Abstract

This paper reports the initial study on physical alterations made by homeowners. It was hypothesized that alterations of houses do not necessarily mean dissatisfaction on the part of the occupants. Rather it shows how people would want to make their home unique. The study employs “systematic observation” whereby a random sample of existing terraced houses was systematically analysed. Some of the findings suggest that people tend to make the appearance of their homes different. This challenges the validity of the present system of housing delivery process which seems to be ignorant of the personal expression of the individual buyer.

Keywords: Personalisation; alteration; systematic observation; design process; housing

1. Introduction

The current process of mass housing production is in such a way that architects do not need to meet the end user throughout design stage of the project, creating “designer-user gaps” (Rodriguez Machado 2004, Ziesel 1984). Mass housing design, even though it has the economical advantage of having one standardised design for all, could not provide a common design solution which will suit everyone as each individual has his or her own needs (Cooper 1975). People experience changes in size, physical and

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ment abilities and needs throughout their lives. Houses are often designed with the typical user, with typical abilities in mind, for the typical needs of today, without considering the future changes of the user (Baldwin & Tomita 2007). Another disadvantage of mass housing design is the lack of social and cultural considerations and insensitivity to local context. Cultural issue is not a priority in mass housing design even though each culture will influence the way space is used in their own way (Hashim et al. 2009). Mismatch between the current house and the residents’ needs, preference and aspiration may lead to adjustment of aspirations, or adjustment of the current house through modification or relocation (Baum & Hassan 1999).

The Ministry of Housing and Local Government (1999) had acknowledged that modification or renovation is already considered part of Malaysian culture and this is due to the fact that buyers or home owners do not have opportunity to be involved during the design stage when purchasing their home. The Ministry is concerned with the present housing delivery system which eventually raises the question how to adequately address the need by developing adaptable house design. This issue had also been highlighted by the then President of Pertubuhan Akitek Malaysia (Tan 2006).

2. Literature Review

Kopec (2006) describes personalisation as a physical marker used to identify personal identity, mark territories and hence regulate social interaction. Most people need to leave their stamp or mark or make their house unique and different than the rest (Marcus & Sarkissian, 1986). Abu-Ghazzeh (2000) defined personalisation as a way people modify their environment to make it distinctively theirs. According to Oulasvirta & Blom (2007), personalisation is a normal behaviour in human activity such as decorating or beautifying, altering, modifying and adapting. Friedman (2002) describes personalisation as a process which involves designing, planning, construction and usage. This also requires more future expenditures (Fernandez 2007, Oulasvirta & Blom 2007).

Personalisation occurs when there is any modification or addition to the exterior part of the house by the residents, including the garage and the front or back yard (Marcus & Sarkissian 1986). Outdoor personalisation is called public personalisation where it occurs between the house and the boundary of the property (Bentley et al. 1985). It may communicate across its boundaries to the surrounding environment.

The act of personalisation of terraced houses can be viewed as positive or negative, and can be a phenomenon or a problem (Saruwono 2007). The outcome of the changes should be accepted since it is part of a natural process of growth and decay. In general, people personalise their homes to suit their own personal needs. Personalisation is an important factor in creating a home (Fernandez 2007).

Some modify their homes for financial gains or simply to beautify and make their home “stylish” (Abbott et al. 2003). Personalisation allows home owners to give some touch of unique expression individually and even as a group (Lawrence 1987, Rapoport 1981, Brown & Werner 1985, Giuliani et al. 1988, Bentley et al. 1985) as well as giving meaning to their home (Marcus & Sarkissian 1986). Personalising a space gives personal control to the user which results in increase of satisfaction, better work performance, physical and mental well-being (Kinney et al. 1985, Wells 2000). It also improves place attachment and facilitates changes which will help occupants to stay and adapt to the changing needs (Marcus & Sarkissian 1986, Fernandez 2007). A research conducted by Mohd Jusan (2007) stated that personalisation is an important approach in Malaysian housing to increase congruence with their home environment. The quality of living environment will be improved through increasing space (Tipple 1996). Vibrant environment can be viewed as a positive outcome but this is of course to a great extent subjected to the possibilities that the original design form can offer and how prudent the handler is in the process.
Fernandez (2007) stated that personalisation also helps to distinguish boundaries and increase security. It also communicates ownership and marks the territories (Brown & Werner 1985). Private territory can only be demarcated when it is personalised by the owner (Abu-Ghazzeh 2000). Most studies focused territorial personalisation on defensibility of the residents rather than other messages such as the unique image residents are trying to portray (Brown & Werner 1985).

