

Cultural Consideration in Vertical Living in Brunei Darussalam

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Abstract

The Government of Brunei Darussalam has played a central role in the provision of public housing in the form of landed property for many centuries. The period of modernity and economic growth has resulted in urban sprawl and declining available land. In a bid to arrest this unsustainable trend, the Government is promoting high-density, high-rise settlement complexes as an alternative to meet housing demands. The necessary legislation to support ownership of apartment units in multi-storey complexes, namely the Strata Title Act, has also been developed. The public, including real estate developers, however has not warmed to the initiative. Some analysts are of the view that there is a need to “re-engineer the Brunei society” to embrace vertical living via various means such as education and awareness. Nevertheless this paper will argue that the understanding and appreciation for Bruneians’ lifestyle as well as social and cultural proxemics are actually important for urban planners to consider. This study shows the different cultural typologies in Brunei which enabled the researchers to understand the cultural and social determinants that influences respondents’ choices with regards to the types and space preferences in relation to vertical housing. The paper puts forward a hypothesis that the Brunei society will warm up to vertical living if their cultural space needs are met in high-rise, high-density complexes. For the purpose of this study, a survey was conducted to validate the predictions of the model i.e. cultural architecture typology particularly targeting affected populations generated. The paper takes an insider-outsider approach which further emphasises the importance of local knowledge and understanding of local cultures and practices in research. It is hoped that the study will contribute to a better understanding of the housing demands of the Brunei society in general, and key cultural considerations with regards to vertical living in particular.

Key words: vertical living, Brunei society, culture, space needs, proxemics

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1. Introduction

Since it began a century ago, state provision of public housing in Brunei Darussalam has been responsible for all aspects of public housing, including allocating land for housing development, ensuring ample supplies of housing and even design. The period of modernity first brought to Brunei by the colonial British influenced housing policy and practice, as did the country's independence in 1984 and globalising processes that brought about changes in the social lives of the people. Rising environmental awareness particularly in relation to sustainable development in the mid-90s further affected the planning and management of urban areas in Brunei.

Such rapid development has led to a decline in available land for housing development. Urban sprawl has also challenged Brunei's sustainable development and land use initiatives. In response, the Government is turning to high-density, high-rise settlement complexes to meet ever-increasing housing demands. It has also enforced the Strata Title Act to support ownership of apartment units in multi-storey complexes.

On the other hand, the public, including real estate developers, has not yet warmed up to the initiative. This paper argues that the public will eventually embrace this new style of housing development if such development takes into account the socio-cultural needs of the Bruneian people, paying particular attention to the roles of living spaces as functional, socio-cultural spaces in relation to the environment. Such measures can supplement what some analysts term to "re-engineer the Brunei society" to embrace vertical living via education and awareness.

Following this introductory section, literature on space, culture and how these pertain to housing is reviewed, showcasing the complex interplays between culture, space and place from a geographical perspective as well as in understanding the dynamism of these concepts temporally. The third section discusses the survey and methods applied in the study, while the analysis makes up the bulk of the paper before the concluding section.

2. Literature Review

2.1 Culture, space and place: problematising problematic concepts

The complex interactions between the anthropogenic spheres and nature and the environment have received much attention in cultural geography, with constant emergence of theoretical assumptions that underpin human-environment relationships in relation to time. Among these, two are most relevant to this study; firstly, the view that natural environment acts as the determinants of societal living and organisations and secondly, the view of the Human and their Culture as the defining, active agents that shape the environment. These theories form this study's framework for understanding the evolution of Bruneian cultural living spaces.

The theoretical assumption of nature's role in determining human or societal living and organisation was first developed in the 19th century by western philosophers and social theorists such as Herbert Spencer and Jean Baptiste Lamarck as well as political geographers such as Friedrich Ratzel. Essentially, the theories view societies as being organismic in nature, whose behaviour, habits and organisational patterns are determined or dictated by their natural environment.

In contrast, the second theory regards societies as the ones that are actively shaping the environment and not merely passive actors relying solely on the environment for life provisions. In the *Morphology of Landscape*, Sauer (1925) laid the foundation for new ways of seeing the relationships between human and environment, in which humans work with and on nature to create material aspects of culture. The natural environment changes

as human society transforms with the introduction and reintroduction of new cultures alien to the local culture, eventually leading to rejuvenation of the local or a superimposition of new landscape over the remnants of the old culture over time (Sauer, 1963, cited in Mitchell, 2000, p.28).

These theories underwent transformation with the emergence of postmodernist school of thoughts. Rise of social problems during this period such as poverty, social inequalities in the form of gender, workplace and others lead to the rise of social movements such as Non-Governmental Organisations (NGOs). Social theorists and cultural geographers criticise the inadequacies of current cultural theories in addressing the issues. Rather than looking on humans and merely describing the forms and structures that existed in the landscape in which they inhabit, majority of social scientists now focuses more on the inner workings of culture itself to explain the various social processes and issues brought about by modernity and modernisation processes. Bourdieu's (1977) idea of an *habitus* is an example of this. In his writings on *habitus*, he argued that *habitus* not only signifies the way we think but it also signifies "the bodily dispositions that we bring into the field (reality or environment)...(as) a certain subjective experience" (cited in Adams 2006: 514), dictated by the dominant culture. In his attempt to explain how *habitus* can be related to structure and agency, he argued that "agency and autonomy are embodied in the concept of *habitus* but they are qualified by the caveat of accumulated history, both personal and collective, which imprint themselves as a *pre-reflective* action-orientation" (cited in Adams 2006: 515). In summary, *habitus* can be referred to as socio-cultural processes that have influence on not only how human or individuals act within society but it also shows how such interactions might be reflected on the structures in which society are living in.

2.2 Proxemics

The concept of proxemics has been applied in several studies on architecture to explain why homes are arranged in particular ways according to the social interactions and cultural backgrounds of residents.

Simply described as the study of physical space between individuals during interaction (Park, 2011), proxemics was used by Amad, Sujud and Hasan (2007) in their research on traditional Malay houses in Malaysia. They found that the social and cultural norms of Malay societies that dictated the arrangement and separation of rooms in their homes, with each room serving particular functions and individuals according to their gender, age and social position. There are also proxemic differences between regions; eastern and southern peninsular Malay societies are comparatively more conservative than their northern neighbours and so made provisions for elevated floors that separated rooms. Southern Malay houses even had attics where unmarried females of the house were gathered when many guests were present during feasts.

Carney (2007), who defined proxemics as the study of the spatial separation between individuals in various situations, also applied it to describe how home dwellers set boundaries of interaction within the home. Boundaries and territories were drawn where possible to achieve privacy and avoid crowding, excessive noise and unwanted social interaction.

