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LIVING





Assoc. Prof. Ar. Meor Mohammad Fared Meor Razali **Chief Editor**

Private and fortified communities have been around since Middle Ages. Fortress walls and moats served as secured barriers from intruding invaders. In Malaysian context, Sultanates' palaces of old, with their baricaded walls and sentry posts were good examples for the need for secured living.

With the current high rate of crimes especially house break-ins, more house buyers are looking for alternative to protect themselves which have prompted residents to organise security patrols and barriers in their neighbourhood. Housing Developers hoping to cash in on this necessity has introduced more new Gated and Guarded Community Scheme (GACOS) in their housing schemes.

Living Safely has been chosen as the theme in this current issue. The Dilemma of Gated Communities article looks at the security aspects from the point of view of a resident. The article Fear of Crime : Can We Design For A Safer Tomorrow? focuses on one of the four core visions of a safe city as proposed by Town and Country Planning Department Malaysia (JPBD). Whilst, Using Environmental Design To Prevent Crime propagates design and usage concepts that could reduce the incidence and fear of crime.

The article Deterring Burglars offers practical tips that could lead to a safer home. In Technology News, transparent concrete is seen as a solution to deter house break-ins. While the Grin Design looks at the lighter side of having a sentry post in a housing area.

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The Housing Research Centre Editorial Board is delighted to congratulate:



Ybhg. Dato' Ir. Dr. Radin Umar Radin Sohadi who has been appointed as the new Vice Chancellor of Universiti Putra Malaysia (UPM) effective 1 January 2011. He was the former Director General of Higher Education Department and the Chief Registrar of Private Higher Education Institutions, Ministry of Higher Education since May 2008. He has been involved in the academia sphere for 24 years.

Prof. Ir. Dr. Mohd. Saleh Jaafar has recently been appointed as Deputy Vice Chancellor (Research and Innovation) UPM. He was the head of the department of Civil Engineering in 1996 until 2006 before his appointment as the deputy dean (Academic), and later as the Dean of Faculty of Engineering in Oct 2007. He was also one of the key researchers of HRC.



GREEN BUILDING 30 JUNE 2011



Dr. Mohamad Fakri Zaky Ja'afar who has been appointed as the new Deputy Dean (Research, Innovation and Post Graduate), Faculty of Design and Architecture UPM beginning 1st June 2011.

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Upcoming Events

The annual Pertubuhan Arkitek Malaysia (PAM) Convention 2011 will be held from 30 June - 31 July 2011. The four-day convention comprises Malaysia Architecture, Interior Design & Building Exhibition (ARCHIDEX2011), Green Building Forum (GBF), Kuala Lumpur Design Forum (KLDF) and International Architecture Design Forum DATUM: KL 2011.



3RD REGIONAL SYMPOSIUM ON ENGINEERING AND TECHNOLOGY (RSET)

21-23 November 2011 Kuching, Sarawak **Organizers:** Federal of Islamic Institution Countries (FEIIC) & Malaysia Society of Engineering and Technology (mSET)

Website: http://www.mset.org.my/RSET2011/downloads/RSET2011.pdf

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THE DILEMMA OF GATED COMMUNITY

Is having gated communities a threat or is it the best solution to reduce urban crimes? Privatisation of neighbourhoods is becoming a trend in Malaysian housing estates.

The idea of gated communities has influenced many existing housing area to hire private security companies and establish guarded parameters of their own. As a result, many of the existing housing developments opting for such solution are facing a few issues. Furthermore, since the market value is set high for gated housing estates, the developers will continue developing them. Consequently, house buyers are left with no choice but to purchase a housing scheme with gated community facility.

The solution as such has proven that the physical separation of neighbourhoods has actually reduced the residents' civic involvement towards societies unconsciously. The conventional neighbourhoods in cities or townships would use their resources to improve city life for everyone. For example, when there is crime in an area, the neighbourhood as a group will bring their concerns to the police department and local authorities, as well as through public forums. Decisions and actions taken would be an advantage to the whole community.

