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# Interpreting the Meaning of Housing Quality towards Creating Better Residential Environment

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#### Abstract

Malaysian National Housing Policy has reinforced the aspect of quality as one of the aspects that utterly needs consideration in new housing development. There are problems in defining the housing quality regarding the expected criteria and standards due to subjective and contextual determined in controlling the quality of housing development. It focuses on what constitutes a good housing quality in the perspectives of housing actors in Malaysia? This paper employs in-depth interview with the actors as well as focus group interviews with residents as the main instruments towards understanding the meaning of housing quality in developing countries such as Malaysia.

Keywords: Housing quality; Housing policy, Residential environment, Housing development

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1.0 Introduction

The changing lifestyles and the rising standard of living have collectively led to an increase in housing quality. Acknowledging the importance of housing guality, the Malaysian government under Malaysian National Housing Policy has reinforced the aspect of guality as one of the aspects that utterly needs consideration in new housing development. The aim of Malaysian National Housing Policy (NHP) is to provide adequate, comfortable, quality and affordable housing to enhance the sustainability of the quality of life of the people (NHP, 2011). Taking the importance of housing quality in the built environment and strong commitment of government towards the provision of a quality housing to the people, this paper has intended to explore the meaning of housing quality in the perspectives of actors in housing development. The intention to focus on housing guality is due to lack of research on this aspect compared to housing provision and affordable housing. In the context of achievement of housing provision, many studies showed the success of Malaysian government in providing adequate housing for people, and the level of homeownership among Malaysians is relatively high by world standard (Agus, 1997, Rameli, 2009). However, accessibility and affordability of housing will not be benefited if consumers not provided with the quality of housing. As noted in the United Nations Habitat II Conference in Turkey in 1996; 'Adequate shelter means much more than just having a roof over one's head. It also means privacy, adequate space and security and a place with which to thrive'. While the availability and affordability of housing remain the important concern of people, the other major concern is on the quality of housing and the surrounding environment. As the quality of life and the people's awareness of quality living increasing, the access to quality housing becomes among the key priorities in government policies agenda (John, 2004; Cagamas, 2013,). According to Cheah (2010), the demand for quality housing and environment rising due to the consumers who are more and more affluent that looking for reliable and quality products with good social and cultural environments as well as the consideration of factors such as landscaping, and the availability and accessibility of social amenities.

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This paper aim is to explore the understanding of housing quality from the perspective of actors and residents involved in housing schemes in Malaysia. Under this objective, the research question seeks to examine; what is housing quality and why housing quality is important to be understood by the actors in a housing development?

# 2.0 Literature Review

What constitutes of housing quality? The British Standards Institute (BSI) defines quality as '...all those features of a product (or service) which are required by the customers". Likewise, The International Organisation for Standardization has placed "customer focus" as the first principle in the list of principles of good quality management in business. In business management, quality is very important and has been seen as to whether the goods and services meet the expectations and needs of the consumers. The meaning of quality and housing quality, it can be described as the provision of housing should meet the expectations and needs of the customer and the housing delivered should achieve a degree of excellent standard. In encounter these needs, there is involvement of many actors such as professionals, bureaucrats and other decision-makers in the formulation of standards, interpretation and implementation of housing quality (Harrison, 2004). Lawrence (1995) defined housing quality as a very complex concept that is exposed to debate due to its diverse meanings and perceptions from different background and experience of people. A study conducted in Europe on housing quality showed that most of the quality attributes selected were regarding internal quality (Sheridan, 2001). The attributes of housing quality selected for the study included space, which focused on the quality of houses concerning the size of the house, size of rooms, the circulation in the house or aspects that can be defined as interior space in the house. Elements of accessibility refer to the access to the external space of a house such as external access, size of circulation spaces, doorways, and so forth. Another aspect of housing quality includes internal environment and health, safety and neighbourhood.