Proxemics therefore can help explain differences in the structure, layout and appearance of homes of varying cultures, as each culture has what Park terms its “characteristic proxemics standards”. Such standards, she wrote, are why Middle Eastern houses, despite being spacy and airy as the American mansions, have fewer partitions compared to the latter. This is because Americans require more privacy and less interference, while the Middle Easterners have no such qualms. Proxemic standards also explain why the homes of Germans, who intensely value their privacy, have much sturdier doors and locks compared to American and Middle Eastern homes. Such home interior practices greatly differ from those of the traditional Malay as described by Amad, Sujud and Hasan.

It is important, therefore, that when designing houses for people of particular cultural backgrounds that planners take into account the prevailing proxemic practices. As Park (2011) warned, “When a building’s features force people to act against their proxemic

habits, people can be stressed... The features of a building will continuously influence the people's experience in the building, and the experience must not be distressful ones.”

Another key factor for cultural considerations in architecture is the established notion of homes as sanctuaries, where residents can rest and relax. Carney (2007) makes this point when writing about the pivotal role houses play in people's lives, noting the abundance of literature that emphasise this centrality and the home as a place of significant actions, of familiarity and of points of departure. As such, factors such as privacy and space for family and gatherings are important, more so than the appearance of the houses. As evidence, Carney referred to the findings study based in Easter Hill Village in the early 1950s which found that despite the planners' efforts to make the exterior of homes attractive, residents were significantly more concerned with issues such as lack of privacy, crowding and inadequate space for family expansion or guests.

2.3 Vertical housing

Rapid urbanisation, population and land shortages have fuelled the upwards expansion of housing in many parts of the world. A feature of American cities since the early 1900s, high rises provide compact living for the masses that include many underprivileged and are quickly becoming the norm particularly in Asian cities, writes Yuen (2009), who also notes that vertical housing frees up land for other uses that contribute to quality urban living.

Yuen (2004) has also singled out Singapore as taking the lead in quality vertical living by not only providing mass housing in high rises for its landless residents, including the low-income families, but also by giving them ownership rights. Such rights encourage pride and more care and attention in maintaining the safety and cleanliness of vertical housing. Singaporean high rises come with community facilities such as schools and open space, and the city-state plans vertical housing in new towns with high-quality living, recreation and accessibility to facilities as part of a “total living environment” that would induce long-term residency (Yuen 2009).

Population increase and land scarcity are also significant factors for Brunei Darussalam, which is now looking skywards to expand its housing sector. The Minister of Development recently announced Lambak Kanan as the pilot site for the country's first vertical housing project while Lumapas has also been earmarked for future development (*The Brunei Times*, 2011).

It is prudent therefore that before the government launches the vertical housing project, it should consider the design of vertical houses to suit the average Bruneian household. Proxemics therefore come into play, because unlike the Singaporeans, whose family dynamics are nuclear and compact, Bruneians have extended families that typically occupy shared residences and significantly different socio-cultural practices that call for varying space requirements.

2.4 Globalisation & Consumption

Globalisation and consumption have also influenced cultural and space needs of Bruneians. The rapid rise in the middle class and greater affluence in many Southeast Asian cities came after almost 40 years of rapid economic growth that transformed the social structure and culture of these countries, particularly Singapore and Malaysia (Chua; 1998; 2000; Talib, 2000). Societies changed from being prudent and thrifty, practicing careful and controlled spending on necessities, to a society that is spendthrift and also increasingly materialistic.

Trade, improvements in transportation and information communication technology i.e. space time compression technologies (Harvey, 1989) also enabled flows of people that bring their cultural baggage and ideologies into the different countries they visit or migrate, as well as flows of foreign and branded goods (both quantity and variety) through importation or online shopping, further strengthening consumerism and materialism (Appadurai, 1986).

Materialism and consumerism saw proliferation of more and new types of cars, fashion,

food (particularly international fast food and café chains) and homes that altered the urban landscape of many cities, and younger generations that are more excessive, materialistic and heavily influenced by outsider, Westernized/Americanized and even Japanese cultures (Chua, 1998; 2000).

Moreover, Talib (2000) emphasized how the “new middle class” Malaysians through consumption and flow of global cultures and goods have altered their choice of homes, transportation, choice of education for their children and more interestingly influenced the practice of their local cultures such as moving their wedding receptions from the home to hotels which represents and symbolizes wealth and status.

3. Methodology

3.1 A reflection on the methodological approach

This paper takes an insider’s approach to the study of cultural architecture typology. It is believed that both the insider and the outsider research approaches face similar issues particularly with regards to their positionality and identities (Chavez, 2008). According to Chavez (2008, p. 475):

For an outsider, the danger is the imposition of the researcher’s values, beliefs, and perceptions on the lives of participants, which may result in a positivistic representation and interpretation. For an insider bias may be overly positive or negligent if the knowledge, culture, and experience she/he shares with participants manifests as a rose-colored observational lens or blindness to the ordinary.

There is a tendency in the academic community to favour the outsider/academic view, although at the same time efforts are taken to obtain the perspectives of locals through participation, immersion and ethnographic surveys (cf Banks’ [1998] Typologies of cross cultural researchers continuum on internal insiders-external