However, uncontrolled and “reckless” act of personalisation also results in defacing immediate surrounding and bringing about problems to adjacent neighbours and themselves as well (Hall 1996). This could be due to the absence of sound professional advice and or the exclusion of those affected, mainly the immediate neighbour. Some literature has shown that chaotic facades are not favourable even though it demonstrates pride and positive contribution and involvement by resident to the environment (Marcus & Sarkissian 1986). Changes and modification to their home are often irreversible, apparent, and clash with the building’s unity and incompatible with the façade treatments (Giullani & Bucchignani 2000). However, the outcome of personalisation, according to Bentley (1985), can be predicted. For that reason, design of a home must be able to accommodate and encourage personalisation to suit the resident’s expectation (Mohd Jusan 2007).

Personalisation can be divided into a few categories by means of achieving it. Most literature discussed on decoration, or modifying semi-fixed or loose fittings, as a method which home can be personalised (e.g. Mohd Jusan 2007, Fernandez 2007). Other ways include modification of structural or fixed element such as walls, columns and fenestrations (Fernandez 2007, Mohd Jusan 2007). Another approach of personalisation is through maintaining a certain orderliness of the house (Fernandez 2007).

Akalin et al. (2008) grouped housing modification into two different types that are intrinsic, which relates to spatial and technical functions, and extrinsic, which refers to aesthetic act. Marcus & Sarkissian (1986) suggested design guidelines which promotes and encourages residential personalisation through territorial expression, added privacy, articulated façade, personal additions, component replacement and entry personalisation. Greenbaum & Greenbaum (1981) in their research on personalisation in a Slavic-American neighbourhood, focused on marking behaviour, which looks at potted plants at the front porch, surname initial on the entrance door, furniture, front yard attractiveness, the amount of landscape in the front yard, maintenance of the sidewalk and the exterior condition of the house. Whitehand et al. (1999) examined seven types of changes in house – change to chimneys, replacement of front door, new addition or alteration of the front porch, re-roofing, replacement of front windows, and change of the front garden.

3. Theoretical Framework

The literature has shown that residential satisfaction may be reflected by the behaviour of residents. When there is a low level of satisfaction, the tendency is that residents may adapt or modify to suit their needs. Personalising a space gives a sense of control of the environment to the residents (Kinney et al. 1985, Wells 2000). Through personalisation, residents are able to cope with the inadequacy of their home (Mohd Jusan 2007). According to Altas & Ozsoy (1998), being adaptable is an important spatial feature in achieving satisfaction in mass housing type. Personal needs which were overlooked in the original design of the house can be fulfilled through modification (Giullani & Bucchignani 2000). Therefore, flexibility and adaptability in design is important as it may accommodate the variety of residents and their needs (Friedman 2002). Essentially, personalisation creates a dynamic and transformative house which can cope with any lifestyle changes of the resident over the different phases of his or her life (Baldwin & Tomita 2007).
4. Research Context

Terraced house in Malaysia remains as one of the most popular choices of landed housing property. In second quarter of 2008, terraced house consisted of slightly more than half of the overall new houses available in the market (JPPH 2008). Also known as row house, it is a form of mass housing which was adopted from the British terraced house design (Hashim et al. 2006). In general, terraced house is relatively narrow and deep with fenestration at the front and back (Chandler et al. 2005). Typical layout consists of rows of rectangular housing lot (Wong 1985, Hashim & Rahim 2008). Boundaries are clearly defined by using chain-linked fence or brickwall fencing. Design of the house is repetitive and monotonous. Minor variations was achieved through the design of three physical features of the house that the roof, façade and car porch (Wong 1985).