Through gated communities, problems that arise within the specific neighbourhoods became isolated and alienated from the rest. As a result, it is seen that the 'gate' is an answer that only profits the residents within that gated development. The reality is that it might solve the problem of theirs but they forget that they belong to a larger community. The action would only encourage crime to be shifted elsewhere. At the same time, involvement and patrolling of police force and authorities are restricted since it has been taken over by such security companies. As a consequence, patrolling of gated areas is done on bicycles by the hired person.

There is also the concern of barricading selected access to public streets or housing areas turning themselves into gated communities which restricts vehicular traffic routes. Recently in Petaling Jaya (PJ), the Residents Associations (RAs) had a dispute against PJ City Council's effort to remove any illegal physical barriers that were assembled as 'gates' obstructing public streets in PJ. Any decisions made on this matter need to refer to the Federal Laws such as Street, Drainage and Building Act 1974 (Act 133) and Local Government Act 1976. Nevertheless the residents growing apprehensions on the rising crime rates around PJ city should also be addressed.

Another encounter on gated community revelation is that despite having a security

company placing 1 or 2 guards at the only access route, there is still crime happening within their neighbourhood. For this reason, a second security company was hired to just secure a particular street within the gated community area further separating that community within its own neighbourhood. The redundancy of payment is seen as a burden to those families who are staying on the same street. Despite disagreement with the decisions made by majority, it was still implemented.

A research in 2007 concluded that gated community in England is not an effective response to issues such as crime and disorder but instead increases the contribution to social divisiveness. However, Malaysian's society still prefers and is even willing to pay a high cost for such schemes. The perception and needs for gated community is no longer about exclusivity and privacy, instead it has become essential to buy a house which guarantees safety in the neighbourhoods.



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Fear of Crime Can We Design For A Safer Tomorrow?

G lobalisation and modernisation has changed many parts of the city, which indirectly affects urban function and social importance. It was during this period, these processes of urbanisation, modernisation and globalisation erode the concept of close-knit community and creating many social ills and moral degradation.

In parallel, as famously proposed by Jane Jacobs, our cities are gradually being unsafe, in which "today barbarism has taken over many city streets, or people fear it has, which comes to much the same thing in the end" 1. The process of urban evolution in Malaysian cities could be described as fast moving. However, measures for safety and security in effort to create sustainable city do not follow the same pace. In light of current issues of increasing crime due to globalisation and socioeconomic changes, the importance of safety and security for urban residence and measures implemented directly and indirectly assisted in maintaining the safety and sustainability of our cities should get the premium priority, especially if it could be done through proper planning.

What is a Safe City?

According to the definition by the Town and Country Planning Department Malaysia (JPBD), a safe city is: A city that is free from all physical, social and mental threats. The environment is always in a preserved state. This means that a city should not create an environment that encourages untoward incidents that disrupts harmony to ensure that residents are always in a safe, harmonious, healthy and happy state.²

4 Core Visions in Creating a Safe City as proposed by the JPBD:

Free from violence, vandalism and life threats such as extortion, robbery, theft and such.

Free from accidents in and out of buildings such as traffic accidents, falls from buildings, fire and such.

Free from destruction and malarkies as a result of natural disaster such as floods and landslides.

Free of social and moral decay such as drug addiction, theft, white collar crime, bribery, abuse of power, loss of integrity and such. This article will only focuses on the first core vision: a city that is free from violence as it is related to the built environment and HRC objective, which is to create a sustainable living environment.

Can we bring back our community culture of ringan sama dijinjing, berat sama dipikul or jaga tepi kain orang ?

Traditionally the Asian culture, especially in Malaysia, social cohesion was built by community activities such as working together during community gatherings and cleaning up *(gotong royong and ringan sama dijinjing, berat sama dipikul)*, dominates people's daily lives. This culture helps to create safe living environment in a settlement. Now, changes in the modern materialistic and individualistic paradigm, especially in the urban setting, has been gradually eroding this culture.