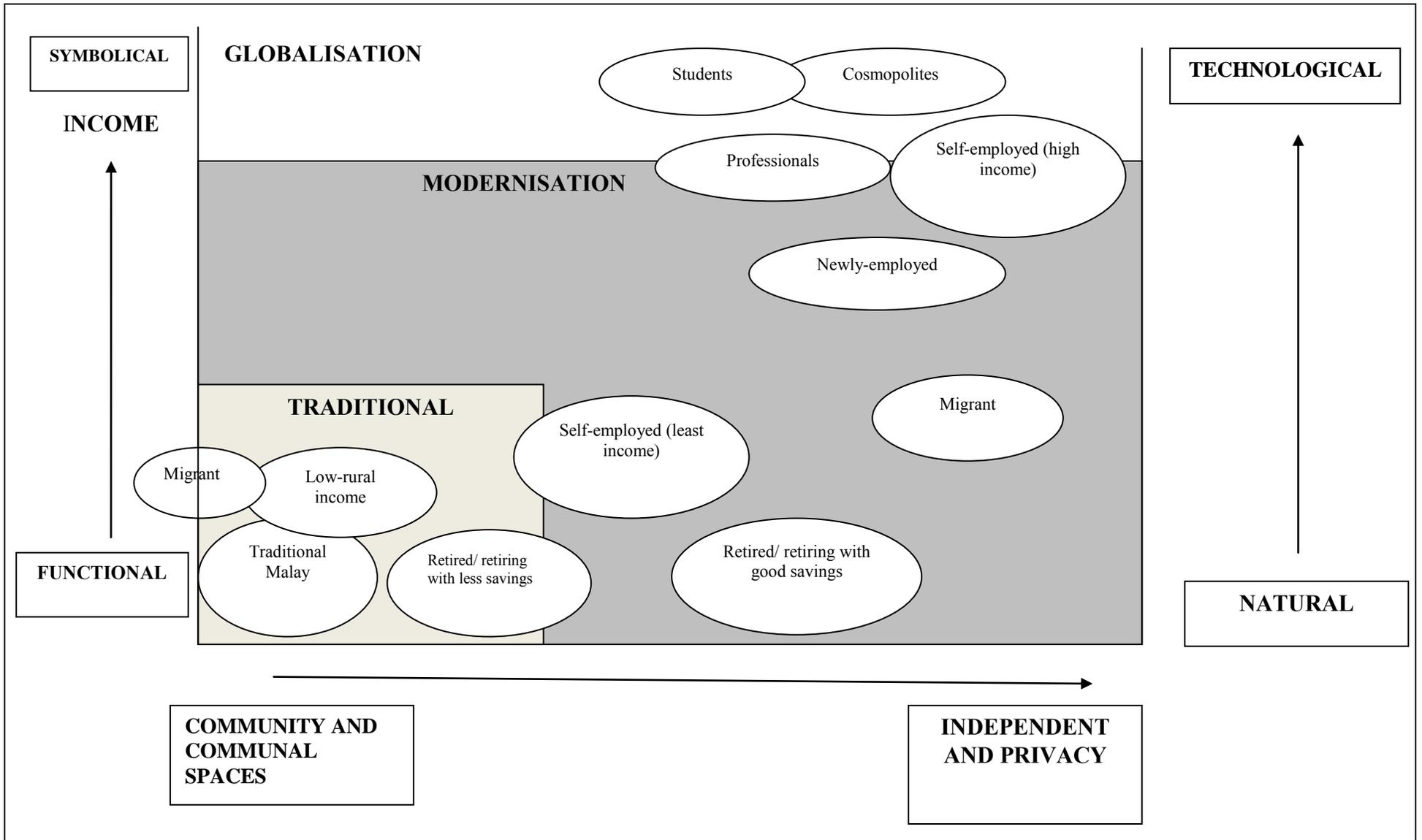
outsiders). The outsider approach is not without problems, however. For instance, according to Crang and Cook (2010, p. 44), foreign researchers' skin colours, nationalities and social affiliations often mean they get ““(mis)placed’ by their respondents in unexpected and enlightening ways”.

This misplacement is not a problem faced by the researchers of this study, who in addition to seeking their fellow countrymen's perceptions and opinions, draw on their own cultural concerns, needs and wants relating to their everyday practices at home or lifestyle and how they value and use their spaces at home. They benefit from having local knowledge while also, as recipients of Western education and academic training, being to draw on the outsiders' perspectives. Such dual perspectives therefore allow “objectivity” and “accuracy” regarding the field or subject studied, as well as greater and deeper understanding and insight of the people, places and cultures (Chavez, 2008).

Much of the researchers involved in this study on Vertical Living in Brunei are what Banks (1998) refer to as *indigenous insiders* in his typology of cross-cultural researchers, have been socialized in the community, have the greatest closeness to and “endorses the values, perspectives...and knowledge of his or her community and culture and is perceived by people within the community as a legitimate community member who can speak with authority about it”.

Previous studies have shown that the insider's approach has the methodological advantages of closeness and familiarization with the community studied as well as the benefit of the researchers' own unique insight into and knowledge of the cultural and social group they belong to (Baca Zinn, 1979; Bank, 1998; Chavez, 2008; Ohnuki-Tierney, 1984; Labaree, 2002; Paredes, 1978). Access to respondents and understanding and interpreting social and cultural data would be more difficult for a researcher without local knowledge or any local contacts and networks. More importantly, foreign researchers are more likely to require more time to build rapport, gain respondents' trust and gather personal details.

Chart1: Cultural- architectural typology working model



As locals, this study's researchers are able to understand and be sensitive to prevailing cultures and understand the complexity of certain cultural and religious practices in Brunei. These sensitivities to diversities in cultural practices by different communities have been dealt with much care and consideration throughout the construction of the questions and minimised the problem of redundant questions.

3.2. The survey design

The survey was conducted to validate the predictions of the model, i.e. cultural architecture typology (see Chart 1). The survey targets the population that would be affected by the policy adopted recently by the Brunei government to confine public housing schemes to high-rise or vertical housing. The policy also encourages private developers to build high-rise instead of the usual complex of detached, semi-detached and terrace homes. The target population would include newly employed young Bruneians, matured and retiring professionals, low and medium income employees, retirees looking have their own homes. The cultural architectural aspects of these categories are described below.

Newly employed

Generally young people in their early to late twenties, this is a group that grew up in the 'Internet age', i.e. technology-savvy and wired into the global village through social networks, accessing and downloading e-products and packaged knowledge from around the globe. Globalization forces and processes invariably shaped their minds and hence, lifestyle and preferences. They are essentially cosmopolites, with greater awareness than their peers of other cultures, fashions, lifestyles and issues, and know that they have a wide range of choices. Their housing preferences therefore tend to be varied and wide-ranging. Connectivity and access to conveniences, quality of life, and often, the environment, tend to be important. Brunei cosmopolites share these characteristics with their counterparts in other parts of the world, but with varying degree of attachment to local culture, such as Malay customs and the practice of Islam.

Mid-high professionals

This is an older version of the previous category, with ages generally ranging from early thirties to late forties, even in the fifties. They are more matured and play significant roles in society and the workforce, and therefore generally earn medium-high incomes. They had their formative years in the late 20th Century, a period of tremendous technological advancement and economic growth, when advanced industrialized nations took concerted steps to reset development trajectories along “sustainable” pathways. Although this group in Brunei Darussalam may not have experienced the events faced by their counterparts directly, such as serious pollution, fears concerning sustainability of planet and limits to growth (Meadows & Meadows, 1972), they are likely to share in the outcomes of the processes, such as preference for environmentally sound designs and technological innovations.

Low-medium income employees

These are semi-skilled or skilled workers in supporting capacity, drawing salaries in the B\$1,000-B\$2,500 per month range. Whatever their age (related to the events and dominant cultures that they are exposed to during their formative years), this group is shaped more by practical needs than globalisation influences as far as habitat design is concerned. This is particularly so if the person has a family to care for. Functional spaces (e.g. bedrooms, kitchen, and living/dining room) are therefore important, as are spaces to practice cultural traditions. Young people in this category, particularly those who still live with their parents or relatives may be influenced by the lifestyle, and hence habitat design preferences, of their elders, despite lacking the capacity to acquire them for themselves.