In this research, personalisation methods of the terraced house facades were investigated. Evaluation is made based on the criteria as suggested by Marcus & Sarkissian (1986) and Greenbaum & Greenbaum (1981). However, this research will only focus on physical characteristics such as structural elements and fixtures and free-standing elements e.g. potted plants, furniture and fittings, are excluded from this research. These modifications made may give some indication on the preferences and needs of the users. Intensity of personalisation is also investigated and analysed.

5. Sampling Techniques

A total of 42 terraced houses in several urban housing areas in Klang Valley were randomly selected through real estate advertisements in major newspapers and the internet property website. The website was selected as it allows property agents from various agencies to advertise their property listings. Another advantage of using the internet website is most advertisements will include general description of the house, map and photographs which can be downloaded and kept for record.

The selected houses came from housing areas within the Klang Valley including UEP Subang Jaya (USJ), Shah Alam, Bukit Jelutong, Puchong, Taman Tun Dr Ismail, Bandar Sunway, Sri Petaling, Sri Hartamas, Subang Perdana, Bukit Rimau, Bandar Kinrara, Subang Jaya, Jalan Klang Lama, Bandar Sri Damansara, Bangsar, Kepong, Seri Kembangan, Ampang, Putra Heights and Cheras. All the houses selected were roughly of similar characteristics. This study focuses on double storey terraced house of intermediate, end and corner lot. The frontage width of house ranged between 20’ to 26’ while the length is around 60’ to 80’ (excluding additional land for end and corner lot). All of the houses were developed by private developers and had been modified. Houses were selected based on the description in the advertisements to ensure that only modified house will be visited. To facilitate this, descriptions must contain keywords which suggest physical changes had been made to the house were used, such as “renovated”, “modified” and “extended”. Occupancy, whether it was vacant, tenanted or owner-occupied, and the duration of occupancy, was not part of selection criteria of the house.

At this stage of the analysis, the focus of investigation is on the frontage of the houses. This was because, as found in previous studies, personalisation often occur at the front (Marcus & Sarkissian 1986, Greenbaum & Greenbaum 1981, Whitehand et al. 1999). Changes that were made in other parts of the house will be analysed in the following stage.

6. Data Recording Procedure

The research employs an unobtrusive method by observing what Ziesel (1984) describes as “physical traces”. Rathje (1979) defined physical traces as “any changes to the physical environment due to human actions”. Observing physical traces has the advantage of recording the actual behaviour rather than
approximations, non-reactive and unobtrusive. Rathje further asserts that it can be quantified and measured, as study materials are readily available, and can measure a cumulative record of total effect of long term behaviour.

In the present study, physical traces refer to modifications made to the house, as classified by Saruwono (2007), that include enlargement or extension, relocation, omission, and reduction. Other physical features included in the observation are columns and fenestration and floor, wall and ceiling finishes, gate and fence (Mohd Jusan, 2007). In clear reference to this investigative approach, Ziesel (1984) states that adaptive traces are important as they are “direct manifestation of design by users”. New or removed elements may imply the need to support activities which were probably ignored in the original design of the house. Observation of the houses requires not only a fair but a quick and simple approach. To achieve this, a standardised format sheet was developed in order to record the observation objectively and systematically. In the context of this research, this is referred to as “systematic observation”. The Format Sheet contains seven sections: i) Building information, ii) Porch, iii) Ground floor façade, iv) Fence and gate, v) First floor façade, vi) Balcony and vii) Others. (The Format Sheet is available on request).

Other items used during the field inspection are a digital camera, to photograph the house whenever possible and a digital voice recorder, to record the descriptions made verbally while observing the house. A GPS navigator was also used to assist in locating the houses.

Field inspection visits were made between the months of April to August 2009. After selecting the advertised house, the property agent was contacted for an appointment. The researcher introduced herself as an interested respondent of the advertised property rather than as a research student. This was done in order to be likely entertained by the agent. Otherwise, it would be quite difficult to get a positive response if request was made for research purpose. Such tactic is not uncommon in social research, as suggested by Punch (1986). Some photographs were taken while the researcher visited the property alone while other photographs were from the internet website. Verbal descriptions made during visit are recorded using mobile phones and digital voice recorder. These recordings helped in gathering data, ensuring all required data are included in the format sheet. In analysing the data collected, correlates were established to state the relationship between elements which were observed, and the behaviour and attitudes of the residents (Rathje 1979).

