily lives and their needs, concerns and aspirations.

4.3.5 Phase V: In-depth Interview
After the participants had moved into flats in public housing estates, we made visits to their new homes -- this happened about one year after they had participated in the interior space design workshop and the ideal public environment design workshop. We brought along the records of the ideal home they had configured, and they were able to make a comparison between the ideal home model they had constructed and the new home they had obtained.
in reality. We started to discuss with them again the conditions of the new home and the neighbourhood space and community facilities installed nearby.

4.3.6 Phase VI: Analysis of Findings (Phases I to V): The Humble Ideal
The observation and interviews conducted in the first few phases of the research allowed us to understand the living conditions in partitioned rooms in run-down districts, as experienced by our participants. A brief account of such situations is already noted in the introduction. The two workshops (that is, the Ideal Interior Space Design Workshop and the Workshop for Designing the Ideal Public Environment) enabled us to perceive the ideal environment dreamt up by these 10 homemakers.

It is obvious that the primary criteria for a good place to live are enough sunshine, fresh air and sufficient space. All of them, being mothers, dreamt of a good place for nurturing and educating their children. They thought of themselves, first of all, as mothers rather than as individuals. In respect to the home interior, they were eager to design a home where there would be space for the children to do their homework and play. Children should have a room of their own. Or at least, children of different sexes should have separate rooms, with those of the same sex sharing. The women preferred to have a living room with enough space for the whole family to gather together. Asked whether they needed a place "of their own", many of them, especially those living with husbands and children, thought that it was not necessary. They thought that during the daytime, when the husband was at work and the children in school, the whole home was at their disposal. Those who were already divorced were more aware of the issue of private space. Some of them wanted to reserve a room other than their bedroom for studying, or for chatting with their friends "in private".

From our findings, we understood that the participants spent most of their time within the district in which they lived, and that they reached most destinations on foot. It is therefore obvious that, in constructing the ideal neighbourhood space, they would want to have sufficient public facilities within 20 minutes' walking distance. This means playgrounds, kindergartens, primary schools, clinics, estate shopping centres, bank and post office just downstairs next to the home block; secondary schools, community centres, swimming pool, ball courts, public library, wet markets, larger shopping streets and centres within 10 minutes' walking distance; and parks, recreational centre, hospital and integrated clinic, police station, fire station, etc. within 15 to 20 minutes' walking distance. They also wanted easy access to the natural landscape: the hills and/or the harbour front should be within 20 minutes' walking distance.

Besides the obvious factors, the workshops helped us to discover one real need of grassroots class homemakers, that is, the need for cultural education and the necessary facilities to carry it out in the neighbourhood. This research project revealed that many participants liked to go to the public library to borrow books, not only for their children, but also for themselves. One or two of them wanted their children to learn musical instruments such as the piano. This need for cultural activities is still totally neglected, not only by the Government, but also by the general public.

4.3.7 Phase VII: Discussion: New Life in a Public Housing Estate
At the final stage of the project, we invited the 10 participants to attend a discussion group to discuss their new experiences living in the public housing estates. Seven of them came. They actively presented their views. Briefly speaking, they found that the following problems were most crucial and needed to be dealt with:

**The interior**
Before the discussion group was conducted, we made home visits to most of the participants after they had moved to the public housing estates. During these visits, we showed them the images of the "ideal" home they had constructed during the modelling workshop for the home interior. Some of them were amazed at the great similarity of the model "ideal" home to their new home: this indicates that they had realistic ideals: the dream home they had in mind closely resembled the public housing estate unit they were able to get.

In general, the participants were quite satisfied with the interior conditions of the allocated housing units: there was enough sunlight shining into the rooms, and the air was also fresh. But particular individuals still encountered problems:

- The interior of some of the allocated units was quite worn. Naturally, an individual would feel very upset when she was allocated a run-down flat with cracks in the walls after waiting for several years.
- Some units could not be partitioned into rooms in order that the privacy for each individual (mother and each child) living in the flat was respected.