Low-income employees

Similar to the above category, but with considerably less capacity to build their dream home. Modernisation and globalisation have less influence in the design of their homes,

which tend to be more functional. Traditions and culture are prominent, and hence, the spaces required to perform them.

Self-employed

This group includes business owners, freelance ‘specialists’ and artists, and aspiring entrepreneurs. They may have stable income, even wealthy, or have intermittent income, therefore different capacities to live as they wish. With higher capacity to consume, the stable income group have wider range of experiences and therefore, space demands to meet a large range of activities, such as recreation, entertainment and garden. The unstable income group may have equally wide ranging demands, even though they lack the capacity to realise them. In fact, they may have even greater and more fanciful demands because intermittent income earners tend to be associated with lack of discipline and focus for entrepreneurs, business people and free-lancers.

Retiring

This group are in their fifties, with enough savings to support their lifestyle after they retire, or otherwise. Those in this group have their formative years in the late seventies to early eighties, i.e. at the height of modernity and reflexive modernity. They are likely to be functional (organised), concerned about the environment, and appreciative of quality of life and technology (but not the Internet). There is a tendency to return to cultural/religious roots with age.

Retired

The retired are over sixty years old, with or without savings. They are from the generation that built the nation. They are pragmatic and industrious people that had their formative years during the late sixties-early seventies. Cultural practices become increasingly important, but constrained by physical wellbeing.

About to enter workforce

This includes students in tertiary institutions and school leavers over the age of 18 years old. These are likely to be cosmopolites with varying degree of local cultural controls. They are unlikely to have good sense of costs implications or feasibility of their dream homes. Their responses will however provide an insight into future trends in housing demands.

Table 1. Categories of prospective vertical housing owners

Category	Description
Newly Employed	Cosmopolite strongly influenced by globalization; wide range of habitat preferences; quality of life, connectivity important, aware of sustainability issues.
Mid-High Income Professional	Eco-modern and educated; preference for innovative design and use of technology to improve quality of life, protect environment, and support family and harmony with neighbours.
Low-Middle Income Employee	Supporting skilled/semi-skilled workers; functional spaces and cultural traditions important.
Low Income Employee	Supporting semi-skilled/unskilled workers; functional design; cultural practices important.
Self-Employed	Business owners, entrepreneurs, free-lance specialists; wide exposure to global forces and hence, products and services, style and designs in the market; wide range of space needs.
Retiring	Age 50's; with or without savings; functional; modern technology (not ICT); concern about the environment.
Retired	Age 60's; with or without savings; culture important; basic functional spaces.
About to Enter Workforce	Cosmopolites; generally lack sense of reality; provide glimpse into wish lists of dream homes

3.2.1. Cultural Influences: Urban vs. Rural

The cultural roots of Brunei population may be traced to water-based Malay culture borne out of Kampong Ayer, land-based Malay culture of the other indigenous groups now classified as “Malay”, or Chinese and Indian migrants. These cultures are further modified by 100 years of systematic inculcation of the modern-era British culture through education and social, political and physical engineering when Brunei became a British Protectorate. Rapid modernisation fuelled by oil and gas exports in the seventies further exposed the local population to the consumption culture of post World War 2 global (‘western’) economic growth. The rise of environmental movement and globalisation in the latter stages of the 20th Century have created the present reality in which all cultural groups now exist. The young generation are fully engaged in this globalised culture. Where external influences are weak, such as among the lower income groups, traditional and cultural influences on habitat design and space needs are more apparent.

It is posited that those that regard themselves to be from rural areas have greater adherence to traditional cultures, and hence, the spaces to perform them. The survey questionnaire therefore also asked the respondent to indicate whether they regard themselves to be urbanites or from rural areas. As explained earlier, rural influences include the affinity for open spaces, greenery, community and the spaces for social interaction, such as large living room and kitchen (to support such events). Urbanites tend to be less community-orientated, more functional and likely to have a liking for gardens (due to the lack of greenery).

The survey also asked the respondents to indicate the importance of the different types of rooms in their preferred home, their preference with regards to building types and designs, and the preferred sizes of the various rooms. The age of the respondent is also recorded, as is the main reason for wanting to own a home. The survey was conducted by directing the target population to complete an on-line questionnaire hosted at Survey Monkey.com. This was done through (i) email to target groups and requesting them to forward the email to others in the target group in a snowball process; (ii) posting the link

to the survey on Facebook; (iii) support from a local newspaper, which published an article of the survey and directed readers in the target group to the link; and (iv) door-to-door polling by a group of students. Two versions of questionnaire were used: one in English, the other in Malay.

4. Findings and Analysis

4.1. Sample Characteristics

Altogether, 311 responses were collected over a period of a month, 224 from the English-language survey, 36 from the Malay-language survey and 51 from door-to-door polling. Students who have not entered the workforce make up the largest portion (32.7%) of the sample. Newly employed accounts for 14.9%, professionals 19.4%, low-medium income employees 14.6% and low income employees 10.4%. Self-employed is under-represented at 2.3%, as are the retiring (1.9%) and retired (2.9%) groups.

The majority (82.6%) of the newly employed are young adults (18-28 years), with matured adults (29-39 years) making up the remainder (17.4%). As expected, a good proportion (51.7%) of the medium-high income professionals comes from the matured adult group. Interesting, quite a significant proportion are young adults (43.3%). Most of the low-medium income employees are young (40.0%) or matured (48.9%) adults, while the low income group comprises a larger proportion (62.5%) of young adults, with matured adults making up a quarter (25.0%) and near-retiring (40-50 years) the remainder. The small group of self-employed are either young or matured adults in ratios of 1:1 for those with stable income, and 2:1 for those with intermittent income.

Of the 311 respondents, nearly a third (31.2%) considered themselves as “urbanites” while over a tenth (12.9%) as “rural”. About 60% did not indicate whether they live in rural or urban areas. This is probably because it is difficult to decide what is urban or rural in the Brunei context, where there are few areas that are distinctly ‘urban’, i.e. densely populated with vibrant economic activities, or distinctly ‘rural’, i.e. country-side,

as almost all areas have well-developed infrastructure and dwellings are modern in design. This study will therefore regard those that indicate themselves to be urbanites or from rural areas to be those who comes from distinctly urban and rural areas. It is therefore assumed that they have ‘urban’ and ‘rural’ cultural architecture preferences respectively. Almost all the respondents are locals. Foreign nationals accounted for 3.9% of the sample. The largest proportion (48.6%) of the sample group indicated that they are “locals looking to be independent”. About a fifth (20.3%) is “looking to start a family”.

