



REDESIGNING A DESIGN AS A CASE OF MASS HOUSING IN MALAYSIA

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ABSTRACT

The research is to appraise the perceptive discourse in uniqueness' factors of new mass housing development in Malaysia. The chosen case study is newly occupied housing area in Taman Cahaya Alam, Shah Alam District. Four main factors that related to 'uniqueness'; facade design, spatial operation, spatial relationship and degree of comfort is evaluated. Beside design aspect, question also concerns the level of security and intrusion. The findings show that various aspects of renovations were made by respondent's addition to existing design in achieving the uniqueness and to fulfil their personal needs as the existing design is merely minimum requirement.

Keywords: redesigning, design, uniqueness, mass housing.

1. INTRODUCTION

Malaysia have witnessed massive mass housing development all over the country for the last three decade. The mass housing, either developed by the government or private developers keep increasing and does not show a pace of slowing down. The most commonly adapted design of mass housing is a terraced house or row house. The most common terrace house design and layout is a two storey height with dimension between 22'0" to 24'0" in width and between 75'0" to 85'0" in depth. The fenestration of the building is at the front and back of the narrow and deep floor layout. Generally, terraced house layout at ground level is an open space of living hall link to dining and kitchen at further back of the layout with a utility room and toilet, in the upper floor there will be a private area which made up of three rooms, and two attached toilet to the rooms. At the front of the house is an empty plot where the car porch is designated and a balance for a green, at the backyard is small empty plot which normally follow setback guidelines of local building by laws and meant for services.

A piece of architecture is unique. It is large, it is costly and therefore it must be unique. In Malaysia, the cases and the conflict of architectural identities are still puzzled. The over demand for housing and increasing land price has resultant in an unbalanced development. The over speculations and opportunities for architectural development with superficial preconceived elevation design and the need of houses to be unique has resultant a syndrome of 'redesigning a design'; conceptually is to redesign the existing is 'to make a new face' also 'to rearrange' the spatial operations. The idea of this 'superficial' and 'after thought' architectural development consequentially will add a double the cost from the existing purchased. Additional renovations or redesigning a design is almost a must for the new house buyers. The concerns generated from such perception often demands more cost being directed to fulfil the uniqueness than the existing design.

2. BACKGROUND STUDY

The discussion on lifestyle in the urban and sub-urban environment already asserts most mass houses produced by the developers' in Malaysia as 'modern living'. Over forecast of demand and overpriced of those commodity to regard the portion of urban space as progressively developed in large scale mushrooming the Kelang Valley and all major city of the states. According to Ministry of Housing and Local Housing (1999) the main core of dynamic growth in mass housing are the Klang Valley encompassing Kuala Lumpur and its metropolis, Penang in the north, Johor Bahru - Pasir Gudang in the south, Ipoh - Lumut and Melaka - Ayer Keroh in the west, Temerloh-Mentakab and Kuantan-Kota Bharu corridor in the east coast of Peninsular Malaysia; Kuching - Damak Laut, Sarikei - Sibul, Bintulu - Miri in Sarawak; and Kota Kinabalu - Klias Peninsula, Sandakan - Karamunsing, Tawau-Industrial Free Trade Zone in Sabah. These scenarios mark an extensive urbanisation and industrialisation, thus it will continuously attract more people and more demand for mass housing. Based on Malaysia economic rate expected to growth at 7% per annum, the purchasing ability will increase at RM14, 788 in 2000 to anticipated RM25, 000 in the year 2020 (KPKT, 2009), the spending pattern is expected to change. A substantial proportion especially the young urban professional will become more affluent and able to attain more quality house or make ado to the current development based on their needs.

At present, planning and design is done architects without much consultation with the end user. Each of new development of design is very much reprint of blueprints of the existing design with a minor changes on the facade design. Planning and design cannot be accomplished by architects operating in a vacuum and merely based on developers' minimum requirement. Improving a design requires an active participation of all stakeholders particularly the designers themselves and furthermore the end-users. Design after all is about change - a changed lifestyle and how each creation is appreciated differs from the past (KPKT, 2009). Design is about innovative change,



each of different epoch mark a changes in a lifestyle. The changes in lifestyles appreciated differs way of how design should be designed. Even the basic needs like a house which shelter us should be transparent enough in term of design by adapting requirement and feedback based on end-user needs. To ensure good and quality housing design in new and future developments, the ideas of recycling existing layout and structural plans definitely require improvements by adding current values, lifestyles and design needs.