What was considered normal fifty years ago such as being busy body (*jaga tepi kain orang*) and taking care of others' child like own (*seorang anak satu kampong jaga*) have become obsolete in the current fast pace societies. Previously we can have a peace of mind leaving our property in the hands of caring neighbours, but now we are suspicious of who our neighbours are. Invasion of global thinking and culture gradually produce generation that ignores the value of strong social knit. Taking care of others and others' property were not seen as a social obligation anymore. Social responsibility is slowly fading away from our culture, as neighbours just go in and out of their homes, tending their own businesses, not caring to know their neighbours or not aware of their surroundings. The current norm is that of individualistic society in which everybody lets the responsibility to be shouldered by relevant authority.

Gated and Guarded Housing

When this happens, and as the authority could not provide enough manpower to continuously patrol every housing all the time, people usually prefer to pay somebody else to watch over their property, hence the growth of gated and guarded community. In fact, the fear of crime and the choice for gated housing for best security was confirmed by a report by United States Department of State Bureau of Diplomatic Security (OSAC) about safety in Malaysian housing: "Gated apartment complexes with 24-hour guards have a much lower burglary rate than other residential units, and apartments are burglarised less often than stand-alone residences. Major international hotels have good security and enjoy a low incidence of crime." 3

Fear of crime has resulted in the current popularity and increasing demand for gated and guarded community. Partly, this scenario is being assisted by the increasing household income. This type of residential area is usually fenced or walled with paid private security guards. Houses in this type of community are usually thought prestigious and high valued properties. This current trend seems to infect others as some communities in medium cost housing have already preferred to be 'gated' for security purposes. This enclave type housing is likened as fortress has also been commented criticised as giving a negative effect on the other communities outside their fences. Studies have shown that deterring crime in one area will just shift the crime activity to other less protected areas. Thus inequality may occur.

Malaysian Initiatives for Safe City

How safe is our city? How safe is our city to its resident, to our children and to its visitors? How do we perceive that our city is safe? What could we do to make our city safe? Could we consider a sustainable city is a livable city that is safe from crime? These terms and jargons may have their own connotation and meanings but in general they carry similar aim that is to provide a secure environment for us to live and work comfortably and happily. The Malaysian National Urbanisation Policy (NUP) clearly outlines strategies for liveable communities and sustainable urban developments, which becomes a framework for local authorities in their development and planning. In addition, various efforts by the government and people to ensure safety and sustainable place to live have been carried out. Among them was by the Ministry of Local Government and Housing in collaboration with the Department of Urban and Rural Planning Malaysia on Safe City Programme (SCP).

The Safe City Programme (SCP):

The SCP established in 2004 by the Malaysian Ministry of Housing and Local government promotes 23 measures toward crime prevention. SCP is applied to prevent street crimes as similar programmes have been proven to reduce street crime in many cities around the world. Certain neighborhoods organized their own neighborhood watch where residents take turn to keep their area safe from intruders. Three Main Strategies proposed in the SCP are:

Strategy 1: Environmental design initiatives that include implementing Crime Prevention Through Environmental Design (CPTED) and establishment of GIS mapping for crime and SCP.

Strategy 2: Target hardening involves increasing manpower and facilities such as police post/mobile station, safety alarm/panic button, motorcycle parking with locking facilities, installation of CCTV in commercial premises and public places, and cleaning/ tidying concealed and unkempt areas and prohibition of business activities and parking on pedestrian walkways.

Strategy 3: Management, community involvement and public awareness that calls for: education, public awareness and publicity using mass media, SCP websites, public involvement in planning and implementation of SCP. This also includes periodical full council meeting that discusses status report on crime index and implementation of SCP.

A report from Penang Integrated Public Safety operated since February 2008 revealed that crime rate has been reduced as well as other related offences such as illegal parking and social problems. It was also reported that public and tourist perceptions of the places have changed. The most significant fact is that our safe city initiatives have successfully gathered all relevant parties to custom design solutions to existing problems and to anticipate and prepare for solutions to safety issues within the locality.

Conclusion

It has been established that the fear of crime is as serious as crime itself. The employment of a good system (policing and law enforcement), social responsibility and built environment design can contribute substantially towards eliminating the fear of crime and reduce crime occurrences. The SCP and other measures illustrate the serious commitment on part of the government to combat crime.