In terms of priority, the largest proportion (27.7%) indicated that they would like to live independently, perhaps with siblings or companions. About a quarter would like a home for their “young family with elderly members” (23.2%) or “large family” (23.8%). A smaller proportion (18.0%) is looking to have their own home for their “young family”. Of the remainder, 2.6% would like to invest in vertical housing or have a second or temporary residence. Urbanites contrast with rural respondents in that the largest proportions of the former are looking for homes for “young family with elderly” (30.1%) or for independent living (31.2%), while the largest proportion of the latter is looking for homes for “large family” (35.0%). Among those seeking independence from their current situation, the majority (31.8%) prefer to live independently with companions, while over half have young families (18.5%), young families with elderly members (20.5%) or large families (21.9%).

4. Analysis of results

4.1.1. Importance of Spaces

The respondents were asked to indicate the degree of importance of the different spaces in their homes. The chart below indicates importance by intensity of shading, such that dark equals important, light not so important, and clear not important. The letter “I” marks spaces that are very important. It appears that “spa” and “recreation room” are generally not important spaces to all groups. Toilets in rooms and bathrooms with

bathbubs are similarly not so important. In general, master bedrooms, kitchen, dining rooms and living rooms are the most important spaces in the home.

Among the newly employed (cosmopolites), professionals (eco-modern) and self-employed with stable income (engaged in modern world) as well as students (cosmopolites without much experience and responsibilities), it is important to have a separate master bedroom, kitchen, dining and living spaces. The low-medium income employee gives more importance to having a master bedroom with en suite toilet, while the low income employee indicated the living room to be the most important space. The self-employed with intermittent income group indicated having individual bedroom and living room as priority (but this is based on a very small sample size). The retired with savings group (also small sample size) regards most spaces as not so important except for individual bedroom and living room, similar to the functional requirements of the low income group.

Chart 2. Respondents' perceived significance of home spaces

Space	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Master bedroom	I	I	I		I						I
Individual bedroom						I					
Kitchen	I	I			I					I	I
Wet & dry kitchen											
Dining room		I			I					I	I
Living room	I			I	I	I					
Toilet in rooms											
Toilet in master bedroom			I								
Bath with bathtub											
Functional bathroom											
Spa											
Recreation room											
Study											
Work room											

Parking spaces	Dark	Dark	Dark	Dark	Dark	Dark	Dark	Dark	Light	Dark	Dark
Store room	Dark	Dark	Dark	Dark	Dark	Dark	Light	Light	Light	Dark	Dark
Garden	Light	Light	Dark	Light	Light	Light	I	Dark	Light	Dark	Dark

NE - Newly Employed; PF - Professional; LM - Low-Medium Income; Lo - Low Income; SS – Self Employed (stable); SU – Self Employed (unstable); rS – retiring (savings); rU – retiring (no savings); RS – Retired (savings); RU – Retired (no savings); U – not working yet
 Dark – important; light – not so important; clear – not important; “I” – very important

4.1.2. Design Preferences

The respondents were asked to indicate using a 4-rank scale, where zero means “not important”, 1 “not so important”, 2 “quite important” and 3 “very important”, the importance of the following:

- (a) Good view
- (b) Clean Environment
- (c) Good security
- (d) Ability to perform cultural practices
- (e) Having neighbours with same/similar cultures (to avoid tensions/conflicts)
- (f) Having neighbours of the same faith
- (g) Having neighbours that they can form a good community
- (h) Community spaces for cultural activities, e.g. weddings and games
- (i) Effective building management
- (j) Energy efficient designs
- (k) Common recreational facility, e.g. gym
- (l) Convenience stores in building

The tables below show the mean scores and their standard deviations for the different target groups, namely the newly employed (NE), professionals (PF), low-medium income employee (LM), low income employee (Lo), Self-employed with stable income (SS) and unstable income (SU), retiring with saving (rS) and without savings (rU), retired with savings (RS) and without savings (RU) and those waiting to enter workforce (U).

Preferences on View

The data shows that good view is important to the self-employed with stable income and retiring groups. It is not so important to the self employed with intermittent income. For all other groups, it is only “quite important”.

Table 2. View Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
View	2.39	2.44	2.40	2.56	2.86	1.00	3.00	3.00	2.50	2.57	2.22
(std. dev.)	0.77	0.65	0.69	0.76	0.38	0.00	0.00	0.00	0.71	0.53	0.77

Preferences on Cleanliness

All groups ranked this of high importance except the retired with big savings and self-employed with intermittent income, which ranked it lower.

Table 3. Cleanliness Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Cleanliness	2.98	2.95	2.89	2.88	3.00	2.67	3.00	3.00	2.50	2.86	2.94
(std. dev.)	0.15	0.22	0.32	0.34	0.00	0.58	0.00	0.00	0.71	0.38	0.24

Security

All groups indicated good security as very important. The exception, which rank it as moderate-high is the self employed intermittent income, which is the same degree of importance they gave for cleanliness.

Table 4. Security Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Security	2.93	2.88	2.93	2.94	3.00	2.67	3.00	3.00	3.00	3.00	2.82
(std. dev.)	0.25	0.45	0.25	0.25	0.00	0.58	0.00	0.00	0.00	0.00	0.41

Ability to Practice Culture

Most groups rate the ability to practice cultural activity in vertical living as moderately important. For two groups, the self-employed with intermittent income and the retired with low savings, this is not so important. The sample size for these two groups is however small.

Table 5. Ability to Practice Culture Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Practice culture	2.22	2.25	2.09	2.13	2.14	1.00	2.50	2.50	2.50	1.14	2.07
(std. dev.)	0.76	0.89	0.95	0.91	0.90	1.00	0.71	1.00	0.71	1.07	0.87

Same Culture

The retired with savings group indicated that it is very important to have people of similar culture sharing the same building. The newly employed, professional and low-medium income employee groups did not think it was very important, but quite important, to share the building with people of same culture. The student and the low income groups thought that it is not so important, while the self-employed groups do not see it as important.

Table 6. Same Culture Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Same culture	2.13	2.03	2.42	1.97	1.43	1.00	2.50	2.00	3.00	2.29	1.75
(std. dev.)	0.91	0.92	0.75	0.97	1.13	1.00	0.71	1.15	0.00	0.76	0.96

Same religion

Most groups did not regard sharing building with neighbours of the same faith as very important. The responses are generally in the low to moderate range. It appears to be slightly more important for the older, retiring and retired groups.

Table 7. Same Religion Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Same religion	1.91	1.70	2.00	1.72	1.86	1.00	2.50	2.50	2.50	2.29	1.55
(std. dev.)	0.96	1.03	0.90	1.05	1.07	1.00	0.71	0.58	0.71	0.95	1.03

Friendly neighbours

Having friendly neighbours appears to be moderately to very important, particularly for the retiring groups. The only exception is the self-employed with intermittent income group, which indicate a low-moderate level of importance.