The world is changing, so do the design. The globalisation or internationalization has homogenised the way of living thus the architectural design. The adaptation of globalize lifestyle has make the housing problems more cohesive, differentiation become more personalised. In the case of Malaysia where houses are usually mass developed, the end-user end-up renovating their house to tailor-suit the needs before occupancy. Even though modifying a house is not an idea and part of house ownership scheme, it has become a pre-thought idea even before the sale and purchase agreement is done. Redesigning an existing design or alter-modification has become phenomenon to house buyer. As housing designs are not easily accepted in tandem with the changes in lifestyles of the people, housing modification became monotonous and acknowledged as a Malaysian culture (Ministry of Housing and Local Government, 2004; Ahmad Hariza and Zaiton, 2010). Redesign or modification involves building envelopes, services, compartment segregation and fittings according to uniqueness customers' aspiration.

3. REDESIGNING THE DESIGN

Redesigning a design is inevitable to new house owner, either a sub-sale house or new house. Commodity such a house is very personal indeed and it requires a personalize requirements to fulfil personal aspiration. The three most common possibilities where alteration of features can take place are by extension, reduction and relocation (Omar, 2010). Extension or enlargement of floor area is the most common possibilities in redesigning the existing design. Extensions of spaces suggest the existing space is inadequate to fulfil the requirements and daily activities of the user. Relocation or re-orientation of space programs explains different user and their background need significant changes. New partitioning and segregation of existing space will make house owners feel more comfortable in term of degree of privacy and space task. Additional space might create difference space performance such as a study or working area in more secluded area or maybe a removal of existing partitioning compartment make the space open and multi-tasking. Availability of extra space means more rooms can be created hence, less sharing space between family members or alternately, large open space means most of activities or daily routine was done together. Modifications were carried out for various reasons. Some modifications are made to increase the property value, and some to beautify

the façade (Sazally, Omar, Hamdan, and Ibrahim Bajunid, 2010).

The most common alter-modification done in new houses are at least extension of porch and adding security-metal grill on all window and doors. Another usual customization is extending the back of the house by adding wet kitchen where the daily cooking and laundry washes is done. According Omar *et al.* (2010), it is common knowledge that kitchen is one of the favourite renovated spaces in local housing development. Findings have confirmed that kitchen has been very significantly modified. The back of the house extension normally will leave a minimum local by-laws 5'0" setback and in some cases the extension might maximize till the building setback. The extension of the back of the house also normally include vertical extensions, meaning additional space on the first floor, thus make the second and third bedroom floor area upstairs become larger by 30% to 40% from existing floor areas. The extension of the back of the house suggested additional electrical works, water plumbing and sewerage plumbing. Another important additional works that come along with the extension is damp proof overlays on the floor preventing the penetration of dampness from the ground. Floor material for additional kitchen extension is normally homogenous ceramic tiles to match back the existing kitchen flooring. The wall normally eye-level heights ceramic wall tiles for efficient maintenance and cleaning, above is plaster paint finish normally in off-white. Ceiling is normally 2'0"X 2'0" mineral board ceiling or plastered ceiling.

Internally, at ground floor basic spaces of living area combined dining area, kitchen and laundry area; and one small utility room with a small toilet comes as standards. Floor finishes is either stone based materials for medium to higher cost housing and ceramic tiles for medium to low cost housing. Wall finishes normally plaster paint finishes at living-dining area and half ceramic tiles at kitchen and toilet. Compartment customization involved from existing design is additional partition to separate dry kitchen and wet kitchen. Resultant from extension of the back of the house, make the utility room or in common cases a maid's room become larger. A toilet entrance in ground floor also re-oriented to face the side wall instead facing the living hall. A customary built-in kitchen cabinet is also an additional must is the existing kitchenette is a concrete bench with a single bowl sink as a standard. Ceilings normally will be converted into plaster ceiling hence additional electrical works is required for additional light fittings which normally down lights with a dimmer. Other customary additional beside kitchen cabinet is TV console or cabinet to house entertainment system and satellite TV decoder.