Can we design for a safer tomorrow? The existing measures to reduce crime especially in urban settings could be grouped into two categories.

Firstly, safe city can be achieved through strategies by city managers in the form of creating policies and regulations, provision of adequate budgets and strengthening enforcement. Secondly, the goal to create a safe city can be attained through built environment such as proper lighting, fences, CCTV and promoting CPTED.

n addition, the traditional way of creating strong attachment and sense of belonging could be considered as an important method to create safe and secure neighbourhood.

Most of all, for a city to be safe and livable, one should not be too overly dependent on the urban management system for protection as he or she should also look into the interrelationship of many parts that inhabit the spaces. Each type of actor has to play his part – individual, communities, intermediary public and private organisations, non-governmental organisations and government agencies – could collectively contribute to make the fight for a safe and livable city where we can grow, work and play safely.





¹ Jacobs, Jane (2000) The Nature of Economics. New York: Random House, The Modern Library.
² Jabatan Perancang Bandar Dan Desa (http://www.jpbg.gov.my)
³ Malaysia 2011 OSAC Crime and Safety Report: Kuala Lumpur. Office of the Prime Minister of Malaysia (http://www.pmo.gov.my)

Deterring Burglars

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Housing security is one of the common issues in any neighbourhood system. As we live in a community, certain principle has to be followed as to ensure safety, sense of belonging, happiness, harmony and so forth. Crime is the main concern to be discussed here, specifically the house intruders or burglars which are the cause of the problem in housing security. We have to be vigilant in deterring any kind of advancements made by these burglars in order to ensure the safety of the households. Some of the tips below could assist us towards a safer home.

House security could be improved by fitting the alarm system. This will informe the house owner that someone is getting into his compound and trying to break into the house. With the advanced system linked to the nearest police station, patrol car could arrive within few

e within few

minutes. Some of us might optfor CCTV instead of alarm system. Houses that are installed with CCTV usually are not being targeted by burglars, thus protecting the home owners from being victimised. Burglars might prefer houses without this security system as afraid of being caught. This could also warn the burglars that they are being watched and at the same time neighbours is alarmed of unwanted visitors.



As we know burglars prefer fast and easy job, therefore we should make the house breakthrough tougher. This could be done through installing dead bolt to our doors and provide double locks. It is also advisable to install impactresistant window panes besides door chain.

Create a good landscape as an important security plan. Our house should be seen by neighbours. Low-lying trees should be cut down and well-maintained to approximately about three feet or shorter to increase the visibility. Tall trees should not be



planted too close to the house perimeter to avoid burglars fro climbing and getting into the house. Thorny plants can become handy at giving burglars a hard time to climb up your ground floor window. Place gravels outside the ground floor window, porch and doorways in alerting any kind of unwanted movements. Try to eliminate dark spots or hiding places anywhere in our house landscape design.

Art Contributors : Emma Yasmin Aisya Nadia Sofea Hanim We should always lock doors and windows when leaving the house. Although it seems common, but in haste we might missed one. Just do practice double-checking. If your door does not have any peephole, do install one to identify your visitors before opening the door. Another common mistake is putting your spare key under the flower pot. Try to avoid this. Someone might saw what you are doing. In the case of losing your house key, change all keys immediately. When duplicating any keys, make sure do not leave the process unattended. In terms of safety at night, keep the outside of your house well-lighted. Another additional precaution is regarding gardening. Once you finished gardening, store ladders, lawn chairs and picnic table out of sight since these could be used by burglars.





Do not psychologically invite or attract them to your house. If there was a delivery during the day, quickly throw away or destroy carton or packaging of new items you just bought such as plasma TV, laptop and etc. from your compound. Another thing is that we should not tell others about valuable items in our house. Our conversation might be heard by others whom either intentionally or not, spread the information to would be wrong doers. Moreover, we should be vigilant of strangers lurking in our neighbourhood. Strangers with the wrong intention will prey on our children in order to gain access into our home. Therefore, educate our children to avoid talking to strangers.