7. Initial Results

7.1. External Features – The Porch

Typical terraced house design provides a porch which covers at least one car. From the observation, it was found that nearly 60% of the houses have modified the porch apparently to allow more cars to be covered or parked inside. The various ways how that was done include extending the roof or putting up new polycarbonate roofing over the additional parking space. The result suggests bigger car porch is needed as most households own more than one car. Due to fear of theft or vandalism, residents prefer to have their cars kept within the boundary of their property (Michael et al. 2001).

The observation has also revealed that a remarkable proportion (78.6%) of the houses visited have had new tiles finishes on their porch floor (Table 1). In most cases the tiles were extended up to the edge of the road pavement. About half of them had their front lawn totally covered with tiles which eventually provides additional space which can be used to park cars and for other activities as well. This observation is consistent with findings by Mohd Jusan (2007) where “spatial improvement” to accommodate daily activities is achieved by enlarging existing tiled area. Results also showed there is a need for a bigger porch where a remarkable percentage (67%) had their porches widened or extended. Nine cases extended
the porch beyond the allowable boundary setback. However it was a surprise to find that only one case managed to conform to the original form of the house. Two cases had built separate porch which had their own secondary entrance gate. In both cases, the porches were connected to separate entrances to the house. Separate porch is seen to be a “special feature” which only corner and end lots could enjoy.

Table 1. Changes made to the porch area

<table>
<thead>
<tr>
<th>Description</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change of floor finish</td>
<td>33</td>
<td>78.6%</td>
</tr>
<tr>
<td>Widen porch</td>
<td>16</td>
<td>38.1%</td>
</tr>
<tr>
<td>Added polycarbonate roof</td>
<td>12</td>
<td>28.6%</td>
</tr>
<tr>
<td>Extend out the porch but disregard original feature of porch</td>
<td>8</td>
<td>19.0%</td>
</tr>
<tr>
<td>Widen porch with balcony above</td>
<td>3</td>
<td>7.1%</td>
</tr>
<tr>
<td>Create a new separate porch</td>
<td>2</td>
<td>4.8%</td>
</tr>
<tr>
<td>Extend out the porch but maintain original feature</td>
<td>1</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Fig. 1. Changes made to the porch

7.2. House Front Façade

The wall façade was investigated by observing the wall, floor and ceiling finishes, doors and windows, column and railing. It has been discovered that small-scale changes, such as replacement of door and change of floor finish, are common among residents. These small-scale changes are “permitted development” which does not require approval by the local development control system (Whitehand et al. 1999). Replacement of entrance door can be seen as a popular behaviour by residents with some replaced with a wider and bigger door. However, it was interesting to note that sliding door which can be considered as a standard feature in a Malaysian terraced house has been found to be widely replaced by casement windows. Another common modification is by changing the colour of the façade wall where residents preferred changing it to harmonious colour as opposed to contrast.

Fig. 2 shows the various alterations made to the front façade on the ground floor. Nearly one in every four cases (38.1%) involved in changing the floor finish at entrance and terraced area to match with their
porch floor tiles. A remarkable percentage (73.8%) of the houses had installed tiles over their front yard. It can be assumed that some residents had to sacrifice their small yard for other purposes. This is consistent with the findings by Mohd Jusan (2007) where results suggest that modification made to facilitate activities for hedonism (desire to enjoy life) and family security. From observation, there is only one case of installation at façade walls by using different or similar materials.

Fig. 2. Changes made to front façade

Fig. 3. Changes made to front façade – ground floor

Fig. 4. Changes to front façade – first floor
Of the sample population, 28.6% and 14.3% of the houses visited had their bedroom and bathroom wall extended and enlarged respectively. This may indicate that the original sizes are inadequate for the residents. Changes to fenestration were often found at bedroom windows as compared to bathroom. There is no indication of preference on type of window with equal percentage of 14.3% changed to similar bedroom window and to different type of window. Five cases were found to change the number of bedroom windows as compared to the original house. Fig. 5 shows that modifications made to the first floor façade clearly set the house apart from the rest as changes were more obvious compared to ground floor which is “hidden” behind the fence and gate.