Table 8. Friendly Neighbours Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Good neighbours	2.39	2.38	2.68	2.50	2.43	1.67	3.00	3.00	2.50	2.57	2.31
(std. dev.)	0.91	0.80	0.56	0.80	0.79	0.58	0.00	0.00	0.71	0.79	0.76

Neighbours to form good community

The desire for good community is moderately to very important for most groups, except the self-employed with intermittent income. The pattern is similar to that of having friendly neighbours, except that the retired group with savings indicating a lower level of importance.

Table 9. Good Community Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Good community	2.28	2.40	2.71	2.44	2.43	1.67	3.00	3.00	2.00	2.43	2.28
(std. dev.)	0.91	0.76	0.51	0.72	0.79	0.58	0.00	0.00	0.00	0.79	0.74

Community space and recreation (common space)

All groups, apart from the self-employed with intermittent income, indicate moderate importance with regards to having common space for activities such as weddings and games. This is similar to pattern for friendly neighbours and good community.

Table 10. Community Space Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Common spaces	2.28	2.35	2.64	2.47	2.14	1.33	2.50	2.50	2.50	2.43	2.16
(std. dev.)	0.96	0.80	0.53	0.80	0.90	0.58	0.71	1.00	0.71	0.98	0.87

Effective management

With the exception of the retiring without much savings group, all groups indicate that effective management is quite to very important. The self-employed with stable income and retired with savings groups thought that effective management is very important.

Table 11. Effective Management Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Effective Mgmt.	2.74	2.78	2.80	2.63	3.00	2.33	3.00	2.00	2.50	2.86	2.62
(std. dev.)	0.49	0.56	0.46	0.66	0.00	1.15	0.00	0.82	0.71	0.38	0.69

Energy efficiency

The newly employed, professional, low-medium income (technical), self-employed with stable income, retired and student groups indicated that it is moderately important to have energy-efficient buildings. This is less important for the low income group and even less of a concern for the self-employed with intermittent income.

Table 12. Energy Efficient Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Energy efficient	2.52	2.70	2.67	2.25	2.71	1.67	3.00	2.50	2.50	2.86	2.55
(std. dev.)	0.66	0.53	0.56	0.72	0.49	1.15	0.00	1.00	0.71	0.38	0.64

Recreation facilities

The general view regarding recreational facilities is that they are not so important, i.e. low to moderate level of importance. The self-employed with intermittent income and low income group, and students, indicate the lowest level of importance.

Table 13. Recreation Facility Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Recreation fac.	2.07	2.24	2.09	1.75	2.50	1.67	2.00	2.25	2.50	0.86	1.89
(std. dev.)	0.95	0.80	0.85	0.92	0.84	1.15	1.41	1.50	0.71	0.90	0.89

Conveniences

There is generally a low preference to have convenience stores in the building, with some in the newly employed, professional, low-medium income, students and retiring with savings groups indicating moderate level of importance. A couple of feedbacks revealed that it is sufficient to have convenience stores in the neighbourhood.

Table 14. Convenience Stores Preference Scores by Target Groups

ASPECT	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Conveniences	2.26	2.03	2.04	1.59	1.71	1.33	2.00	1.50	2.50	1.57	2.11
(std. dev.)	0.85	1.02	0.90	1.10	1.38	0.58	1.41	1.00	0.71	1.40	0.86

4.1.3. Proxemic determinants of various social groups

Rural residents

Further examination of the data revealed that those coming from rural backgrounds regard having good view, community space, friendly neighbours and energy-efficient buildings to be moderately to very important. Clean environment, good security and good neighbours with which to build communities are also regarded as very important, with lesser importance accorded to having effective building management. Meanwhile the ability to practice traditions and cultures, having convenience stores and recreation facilities, or having neighbours with similar culture or religion were considered as not so important, i.e. low to moderate level.

Urbanites

For the true urbanites, clean environment and good security is very important. This is similar to the previous group's preference. They regard having good views, friendly neighbours, good community, effective management and energy-efficiency as moderately to very important. Common space, the ability to perform cultural practices, and having neighbours with similar culture is regarded as only moderately important. Having neighbours of the same religion, recreation facilities and convenience stores in the building are not considered very important (score of low to moderate importance). The retired urbanite with savings scored higher across the various preferences.

Looking to be independent

For those looking to be independent, i.e. not having strong urban or rural linkages, recreation facilities and convenience stores within the building are not regarded as important (low scores). The exception is the self-employed group with good income. The independence-seeking group regards having friendly neighbours and energy efficient buildings to be of moderate importance. This is similarly the case with having neighbours of same religion and cultural background, and being able to practice traditions, and having common space for such activities. As with the other groups, cleanliness and good security are considered very important, with having effective management and good views as also very important, but to a lesser degree.

Looking to start a family

This group similarly considered clean environment and good security as highly important, just slightly higher than having effective management of the building. Of moderate importance are having friendly neighbours, neighbours that make a good community, neighbours that share the same culture and religion and the ability to practice traditions. Having good view and common space for interaction are also considered moderately important. Of less but still considerable importance (low to moderate level) is

having recreation facilities and convenience stores in the building, and energy-efficient building. The professional group within this category regards cleanliness, security, energy efficiency and effective management to be high importance.

4.1.4. Building Design Preferences

The tables below show the mean scores and their standard deviation for seven building designs. The scores are based on a four-scale ranking, where 0 represents no; 1 weak yes; 2 moderate yes; and 3 strong yes. The seven building designs are: (a) typical modern flats found in Brunei; (b) high-rise condominium with modern amenities and good security; (c) smart ICT-integrated building; (d) eco-building that uses natural lights and ventilation; (e) building integrated with natural environment; (f) open concept building; and (g) low-cost functional building.

Typical Flats

The mean scores are generally very low, indicating the negative appeal of such designs. The scores are slightly higher and more variable for low income and retiring and self-employed groups that do not have much savings or stable income.

Table 15. Mean Scores of Preference for Flats

	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Flats	0.74	0.76	0.64	1.19	0.14	1.00	1.00	1.75	0.00	2.00	0.83
(Std dev)	0.74	0.84	0.71	1.03	0.38	1.00	1.41	1.50	0.00	1.15	0.88

Modern Condominiums

In general, modern condominium type buildings are more appealing than flats, with most groups indicating a moderate preference. The exception is the retired with savings group, where the response is a flat “no”. This is however a very small sample size. The self-employed with stable income group is the other that indicated a weaker (low-moderate) preference.