The interpretation and understanding of the quality of houses and its internal layout have gradually broadened to the aspects of environmental quality. Furthermore, Conway (2000) defined that the quality of housing is not only affected by the physical quality, but also by its external environments such as location, sense of security and privacy and general feeling about the area. This understanding is supported by Lawrence (1995) who stated that it is crucial to consider the mutual connection of the characteristics of residential buildings with its much broader environmental condition when defining housing quality. Carmona, (2003); Rapoport (1982); and Angel (2002) agreed that housing quality should not only look at the issues of individual unit quality, but also to the broader context such as the quality of surrounding environment, the look of buildings (aesthetics), the amount of greenery, the layout of roads and walkways (layout design), and the way all these factors contribute to the "feeling" of a place (Karn et al., 1998). As Carmona (2003) suggested, the quality of housing is mostly determined by the utility and the facility value enjoyed by its owner, and it should offer a healthy and safe living environment. In this context, the understanding of housing quality shows that the quality of living environment does not depend only on the relationship of the physical factors, but also on personal and social factors. Rapoport (2001) described that environmental quality is one of the factors that influence the preference of people to live in suburban and rural areas rather than in the cities.

Evans and Kantrowitz (2002) argued that housing quality should include both the quality of internal and external of the housing. The authors' defined internal housing attributes as a space capacity in the house indicated by the space standard or number of rooms per person, the degree of sharing, self-containment, privacy, exposure to safety hazards, structural quality, ventilation and natural lighting. These attributes of internal quality do not only include the physical aspects but also on social and personal aspects. This means that housing quality extends beyond the elements of internal and external quality but also the elements of social and personal aspects such as privacy, safety and self-containment. This understanding has similarity with the idea of Goodchild (1997) who suggested that housing quality is related with the issues of safety, durability and environmental impact, as well as a series of components, which are interrelated consisting of social, personal and physical factors. On the other hand, the external living environment includes cleanliness in the neighbourhood, access to open space and community facilities, air quality, noise level and exposure to crime (Rahman et al., 2015; Chiu, 2003; Evans & Kantrowitz, 2002).

From the discourse regarding the understanding of housing quality, three main components of housing quality understanding can be defined. The components are internal quality, external quality and social aspects. Each component of housing as its variables as shown in Table 1.

Table 1. Housing Quality Attributes				
Internal quality	External Quality	Other Attributes		
Durability	Location	Safety		
Size	External Appearance	Sense of security and privacy		
Internal layout	Environment	General feeling on the area		
Physical Quality	Accessibility	Exposure to crime		
Space standard	Neighborhood cleanliness	Lifestyle		
Degree of sharing	Air quality	Identity		
Structure Quality	Noise level	Status		
Self-containment	Road and drainage system			
Ventilation	Public Facilities			
Natural Lighting				

Source: Adapted from Rapoport (1982); Goodchild (1997); Karn et al. (1998); Conway (2000); Evans & Kantrowitz (2002); Angel (2002); Carmona (2003)

Although housing development involves a complex process, housing quality can still be achieved through a well-executed plan from the beginning of the process until the implementation of the plan on the ground. In the process of construction of good living environment,

planning has a big influence on the production of the conducive living environment. Accordingly, living environment should be designed to be responsive to their environment, to enable it to contribute to a high quality of life by ensuring they are safe and inclusive, wellplanned with proper a transportation system, infrastructure, public facilities and open spaces for recreation activities (Rahman et al., 2016; Angel, 2002; Carmona, 2003; Coolen, 2006; Rapoport, 1982).

# 3.0 Methodology

This paper adopted the qualitative approach to explore how housing policies, planning standards and housing guidelines are used in planning and design of new housing schemes and how the housing quality can be achieved in the completed housing schemes. An indepth interview with the actors as well as focus group interviews with residents is employed as the main instruments towards understanding the meaning of housing quality. The in-depth interview gives the researchers access to the observation of others and learns what people perceive and how they interpret their views (Silverman, 1994). A semi-structured interview is used based on prepared interview questions with probes, which were grouped under different topics and different types of participant. Whereas there were common questions asked of all participants, there was nonetheless scope to vary the order and wording of questions as well as the nature of probes used both for different categories of the interviewee.