![Fig. 5. Changes to front façade](image)

7.3. Visible External Components

Terraces were found to be a common feature in terraced house, unlike balconies which were only found mostly in older terraced houses. Original terraces and balcony, which shares the same function and purpose, were seen to be insufficient in size and dimension. Changes were made by enclosing the terrace, with additional casement windows, French windows or bay-windows (Table 2). By “taking up” the terraced space, the residents have enlarged the living room of their house. There were six cases of enlargement of terrace which provides not only climatic comfort, but suitable as an important outdoor space for activities. The result indicated that modifications were made only to smaller balcony which may indicate that the size and dimension were inadequate for the residents. Balcony with bigger dimension was left untouched. The result showed that 19% created a new balcony over the porch roof where more than half were found covered by new roof. Findings show that for the addition of a new balcony, it must be covered and spacious in size. Other than its spatial requirements, having a big balcony over the porch strongly projects and expresses the image of the resident.
Table 2. Balcony and Terraces

<table>
<thead>
<tr>
<th>Description</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclose terrace with windows</td>
<td>15</td>
<td>35.7%</td>
</tr>
<tr>
<td>Created bay window</td>
<td>9</td>
<td>21.4%</td>
</tr>
<tr>
<td>Created balcony</td>
<td>8</td>
<td>19.0%</td>
</tr>
<tr>
<td>Enlargement of terrace</td>
<td>6</td>
<td>14.3%</td>
</tr>
<tr>
<td>Added roof to balcony</td>
<td>5</td>
<td>11.9%</td>
</tr>
<tr>
<td>Enclose balcony with windows</td>
<td>3</td>
<td>7.2%</td>
</tr>
<tr>
<td>Change railing</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>Enlarge balcony</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Fig. 6. New addition of balcony

7.4. Other Visible Features

External components of houses which have been observed focused on the fence, gate, gateway and structures which are detached from the house. Observation showed that more than half of the houses had the fence and gates modified. Some residents built plain brick wall perimeter fencing but most changed to unique and different design of fence. Only two cases were found to build a different design of fencing of different height with one case increased the height of the wall to match the height of the gate. Half of the houses observed had been installed with an automated gate, while most had changed to a different gate design. Sliding and sliding-folding gates were seen to be most preferred especially at houses with widened porches. Only 16.7% house owners modified their original gate into automated gate.

The findings strongly supports the statement that some symbols are used to identify a place with the occupant such as fence, gate, hedges and signs (Hansen & Altman 1976). The importance of the fence and gate is not only for security but also for privacy (Mohd Jusan 2007).
Table 3. External components of houses

<table>
<thead>
<tr>
<th>Description</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed to a different design of automated gate</td>
<td>13</td>
<td>33.3%</td>
</tr>
<tr>
<td>Change to a different design of brick wall fence of similar height</td>
<td>12</td>
<td>28.6%</td>
</tr>
<tr>
<td>Soft landscape</td>
<td>11</td>
<td>26.2%</td>
</tr>
<tr>
<td>Enlarge entrance gate</td>
<td>9</td>
<td>21.4%</td>
</tr>
<tr>
<td>Change to plain brick wall fencing of similar height</td>
<td>8</td>
<td>19%</td>
</tr>
<tr>
<td>Changed to automated gate</td>
<td>7</td>
<td>16.7%</td>
</tr>
<tr>
<td>Added additional entrance gate</td>
<td>2</td>
<td>4.8%</td>
</tr>
<tr>
<td>Added another gate</td>
<td>3</td>
<td>7.1%</td>
</tr>
<tr>
<td>Change to a different design of brick wall fence of different height</td>
<td>2</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

Fig. 7. Gates and fences

Results indicated that only a small percentage (23.8%) had modified the roof form. It was discovered that only houses which had undergone extensive modification, which required approval from the local authority, changed their roof. Figure 8 shows the general modification trend of houses observed. It can be seen that one of the main features of the house which was frequently “sacrificed” is the porch roof. First floor was usually extended to cover the porch. However despite changing the form, it was found that none of the houses have changed the colour of their roof. Polycarbonate roof was also found to have widely been added to porches and terraces. This roof that is more temporary in nature does not require prior approval from relevant authorities. It can be assumed that the preference for this roof is because it is easily available and promises faster construction process compared to conventional roof which requires submission of forms and permission from authorities.