On the upper floor, compartmental planning comprises of bedrooms and family area. This floor is a private floor and meant for family members. A standard compartmental is a master bedroom with an en-suite bathroom which located at the front of the house. At the back of the house is two bedrooms attached to a shared bathroom. These bedrooms normally separated at the



centre of the house by small family area which is also where the staircase landing. Alter-modification on the upper floor in term of redesign is the enlargement of bedrooms, application of finishes, services and fittings. Master bedrooms normally extended to the front of the house, thus nominated changes on face of buildings. The same also might be applied to back of the house where the second and third bedrooms enlarged following the extension of wet kitchen below. Customization of the built-in wardrobe of each bedroom is possible due the enlargement of the existing spaces. Replacement of existing parquet timber floorings which is common and standards to a new termite resistance, durable and easier to maintain laminated floors or ceramic tiles is also one of redesigning aspect found in the modification of existing design. Application of plaster ceiling and ambience lighting together with a featured wall in bedrooms is an essential modification to fulfil customers' needs before occupying the house. Other additional elements added is the air-conditioning system which a compulsory fixture in any houses before occupancy.

4. METHODOLOGY

The methodological approach is end users perceptive discourse on design 'uniqueness' towards theoretical foundation of economics, technology and planning needs. This study is contextual and adopts a case study approach to assess and provide understanding of four main factors that related to 'uniqueness'; facade design, spatial operation; spatial relationship and degree of comfort is evaluated. Beside design aspect, question also concerns the level of security and intrusion the formal and informal role and involvement of related human agency - friends, family, community, professionals and non-professionals (private and institutional) - is examined to adequately explain medium income housing. The adaptation of the new generation of medium income in the societal complex and how these produce social relations, a significant input into medium income housing is studied. This necessitates considering medium income housing as one of the spatial practices of everyday life style of new medium income society. This is necessary to balance aspects of reality normally ignored or missed out by house builders in fulfilling design requirements between low income and the high income even though the medium income make the majority of group in the society.

The study adopted Taman Cahaya Alam, Shah Alam District, one of the medium to high income housing development on the outskirts of Kelang Valley, the then largest city in Malaysia as a case study to allow for intensive explanation and description. The area is coordinated at 3°59'N 101°29'19"E enclosing approximately 99 buildings in a rectangular area of about 226-acre Township with lushly beautiful linear park. The chosen site is newly developed area whereby occupancy rate is still less than 50%. The study involved a perceptive questionnaire surveys to 30 new house owners of the establishment. The main reason on the selection of targeted group was these groups of people are new house

owner and the purchased are first house. Four main factors that related to 'uniqueness'; facade design, spatial operation; spatial relationship and degree of comfort is evaluated. Beside design aspect, question also concerns the level of security and intrusion.



Figure-1. Façade view of houses at Taman Cahaya Alam, Shah Alam (Image courtesy of <http://homes.mitula.my>).



Figure-2. Location map of housing development at Taman Cahaya Alam, Shah Alam (Image courtesy of <http://property.malaysiamostwanted.com>).

Quantitative and Qualitative data were collected from quarter (99) of the housing producers and their houses; the first house was randomly chosen and every other house was taken. Multiple techniques of questionnaires administered as interview schedule, in-depth interview of 30 willing respondents among the producers and observation was used. Qualitative data obtained by observation and interview included spatial organization, the physical characteristics, degree and level of completeness, materials and technology, available services and facilities. The research assistants went around in pairs with one of them specifically saddled with the responsibility of documenting typical houses and houses that had peculiar characteristics from all the ones they saw earlier. On the spot sketches of plan layout, site layout and elevations were done. Photographs of single buildings and whole areas were also taken to have comprehensive documentation and description of the building types. Data collected were analysed quantitatively using frequency distribution analyses, cross tabular descriptive analyses,



discriminate classification analyses and categorical regression that allowed for optimal scaling of variables on SPSS 16.0. The qualitative data were subjected to content analysis.

