3. Creation of empowerment games - a design facilitator's perspective

3.1. Implementation of participatory design in Hong Kong
The tradition of participatory design for community development emerged from research projects by Third World scholars, social organisers and educators. Their aims have been to conduct ethnographic studies and empower adult education movements. The term 'participatory planning' first appeared in the mid-eighties regarding low-income housing in Third World countries (Desai, 1995). Many subsequent developments, such as 'popular participation', 'grass roots development' and 'development from below' were inspired by these initiatives. These approaches have also been adapted for use in different sectors throughout the world: from the Third World to developed nations, from rural to urban, from small-scale to national level and from research to design. *"These social science tools not only provide the designers (environmental) with a deeper understanding of the human condition, but an opportunity for engaging in an effective dialogue with people who use the environment"* (Sanoff, 2000). More and more planners, architects and designers, inspired by the social science experiences, have started to practice user-centred design activities that take place in a participatory context.

The implementation of this relatively new concept in Hong Kong is still under development and is mainly happening at the academic level. As one of the key figures to promote public participation, Christine Loh (2000) expressed that *"Participation implies a number of things. It implies that the system respond in some way to input from the public. We believe the Hong Kong political system can become more responsive and participatory but you need to participate in order for this to occur. Participation also implies that those seeking to participate understand the system and know how to navigate it to achieve their goals."* More work needs to be done in order to get users to participate actively in the design process, not just as *"a subject of analysis."* (Hill, 2003)

3.2. Pre-participatory design workshops
This paper documents a first endeavour of pre-participatory design exercises in an old Hong Kong social housing estate. 'Empowerment games' is the author's term for a series of game-like tools for community workshops, which are designed as interfaces to inspire the participants to raise their awareness of their living environment (Fig 2). Thus these community workshops are called awareness workshops.

Different scales of urban living problems are tackled through different games. Association is the main design method. The workshops are a series of exercises for participants to understand complicated architectural design process by association with their everyday life experience. The aim of these community workshops is to help the resident group members understand the design process and language of design. Through such new experience, knowledge of design is transferred from designer to resident group members and to other residents.

Fig 2. Relationship between facilitators, participants and design professionals with the research tools of workshops

Game 1 (Fig.3) aimed at enabling participants to anticipate problems and opportunities in their future home by associating their perception of positive and negative environmental factors in several newly built housing estates in Hong Kong with issues that may possibly play a role in the design of their own future homes. The aim of this first simple awareness workshop was to provoke participants' interest in the workshops. The result was that participants were actively involved in the process and many useful dialogues about environmental issues were developed. For example, the discussion about the design of the rubbish collection system was an interesting dialogue. Participants thought that this is a good design but need to be improved. One of the suggestions was to change the opening mechanism from a hand-operated one to a step-operated one, solving the problem of the dirty handle discouraging use of the system.
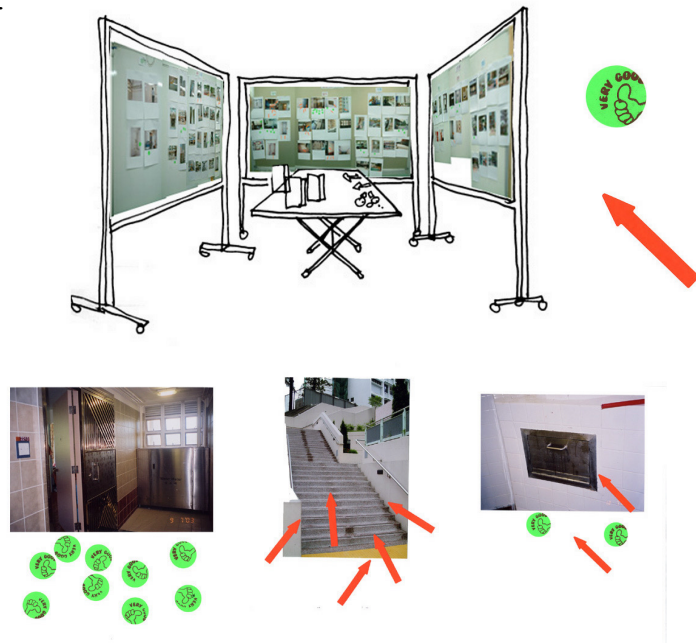

Fig 3. Game 1 for awareness workshop 1

In awareness workshop 2 (Fig.4), participants arranged icons representing the furniture and items of their day-to-day life within a plan of their future flat. These individual flats were then placed within the context of the overall layout of the building block. This is game 2, which allowed participants to gain an understanding of the relationship of their private space to the communal space and overall building ensemble, as well as encouraging projection of the patterns of their daily existence into the space of their future flats, leading to insights about spatial division and organisation. At the beginning, participants were confused about the concept of two-dimensional floor plan and they did not have a concept of the relation of plan scale to actual scale. Then they started to associate the cartooned icons with their mental maps of their existing home. After many collective conversations, all participants overcame those problems and made the game become a useful tool for them to design their future home. Many creative spatial use scenarios were developed.