Fig. 8. Changes on shape and form of roofing
8. Summary of Findings

Findings revealed that most changes made in the houses are permanent. It has been discovered that, in general, there are two evident categories of personalisation: large-scale and small-scale changes. Large-scale changes only occur whenever there is structural modification to the house which requires approval from local authority while small-scale relates to changes due to maintenance or “decorations” works made to the house (Whitehand et al. 1999). Major renovation which includes changing of roof form, extension of porch and wall are considered large-scale changes. Replacement of door, and windows, change of wall colour and installation of tiles care are regarded as small-scale. Table 4 show the summary of overall most common changes found from the research.

Contrary to what was discovered by Marcus & Sarkissian (1986), personalisation in Malaysia normally takes place at the gate and fence, rather than at the entrance door. This is probably due to the differences in housing design and cultural norms. The front of the house is where “performance” take place to impress by conveying the social status (Ozaki 2003). Personalisation begins at the boundary of the house where guests or visitors enter or are received. Modification of the fence and gate allows residents to effectively place their mark and express their territory. Territorial expression through personalisation is not only to express their self-identity or image, but also has improved privacy and security as well. Installation of tiles to the porch and over the front yard suggests that the front of the house is flexible in use. Activities from inside can overflow to outside, and more cars could be accommodated within the house compound.

Table 4. Summary of action and effect of modification

<table>
<thead>
<tr>
<th>Action</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of floor tiles at porch and entrance</td>
<td>Aesthetically pleasing and facilitates other activities</td>
</tr>
<tr>
<td>Enlargement of porch</td>
<td>More cars could be accommodated within the boundary of the house</td>
</tr>
<tr>
<td>Replacement of entrance door, windows and sliding door</td>
<td>For positive impression to guest and outsiders and self-image</td>
</tr>
<tr>
<td>Addition of new balcony</td>
<td>Increase of usable space in the house</td>
</tr>
<tr>
<td>Enclose terrace, with or without windows or addition of bay window</td>
<td>Enlargement of indoor space</td>
</tr>
<tr>
<td>Upgrading of fence</td>
<td>Improving security and privacy, positive impression on guest and outsiders and self-image</td>
</tr>
<tr>
<td>Upgrading of gate</td>
<td>Improving security and privacy, positive impression on guest and outsiders and self-image</td>
</tr>
</tbody>
</table>

9. Conclusion

This paper has reported initial findings of the trend of personalisation in terraced houses in Klang Valley, Malaysia. Apparently, due to the monotonous and repetitive design of mass housing, residents have resorted to personalisation to make their home identified individually. The house becomes a medium to express identity where residents are “recognised” from the external appearance of their houses (Porteous 1976). Some have large impressive porches while others prefer intimate terraces. Changes made to the fence not only express their identity but allow residents to mark their territory. This
subsequently improves security and the privacy of the house. Personalisation also helps residents to adapt to the changing needs and lifestyle which mass housing design could not provide. In a way, personalisation is a “tool” to ensure congruence with the current condition of the house. Indeed, modification in a terraced house can be contagious as suggested by Whitehand (1999), that when it occurs to one house, neighbours may follow suit. As such, modifications of houses are seen to be “repetitious” even though the needs of the residents may be different. This is due to strong social interaction between neighbours, as described by Pulhan & Orcunogly (2005). The phenomenon can be seen as a positive action by residents in improving comfort, a clear process of transforming houses into homes. Understanding the trend and the reason behind this personalisation will help parties concerned to re-evaluate the design of houses and housing in the future.

References