To explore the experience of the actors in the housing development, the in-depth interviews only focus on policy makers, local authorities, professional planners (planner who practice at private sector) and private developers. This study only examined four main actors due to the limitation of the research period.

The interviews with the actors were carried out in two stages. The first stage involved interviews with the most senior positions in the organisation and the second stage of the interview was with the second and third higher position staff in the organisation. Respondents were contacted beforehand by telephone and briefed about the nature and objective of the study, but specific details about the nature of the questions were not revealed to capture spontaneous views and opinions and thereby minimise response bias. The interviews were based on semi-structured interviews to create a situation in which the interviewees could express themselves in their terms. The interview here was viewed as a form of discourse that was the joint-product of the interaction between the researcher and the respondent.

The focus group is used as a multi-method which adds to the data collected through in-depth individual interviews and documentary data analysis. Resident focus groups were selected from four housing schemes which are Bukit Jelutong, Kota Kemuning, UEP Subang Jaya and Precinct 11 Putrajaya to get the views and perceptions of residents about their living environment, the quality of housing, issues and problems they are facing in the neighbourhood. Every focus group consisted of small groups of three to four people in one group to allow every participant to have an opportunity to express their ideas and share their experiences and problems in their neighbourhood. In this way, the researcher can get in-depth information from the residents about their living environment.

Based on the research question and research objective, the thematic content analysis was identified suitable for this qualitative research. Content analysis is used as a process to condense raw data into categories based on valid inference and interpretation. From this process, themes and categories emerged from raw data under researcher examination and constantly compare the data.

# 4.0 Results and Discussion

This section discusses on how the actors in housing development interpret the concept of housing quality and what they understand on the aspects of housing quality. The analysis shows that the understanding of housing quality has various perception and meanings that contribute to very rich meaning and interpretation of housing quality. The various perception of housing quality appears from different actors who come from different background and practices such as from local authorities, developers, consultants as well as from consumers/residents. Even though there are various perceptions and interpretation, the meaning of housing quality should not be separated from the concept of how to construct the better-quality living environment which association to the good planning system. Thus, it is important to link the analysis of understanding of housing quality with planning system and planning control. This association potentially shape and influence the production of housing quality.

Analysis of understanding of housing quality is based on an understanding by Rapoport (1982) who defined that housing quality as a package of various factors that interact with another and operate in different ways at different places and context. The various factors include the aspect of physical, social and culture which interacts with each other and contributes to the 'feel' of a place. From the analysis, four main categories of understanding on housing quality have been identified. Firstly, housing quality has been referred as the quality of the house building and the quality of external housing (setting context). Secondly, the understanding of housing quality is referring to the quality of the house building or individual unit of houses. Thirdly, housing quality referring only to the quality of the external fabric of the housing unit (living environment or external quality) and lastly housing quality referring to other aspects such as location of the housing schemes, value for money which relates to house prices and house types, social aspects such as residents' satisfaction, safety and security, lifestyle, sustainability as well as sustainable housing.

Most of the actors defined housing quality as the quality of internal and external quality of housing. Based on the interview with one of policy maker, housing quality is a quality of internal housing includes the quality of building materials as well as the furnishing of the house. Meanwhile external quality is found to relate to the aspects of residents' accessibility and convenience to reach the public facilities and the quality of the infrastructure such as road systems, parking spaces and quality of the environment in the neighbourhood. The aspects of external quality obviously related to the provision and requirement of planning standard and housing guidelines. In Malaysian practice, the development of housing is control by Acts and legislature (statutory), development plans as well as planning standard and

guidelines. This planning control mechanism is used to complement the process of housing planning by assessing, controlling and monitoring the applications of housing development. The quality of external housing is control based on the requirement and compliance with local authorities planning standards and guidelines as well as housing guidelines and planning principles. Internal quality such as the quality of material and workmanship also defined as essential elements in defining housing quality as described by professional planner below. Meanwhile for external housing, the location and accessibility are among the significant factor that contributed to housing quality as enhanced by professional below;