FINDINGS AND DISCUSSIONS

The data collected from questionnaire survey and on-site observation were analysed and interpreted accordingly. The data and result were then elaborated using descriptive statistic. 30 sets of questionnaire were distributed, 30 returned. This represents 100% of respond rate. The tabulation of the questionnaires can be explained clearly in the Table below:

Table-1. Tabulation of the questionnaires.

Variables	Gender	Percentage (%)
Male	23	76.7
Female	7	23.3
Total	30	100

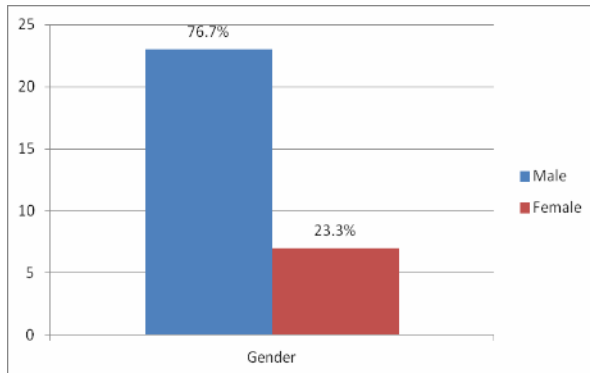


Figure-1. Gender of respondents.

The findings discovered that all respondents had been agreed that it is important to carry out renovation works before moving in the house. The main reason, the respondents mentioned is about the level of comfort whereby it is easier to carry out the renovation works in an unoccupied area, meaning that, to renovate the houses before moving in. Table-2 and Figure-2 illustrate the result.

Furthermore, the respondents were asked about the factors that influence the decision of renovations to the houses. The factors that had been listed are facade design, spatial operation, spatial relationship and degree of comfort. In this case, the respondents were required to choose one factor only that being considered as the most important factor that influence the decision of renovations. Based on the gathered information, the author will rank the factors from 1 to 4, which 1 represents most important and 4 represents not important at all. Table-3 and Figure-3 show the result on the matter.

Table-2. Importance of renovations.

Importance of renovations	Frequency	Percentage (%)
Yes	30	100
No	0	0
Total	30	100

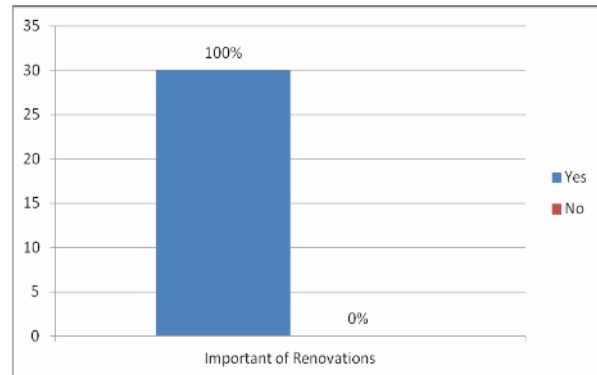


Figure-2. Importance of renovations.

From the result, majority of the respondents concerned about the issue of comfort. The renovations works were carried out in order to achieve a maximum level of comfort. A high level of comfort is vital because a lot of times will be spent at home. On the other hand, the implementation of open design concept (clear view from living hall to kitchen) had forced the respondents to redesign the area to be more comfort in terms of privacy. The result shows that houses went through spatial operation relocation whereby kitchen is one of the favourite renovated spaces in local housing development. The relocation and extension of a new 'wet kitchen' is crucial in the needs of bigger kitchen. Furthermore, another valid reason is the nature of how local dish is prepared where it requires larger space and requires longer time for preparation and cooking which were not suitable in modern modular kitchen. Sazally, Omar *et al.* (2010) stated that homeowners found there is a crucial need for a bigger kitchen and a separate "wet kitchen". The former kitchen was transformed into a "dry kitchen" and was installed with built-in kitchen cabinets. Most homeowners pointed out that the dry kitchen was only used for warming up food (using the oven) and functions more to impress guests, as indication of their status.