Table 16. Mean Scores of Preference for Modern Condominiums

	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Modern condo.	2.07	1.90	2.02	1.97	1.57	2.00	2.50	2.25	0.00	2.57	2.18
Std dev	0.95	1.03	0.94	1.18	0.53	1.00	0.71	0.50	0.00	0.53	0.86

Smart Buildings

There is greater variability in preference for smart buildings among the groups. The retired and retiring with savings, as well as the newly employed and students indicated slightly higher than moderate preference. The professional and technical (low-medium income) groups indicated a slightly lower than moderate preference. Smart buildings are less popular among low income and self-employed with stable income groups.

Table 17. Mean Scores of Preference for Smart Buildings

	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Smart Building	2.20	1.92	1.95	1.34	1.43	2.00	2.50	1.75	2.00	2.14	2.11
Std dev	0.93	0.86	0.99	0.90	0.79	1.00	0.71	0.50	0.00	1.07	0.84

Eco-Buildings

The respondents were offered two eco-building designs. The first is the more standard green or eco-building, which uses a lot of natural lighting and ventilation and has good amount of out-door space. The second may be regarded as ultra-green, where the building is integrated with the surrounding nature. There is a general moderate-strong preference for the first design among all groups, except for the self-employed with savings, which indicated a weakly moderate preference. Although the mean scores are similar for the second design, the retiring with savings group indicate a clear “yes”, while the other retiring and retired groups also indicate strong preference for the latter over the former, revealing perhaps a stronger connectivity to nature. The low income and self-employed with stable income groups indicated the lowest preference.

Table 18. Mean Scores of Preference for Eco-Buildings

	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Eco-building	2.63	2.42	2.41	2.03	1.57	2.00	2.50	2.25	2.50	2.57	2.53
Std dev	0.61	0.83	0.79	0.82	0.79	1.00	0.71	1.50	0.71	0.79	0.63
Nature-based	2.41	2.41	2.45	2.00	2.00	1.33	3.00	2.75	2.50	2.86	2.55
Std dev	0.69	0.70	0.73	0.84	0.82	0.58	0.00	0.50	0.71	0.38	0.66

Open Concept

Open concept designs allow the occupants to modify the interior of the building to suit their tastes. The building is developed with the basic infrastructure. Bruneians tend to want to modify their home, based on observations of private properties and housing schemes. The mean scores however indicate only weakly moderate preference with high variability, particularly for the newly-employed and retiring groups. The strongest “yes” comes from the retired groups.

Table 19. Mean Scores of Preference for Open Concept

	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Open Concept	2.00	2.10	2.27	2.00	2.14	1.67	2.00	1.50	2.50	2.43	2.12
Std dev	1.01	0.88	0.73	0.95	0.69	0.58	1.41	1.00	0.71	0.53	0.85

Low-Cost Functional Buildings

The strongest “yes” is from the retiring and retired with savings groups. Students indicate the lowest preference (weak-moderate), with professional and newly employed groups indicating only slightly higher preference. It appears that the cosmopolites and eco-modern groups generally do not like low-cost functional buildings very much. The low income group indicate a slightly higher than moderate preference.

Table 20. Mean Scores of Preference for Low-Cost Functional Buildings

	NE	PF	LM	Lo	SS	SU	rS	rU	RS	RU	U
Open concept	1.80	1.69	1.93	2.13	1.57	2.33	2.50	2.00	3.00	2.43	1.65
Std dev	0.91	0.88	0.95	0.87	0.53	0.58	0.71	1.41	0.00	0.79	0.87

5. Discussion

The discussion will focus on four main groups of the target population, namely the (a) newly employed, (b) professionals, (c) low-medium income, and (d) low-income employee, for two main reasons.

First, they are the group that would be most affected by housing policy and any housing provision and development programmes as they are looking to own their own homes. Secondly, they are satisfactorily represented in the study sample, in contrast to the self-employed and retiring and retired groups, where the sample sizes are quite small. The largest representation, i.e. the soon-to-enter-workforce group (mainly students), however, will not be discussed further in this paper as they are not likely to understand the issues concerning housing due to a lack of experience and appreciation of the real world (many still live as dependents in their parents' house). The discussion will address three core cultural-proxemic divides: (i) connectivity to nature; (ii) functional versus symbolic determinism; and (iii) collectivism versus individualism.

To recap, the newly employed group are expected to comprise mainly young people in their twenties. Strongly shaped by globalisation processes, they are essentially cosmopolites, and therefore tend to be individualistic, and symbolic in their consumption preferences. Hence, they tend to be diverse in lifestyle choices. This group is also inclined towards ecological form of modernisation.

5.1 Young Cosmopolites

The data for young cosmopolites shows they have:

- a strong preference (moderate-high) for eco-buildings;
- dislike for flats and low-cost housing;
- moderate preference for modern condominium and smart buildings;
- strong demand for well management buildings;
- moderate need to practice cultural activities and be with people of same culture or faith (higher than expected);
- moderate need for common community spaces.

In terms of proxemic determinants,

- good view is very (moderate-strong) important;
- energy efficiency is also very important (moderate-high);
- there is some preference (moderate) for open concept designs (lower than expected);
- provision of conveniences within the building is (moderate-high) important;
- having a master bedroom with en suite toilet is very important;
- the kitchen and living rooms are very important; dining room is also important but to a lesser degree;
- bathroom must be functional;
- recreational space and spa are not important (not as expected);
- moderate preference for gardens (lower than expected).

5.2 Professional groups

The professional group is made up of almost equal numbers of young cosmopolites and more mature (30-40 years old) educated people with eco-modern cultural backgrounds. They therefore tend to be both functional and symbolic in their consumption preferences, individualistic, tech savvy and ecologically-aware.

The data for mid-high income professionals shows that they have:

- moderately high preference for eco-buildings (lower than expected);
- dislike for flats and low preference for low-cost housing;
- low-moderate preference for modern condominium and smart buildings (lower than expected);
- strong demand for well managed buildings;
- moderate-high need to practice cultural activities and have good neighbours;
- low-moderate need to have neighbours of same culture or faith;
- moderate-high need for common community spaces.

In terms of proxemic determinants,

- good view is (moderate-strong) important;
- energy efficiency is also very important (moderate-high);
- there is some preference (moderate) for open concept designs;
- provision of conveniences within the building is (moderate-high) important;
- having master bedroom with en suite toilet is very important;
- kitchen and dining rooms are very important; living room is also important but to a lesser degree;
- Recreational space and spa are not important (not as expected)
- Study space is important;
- Work space is not very important;
- moderate preference for gardens (lower than expected).