'Firstly, my first perception on housing quality is the material used to construct the house, secondly is the location of the house and then thirdly is how easy you can access to workplace. External environment aspects also important such as school, 'surau<sup>i</sup>', kindergarten, shop and other facilities should be within walking distance from your house'. (Professional, D02)

Provision of public amenities within walking distance also contribute to the quality of housing. In similar rhythm, another professional planner stated the identical understanding of the housing quality;

'Housing quality is everything; it includes the location, the house itself, facilities provided, workmanship, park and recreations area for leisure activities. Quality for me is the quality of the house and the quality of environment in the housing area'. (Professional, D03).

Above understanding shows that housing quality includes everything from the external environment such as facilities provided to the quality of houses. This meaning can be defined as the macro perspective of housing area which is the quality of the overall housing. Meanwhile, the micro perspective is referring to the unit of houses. This understanding is similar to the perception of another professional as quoted below;

### i. Social attributes

Social aspects also emerged in defining housing quality in the context of interaction between communities in the neighbourhood. This is mentioned by the actor from Putrajaya Corporation. His understanding on the meaning of housing quality is not only on the quality of the environment, infrastructure and public facilities provided in the housing area but also include the quality of social attributes such as the relationship and interaction with neighbours in the particular neighbourhood. The quotation below expresses what he observes on the concept and meaning of housing quality;

'First, what comes in my mind about housing quality is the quality of material, furnishing...but actually it is more than that. We need to see other aspects of quality such as social aspect such as how you interact with your neighbours, the environment of the housing, the quality of infrastructure, the transportation system and the facilities provided' (Local Authority, B09).

In describing the meaning of housing quality, his understanding not only focuses on the quality of houses and the external quality of housing but going beyond that which includes social aspects. His explanation expresses the importance of social aspects in measuring the quality of housing which interaction and affiliation between the neighbours are influencing the quality of life of residents.

This aspect especially involved the design issues; how the housing layout was designed to encourage the interaction between communities. The design of housing should encourage the interaction within the community, the setting up of housing in the neighbourhood has a role to play; the arrangement of the layout such as the design of the road, green linkages or green network and the orientation of houses. These factors or criteria usually stated in the planning guidelines as well as in the housing guidelines. Considering these factors in the design potentially form the quality of the living environment as well as give the security and safety to the residents.

Another social aspect mentioned by actors includes safety and security. This aspect also can be defined as external factors that have a relation to how housing layout was designed, whether the design includes the aspect of safety and security in their layout design. These aspects mentioned by a developer who stressed that these elements also have significant in understanding the concept of housing quality;

'Housing quality is about internal and external of housing and actually is refers to everything. It is not only the quality of building but also about the ambience, safety, security and all aspects. The main thing is about safety and security; this is for me the priority! And how easy you can access to the amenity; how easy you can access to the public transport and how you can access to the park. Housing quality is about houses and all setting up'. (Developer, C04).

Again, this understanding is about how well the designer is designing the housing layout. The elements of safety and security need to be considered in designing the housing layout, especially regarding access to the public parks, to public amenities such as shops, kindergartens, community hall and public transport. Those elements as external qualities should provide within accessible walking

distance and easy to access. The provision of public amenities within walking distance not only increases the quality of housing but also has an impact on the housing prices. A study by Song and Knaap (2004) indicate that housing prices increase with their proximity to or with increasing number of public parks and or neighbourhood commercial.