Table-3. Factors influence the renovations.

Factors	Ranking	Number of respondents
Facade design	4	3
Spatial operation	2	8
Spatial relationship	3	6
Degree of comfort	1	13

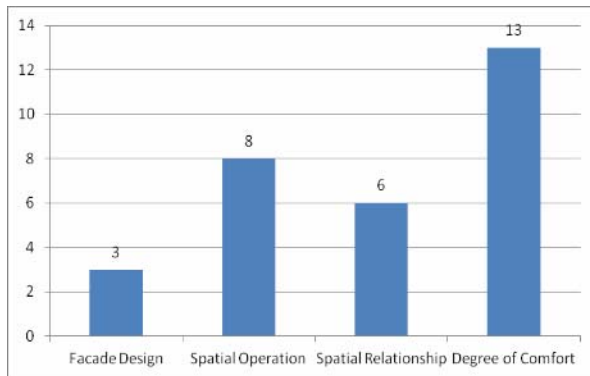


Figure-3. Factors of renovation.

Existing spatial relationship generally divided into two. The ground floor is less personal compared to upper floor. From the observation the spatial allocation of the spaces within the houses are still intact. Design changes traces that existing spaces is normally extended and enlarged. From the entrance of the house is the living area combined with dining area, further in is the dry kitchen which normally visible right from the entry. The open space adapted is to make the space feel larger and to show of the design traits where the most costly implied redesign feature lies within the furniture and fitting at this three area. Another important redesign feature beside the kitchen cabinet, dining furniture set and living couch set is the featured wall at living area with emphasis colour finishes and customize TV console cabinet. The staircase attached on one of side wall is the vertical access to upper which link spatial relationship vertically. On the upper floor, the existing spatial relationship remains intact except the extension horizontally to the front and back of the house to gain larger bedroom area. The existing en-suite bathroom of master bedroom and shared bathroom to the other two bedrooms also remain in the same location. The reason being is because of the plumbing and sewerage systems need major cost and additional expert to look into the matters if relocation or major redesign took place. Major redesign aspect involved on the upper floor is material and finishes changes to suit the house owners' personal desire and taste. Furthermore, since upper floor is the private space floor family members only, design preferences definitely personal but it doesn't involved the redesigning of superstructure and spatial relocation.

Façade design is the least concern redesign factors to the house owners even though outer appearance impact is significant. Most of redesign concerns to façade design is the result of internal space expansion and security intrusion. Noticeable redesigning elements are the installation of metal security grille and repainting of new colour scheme. Variation of security metal grille patterns and finishes make the façade appearance differ from each of the individual lot. Another additional customization is the installation of flooring materials at external compound. Justification given by most of the house owners is the ease of maintenance instead of partial grass turf compound. Second factor is for the second car parking as the existing

porch only accommodates single parking. Majority house owners changed main entry gate to their desired design with the installation of the auto gate.

6. CONCLUSIONS

The findings show that various aspects of renovations were made by respondent's addition to existing design in achieving the uniqueness. Redesigning an existing design is almost a must to the new house owners. Alter-customization whether major or minor is inevitable based on observation and survey concluded from the above said case study. Average cost of the redesigning the existing house is ranging from MYR50,000 to MYR100,000 which normally made up of 15% to 20% of purchased priced of the property. Main redesigning features is the extension for expansion of existing space, installation of security grille, installation of built-ins such as modular kitchen and wardrobe, and changes of finishes. All the redesigning works except for the extension are mainly surface treatment or cosmetically changed but however give a satisfying appearance impact to the house owners.

In, addition, the respondent's data suggests that most of additional designs are to fulfil their personal needs as the existing design is merely minimum requirement. Undeniable, most new housing developers works on minimum by-laws requirements. Adaptation on modern planning where most of compartmental planning space become more universal throughout the world, considerations need to be adhere especially on local culture and customary. A house, to the developers is a commodity to maximize the profit but then to the purchaser or house owners it is a personals belonging and part of their life. Hence, redesigning a design is unavoidable.

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