**The exterior community space and facilities**
The participants were generally not satisfied with the facilities installed in the vicinity of the housing estates, especially those which were newly built:

- cheap wet markets had been replaced by expensive supermarkets with fewer choices;
- medical clinics were too far away;
- social facilities such as community centres were far away;
- recreational spaces for children and young people in the neighbourhood were insufficient;
- there was no library in the vicinity; and
- the daily (walking) itinerary of the inhabitants had not been taken into consideration in the planning and design of the public housing estates.

In summary, we can see that public housing planning based mainly on functionalists/quantifiable logic or economic cost-effectiveness cannot meet even the basic needs of the habitants of public housing estates. Let alone/and far less the ideal of upgrading their quality of life. When we measure the everyday life led by the participants against the concrete *right of the human being as a city inhabitant* laid down by Henri Lefebvre (1996), that is, the "right to training and education, to work, to culture, to rest, to health, to housing", we find that public housing does not
respect these rights of urban dwellers at all [35]. The public housing estate in Hong Kong, with its minimal aim of offering a shelter for grassroots people (statement by Ms Elaine Chung Lai-kwok, Deputy Director (Strategy), Housing Department, Housing, Planning and Lands Bureau) is not at all able to offer its inhabitants the opportunity to lead an urban life with quality.

5. CONCLUSION
The emphasis of our research is to involve local people in urban redevelopment. We take the view of Henry Sanoff that our projects demonstrates our advocacy for the right of grassroots citizens to voice their concerns regarding the living environment, while at the same time the research team, the social workers and participants together learn, modify and develop methods of citizen participation in the designing of habitable living environments [36].

Through the present project, we have come to understand that inter-disciplinary knowledge, that is, knowledge of urban studies, anthropology, spatial design, architecture and planning, is essential in order to reconstruct new knowledge of urban living environments and to promote participatory democracy. Being conscious of defending the necessity of epistemological vigilance, we have extended considerably the methods of public enquiry and charrette, used frequently by planning and architectural professionals in Hong Kong, to collect different views of urban dwellers in respect to the living environment. These methods, we believe, only perform as "a simple reading-off of the real" [37]. We endeavour to construct the body of research and to conduct data collection, analysis and assessment through methods used by anthropologists and sociologists, such as photovoice, semistructured interviews and in-depth interviews. We have also tried to encourage the participants to express their views visually through inviting them to construct models of their ideal living environment. By using multiple methods to triangulate the validity of the data, we are able to break from common sense and from spontaneous sociology [38].

This project enables us to see that participatory action research is a learning process. It is valuable to urban inhabitants, researchers, and design and planning professionals. In the process, urban inhabitants begin to rethink the meaning of their life and its relationship to spatial living conditions. The use of different media of expression facilitates the urban inhabitants' competence in critically re-reading the power and domination in social space.

Our research looks at our city as a "total milieu" and studies it using a multi-disciplinary approach. To conclude, we maintain that we, professional urban researchers and designers, should respect how inhabitants see their own living environment and how they want their homes to be changed. Returning the right to make everyday life decisions to the people is our definition of social justice.

6. ACKNOWLEDGMENTS
This research was in collaboration with The Boys' and Girls' Clubs Association of Hong Kong. The author wishes to acknowledge the CERG of the University Grants Council of Hong Kong and the research grants of The Hong Kong Polytechnic University to support this research project.

7. REFERENCES
[12] See Note [10], 73.
[17] See Note [16], iv.
[19] See Note [10], 76.
[22] See Note [10], 149.
[23] See Note [10], 150.
[24] See Note [8], 81.
[25] See Note [8], 164.
[26] See Note [8], 228.
[27] See Note [8], 228.
[29] See Note [1].
[34] See Note [31].
[36] See Note [31].
[38] See Note [37].