5.3 Low medium income group

The low-medium income group are expected to be more functional and are affected by their cultural roots, in particular, the urban-rural divide. The urbanites would tend to be more individualistic, while those from the rural area are expected to exhibit greater preference for collective living. In terms of connectivity to nature, the former group is expected to be less connected while the latter would have a stronger connection to the

natural environment. However, inversion is commonly observed in behavioural patterns in society, and as such, the opposite might be true.

The data for low-mid income employees show that they have:

- a moderately high preference for eco-buildings and greater preference for greater connectivity to environment among the rural group; in contrast, while the urbanites also indicate moderately high preference for eco-building, they have lower preference for connectivity to nature (as expected);
- dislike for flats, more so among the urban group than the rural groups;
- low-moderate preference for low-cost housing among urbanite, but higher (moderate) among rural group;
- weakly moderate preference for modern condominium and smart buildings for both urban and rural groups;
- moderate-high need to practice cultural activities and have good neighbours for both urban and rural groups, with the former placing greater emphasis on friendly neighbours (perhaps due to experience with urban living);
- moderate-high need to have neighbours of same culture or faith for both groups, slightly lower for faith;
- moderate-high need for common community spaces for both urban and rural groups, with the former indicate stronger need.

In terms of proxemic determinants,

- good view is (moderate) important for both groups;
- energy efficiency is quite important (moderate-high) for both groups;
- there is some preference (moderate) for open concept designs for both groups;
- provision of conveniences within the building is not important for the rural group, but moderately so for the urbanites;
- having master bedroom with en suite toilet is very important for both groups;
- Kitchen is very important for both groups;

- Dining and living rooms are very important for both groups, but less so for urbanites;
- Recreational space is not important (low-moderate) for both groups;
- Spa is of low importance for both groups (as expected)
- Study space is moderately important for both groups;
- Work space is moderately important for both groups, being more so for the rural group;
- moderate preference for gardens for both groups.

5.4 Low income group

The low income group is limited by capacity to consume, and therefore tend to be more functional in their proxemic characteristics and influenced by their cultural roots, including the urban-rural practices. They are expected to share the same connectivity to nature as the previous group, but perhaps at slightly higher degree, including inversion effects.

The data for low-income employees show that they have:

- a low-moderate preference for eco-buildings and lower preference for greater connectivity to environment among the rural group; in contrast, while the urbanites have a moderate preference for eco-building or connection to nature;
- low preference for flats, considerably lower for the urbanites;
- preference for low-cost, modern, open concept condominium for the rural group; in contrast, the urbanite do not like this combination (low-moderate), perhaps an indication of cultural inversion;
- low-moderate need to practice cultural activities for both groups (lower than expected);
- moderately high demand for good neighbours for both groups, but less so for the urbanites;
- moderate need to have neighbours of same culture or less so for neighbours of same religion for both groups;

- moderate for common community spaces for the urbanites but slightly higher for the rural groups.

In terms of proxemic determinants,

- good view is moderately important for both groups, slightly more so for urbanites;
- energy efficiency is quite important (moderate-high) for both groups;
- provision of conveniences within the building is quite important (moderate-high) for the rural group, but not so (low-moderate) for the urbanites, an inversion feature?;
- having master bedroom with en suite toilet is very important for urbanites but less so for the rural groups (quite unexpected, as this is not a functional characteristic);
- Kitchen is (moderate-high) important for both groups, more so for urban group;
- Dining room is important (moderate-high) for the urbanites but less so (moderate) for the rural group;
- Living rooms are very important for both groups;
- Recreational space is somewhat important for urbanites (moderate) but not so for the rural group (low-moderate);
- Spa is of quite important (moderate) for both groups (which is unexpected, as this is not a functional feature)
- Study and work space is quite important (moderate-high) for urbanites but considerable less so (low-moderate) for the rural group;
- Low-moderate preference for gardens for both groups.

6. Conclusion

The paper studied the cultural-architecture preferences of the Brunei population most affected by the recent adoption of a policy to restrict housing development schemes to vertical living. It involved establishing a cultural typology based on the concepts of

proxemics and an insider-outsider methodology of research. A survey was carried out to validate the model of cultural typology developed among the target population.

In general, the survey found that there is a low preference for the kind of flats typically found in Brunei. Instead, the most popular building type is eco-building, followed by low-cost, open concept, smart buildings, and finally, modern condominiums. The data suggests that current vertical designs do not meet the proxemic demands of the sample population. The implication is that any vertical housing provision in Brunei Darussalam ought to take this into consideration. There appears to be a preference for architecture that provides greater connectivity with nature and people, which reflects the influence of both traditional Brunei culture as well as globalisation. There are however variations among the four main groups examined, namely the young and more mature professionals, low-middle income and low income groups, and their urban-rural sub-groups.

7. References

Adams, M. (2006). Hybridizing habitus and reflexivity. *Sociology*. vol. 40,(3). pp. 511-528.

Amad, A.M., Sujud, A., and Hasan, H.Z. (2007). Proxemics and its relationship with Malay architecture. *Human Communication*, 10 (3), 275-288.

Appaduarai, A. (1986). *The Social Life of Things: Commodities in Cultural Perspective*. London: Cambridge University.

Carney, K. (2007). *Affordable Housing: A Holistic Design Approach to the Domestic Environment*. Masters Dissertation, Washington State University. Retrieved from <http://spokane.wsu.edu/academics/design/documents/Theses/KariCarney.pdf>

Chua, B.H. (1998). World Cities, Globalization and the spread of Consumerism: A view from Singapore. *Urban Studies*, 35, 981-1000.

Chua, B.H. (Ed.). (2000). *Consumption in Asia: Lifestyle and Identity*. London: Routledge.

Harvey, D. (1989). *The Condition of Postmodernity*. Oxford: Blackwell.

Jones, A. (1997). Urban conservation issues in Brunei Darusalam: the case of Brunei's water villages. *Planning Perspectives*, 12, 457-475.

Mitchell, D. (2000). *Cultural geography: a critical introduction*. Oxford: Blackwell Publishers Ltd.

Park, B. (2011). *Is it important for architects to understand proxemic characteristics in different cultures?* Retrieved from:
<http://kduncan.phoenix.wikispaces.net/file/view/sociology+research+paper+beatrice.pdf>

Peet, R. (1998). *Modern geographical thought*. Oxford: Blackwell Publishers Ltd.

Talib, R. (2000). Malaysia: Power Shifts and the Matrix of Consumption. In B.H. Chua (Ed.), *Consumption in Asia: Lifestyle and Identity* (pp.35-60). London: Routledge.

Yuen, B. (2005). Romancing the high-rise in Singapore. *Cities*, 22(1), 3-13.

Yuen, B. (2009). Reinventing highrise housing in Singapore. *Cityscape: A Journal of Policy Development and Research*, 11(1), 3-18.