The combination of living environment, location and material of houses potentially contributed the quality of housing. The similar view expressed by the residents as two quotations below portray;

'I refer housing quality to both aspects; the house/building and the external of the housing such as open space, road system and facilities provided in the housing area'. (Resident, RUSJ02)

'There are two aspects which I have considered as housing quality; firstly, is the infrastructure provided and secondly the material used by developers to construct the house.' (Resident, RKK02)

Based on those understanding discussed below, the meaning of housing quality is about the quality of material uses in constructing houses, the setting context or quality of the environment and how the facilities and infrastructure are integrated together. This understanding has similarity to what Rapoport (1982) defined on the meaning of housing quality as a package of various factors which include the aspects of physical, social and culture that interact to each other to contribute to the feel of the place. In this analysis, the meaning of housing quality defined as internal quality and external quality of housing which is a physical aspect as well as and social aspects. The internal quality of the house refers to the quality of materials used to construct the house, the quality and furnishing of the house, the facade and design of the house. Meanwhile, the understanding of the external quality housing refers to the location, overall layout, public amenities, open space, infrastructure network, road system and accessibility. The social aspect includes safety, security and interaction between neighbours (Refer Table 2).

#### ii. Financial - Value for money

Financial aspect and value for money is another aspect which has been discovered in an analysis of understanding of housing quality. Based on the actors' understanding the financial aspect is referring to a price of the house and value for the money they spend to buy the house. They value the quality of house or quality of housing depends on the price they paid for as mention by one of the professional below;

'Quality always comes with price, the higher the price the better quality you can get' (Professional, D04).

This statement was supported by another developer who stated that the higher the price of the house, the more quality you can obtain;

'For me housing quality is about the value of the house. If you pay higher price then you get a better-quality house but if you pay less, then you get what you pay for'. (Developer, C08).

The financial aspect also raised by one of resident who sees financial criteria's is an important aspect in describe on housing quality;

'Housing quality mainly refers to physical quality and financial aspects. That is the main measure of quality because we want to get value for our money. The rest is of course the elements compounded together such as school, shop, park and other facilities'. (Resident, RBJ03)

As housing quality described as value for money, this perception might be true because housing quality can be offered by developers on higher end products. This is quoted by the developer of Bukit Jelutong when he explained on his understanding of housing quality;

'Quality is arbitrary; the quality of housing is different between locations to location. If we are talking about the quality of housing in Bukit Jelutong, we are talking about the houses selling for half million ringgits (£100,000) and most of them is a landed property. And if we are talking about the low-cost housing which price is RM45,000 (9,000 pound), the quality and material used is different'. (Developer, C01)

This is true because the location and price of the houses much influence by the quality of housing where the better location with wellintegrated infrastructure and facilities has the potential to achieve a higher price. In Malaysia, to enable every income group people to own a house, the housing policies outlined that every housing scheme or housing development must provide a range of house types to cater for all income groups which must include 30 percent of low cost housing for low income group. In line with this the buyers need to decide what the best value for their money as addressed by developer below;

'In Bukit Jelutong, we have mixed development.....we cater for all income groups, but most of the buyers are landed property buyers and they know what they want and the value for their money. They travel a lot and they can compare the prices and the quality of the houses. When we are talking about quality of housing, we need to look at the parameters and who are we serving; high end product or low-end product'. (Developer, C01)

Thus, this analysis revealed that the aspect of financial, price of the houses (cost) and value for money has significant impact to the quality of housing. However, many not see it as the criteria's in perceiving of housing quality as mentioned by Goodchild (2008, p.177),

'Consumer viewed cost and price as part of the aspects on the housing quality thus the cost and price are normally not listed in the majority of quality classifications'.

Thus, from this revealing, the aspect of financial and value for money has contributed to the variables of understanding of housing quality.

#### iii. Design quality - Cost efficient

Design quality is another aspect or a criterion's which highlighted by the actor when perceiving housing quality. It is mentioned by a developer who enhances that the quality in-house design is important to fulfil the customer needs. In producing of quality design in housing schemes, several professions are involved such as planners, architects, engineers, landscape architects etc. However according to this developer, design quality is not only the beautiful design, but it must be cost-efficient;

'To get the standard and quality, we need to control in term of efficiency so that design is not too low or over designed. In the design process, we need to look into everything, in term of requirements, bylaws, and regulations by local authority. We need to ensure the quality of design is compliant within the company budget and local authority requirement. In other words, design quality is inclusive everything; functional, efficiency, value for money and of course good quality of workmanship.... (laughing)'. (Developer, C07).

Based on the perception of this developer, to achieve design quality it must consider many elements such as the design must be functional, efficient and value for money neither for developers and buyers. For the developer, making a profit from selling the houses is their priority thus their team try to work out the best quality design without compromising their budget, yet the quality of the houses can fulfil the buyers need and satisfaction;

'We must make money, make profit but we need to ensure that our products achieve the standard and quality of end users...to fulfil everybody's needs'. (Developer, C07).

# iv. Lifestyle

Another aspect of housing quality which viewed by resident is lifestyles or way of life. Resident said housing quality related to lifestyle and family values which can be improved through the quality of the living environment;

'Housing quality to me is a way of life. A way of life in the sense of.....family values.....whether families are able to do activities within the township or they have to travel outside the township. Like in Kota Kemuning, we have a lake; we have a park so we can have activities for families to get together within the township. So, housing quality is ensuring a good life style for the residents, not so much of the quality of the house, not so much on the brick and walls but it is more about lifestyle'. (Resident, RKK03)

This is true because when quality of housing increase, level of quality of life and lifestyle also improve through the interaction and activities among the family and also between the neighbours in the neighbourhood. In other words, housing quality give an impact to family value and value for communities.

To conclude the discussion on understanding of housing quality it is revealed that the notion of housing quality has a various broad meaning and perception among the actors. It consists of all aspects including physical, social, and environmental as well as the economy and ways of life. Most of the actors understanding has much similarity although the actors come from different background such as from the local authority, developers/private sectors, the professional planner as well as the residents the end user of housing. The interesting finding revealed these understanding have much similarity with most of western countries *understanding. What is Rapoport (1982) described on housing quality as a package of various factors that* interact to each other clearly emerge in the actors understanding of housing quality. The finding of various factors of housing quality can be described into three main components which is internal quality, external quality and social aspect. Under these factors, there are several attributes of housing quality as shown in Table 2. These attributes are interacted to each other to contribute the quality of housing and create the 'feel' of the place.

Table 2: Findings on the meaning	g of Housing Quality by actors' perception
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actors h	Jerception
External Quality	Other Attributes
Location	Safety and security
Overall layout	Peace in mind
Environment	Interaction with
Accessibility	neighbor
Quality of	Value for money
infrastructure	Exposure to crime
Transportation	Lifestyle
system	Sustainability
	External Quality Location Overall layout Environment Accessibility Quality of infrastructure Transportation

Floor area/size of house	Ambience	
House façade	Open space/	
Sustainable housing	recreation area	
Ũ	Road and drainage	
	system	
	Public Facilities	
	(Source: Authors)	

#### 5.0 Conclusion and Recommendation

The understanding of housing quality among the actors reveals there are rich and various meaning and interpretation of housing quality. The broad and various meaning of housing quality potentially adds to the existing knowledge of the actors' perspectives, specifically become key contributors to the existing academic literature of housing quality. This contribution is noteworthy in the Malaysian context because of the paucity of studies on housing quality as compared to housing affordability and housing supply. The understanding of housing quality not only focused to the physical aspects such as the internal and external structure of dwellings, but it includes the aspects of the external environment such as the location, the layout of housing area, the provision and location of public amenities and infrastructure, sustainability aspects, social aspects as well as cost and value for money. The diversities of housing quality meaning also contributes and help in refining the housing design and planning principles in housing development that can enhance the quality of housing in the new housing development.

The research also identified the close relationship between the delivering of housing quality and planning control enforcement. Although the planning standard has been critiqued by actors as the minimum standards, this minimal requirement set by the government will give the developers and professional designers to use their creativity and innovation in designing excellent quality housing. The elements of sustainable housing also can enhance in the new housing schemes in relation to create the sustainable environment as well as the sustainable communities.

There are many others important actor involves in housing development, therefore future research should include other actors such as architect, contractors, builder as well as the residents from different culture and races such as Chinese and Indian, in order to get different perspectives in defining the meaning of housing quality.

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