If you plan on leaving your house for more than three days, you should finform local police station for periodical patrolling and checking. This could be done through filling up a form at that particular police station or if you have an emergency this may be done through phone calls. At the same time let the automatic sprinkler system on. This is to show that someone is at home. For the night precaution, set the automatic light control or motion- detecting lights to warn intruders. Another option is to let relative or close friend or trusted neighbour to house-sit for you.

The fundamental of housing security should start from our house. Then the same principle spread-out to our neighbourhood and finally to the whole community where we live in. Having a good neighbourhood generally could help us from victimised by intruders. But good relationship with our neighbours is even better. Part of the advantages is they may spy strangers passing by our windows even when we are out for vacation.

Using Environmental Design to Prevent Crime

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afety within the community is an issue which need to be looked into at both the local level and national level. The debate on the 'designaffects-behaviour' has been going on for quite sometimes. Even though it drew a lot of criticisms when it was first introduced, the theory of defensible space mechanism by Oscar Newman has some relevance and application in the promotion of safer communities, be it through active citizenship or through design.

The theoretical framework for this theory is based on 3 critical components – territoriality, natural surveillance and image or milieu ¹. Others, especially the proponents of Crime Prevention through Environmental Design (CPTED) listed four designs and usage concepts that can lead to a reduction in the incidence and fear of crime and improvement in the quality of life.

The four concepts are surveillance, access control, territoriality and maintenance $^{\rm 2}\!.$

Surveillance involves the use of electrical and mechanical devices, the location of physical features, activities and people to provide good visibility on their surrounding environment. This will create a risk of detection for offenders and perception of safety for the residents.

Access control refers to employing electrical and mechanical devices, people and natural measures to create a perception of risk to offenders and denying them easy access and escape routes. It also meant to guide the residents a safe passage through their own environment.

Territoriality refers to usage of physical features and signs, either real or symbolic, to define ownership and control activities in the environment. Lastly, **maintenance**, which refers to the situation of the place whether it is being looked after or being neglected. The appearance of residential space will create an image of the area that symbolises the inhabitants.

For example if the place do not show any forms of good maintenance, it indicates that the place is being isolated, being left behind or neglected, making it more vulnerable to criminal activities.

Newman also has adopted his principle in doing renovations on a low income housing project in New York. One of the goals was to increase defensible space, thereby reducing both fear of crime and actual crime. The renovations employ the following principles,

1) assigning as much public space to the control of specific families, using both substantial and symbolic fencing,

2) reducing the number of pedestrian routes and improved lighting along the paths; and

3) improving the area's image and encouraged a sense of personal ownership by resurfacing the dwellings, giving different colours to individual dwellings ³.

However, the success of the idea of creating a safe place through design needs people participation. This is partly because defensible space (the physical layout) does not necessarily translate into defended space (residents actually doing the surveillance works), especially if the residents in that particular area are not cohesive to act together against criminal elements ¹. Based on this situation, researchers in Netherlands have developed a checklist for assessing the crime vulnerability of a housing area which comprise of six elements. The elements are, the potential visibility of public areas (lines of sight), the actual presence of residents care enough to maintain buildings and act against criminals), access and escape routes (for both criminals and victims), attractiveness (assuming that beauty evokes care in residents and decay informs criminals that the residents have little vigilance) and the vulnerability of materials (locks, presence of easily vandalised walls etc.) ³

¹ Reynald, D.M. and Elffers, H. (2009). The Future of Newman's Defensible Space Theory. Linking Defensible Space and The Routine Activities of Place. European Journal of Criminology, vol 6 (1), 25-46.

² Wolf, K.L. (2010). Crime and Fear – A Literature Review, in Green Cities: Good Health (www.greenhealth.washington.edu). College of the Environment, University of Washington. ³ Gifford, R. (1997). Environmental Psychological, Principles and Practice. Boston:Allyn and Bacon.



Prof. Dr. Ramazan Demirboga Faculty of Engineering Housing Research Centre



Transparent Concrete and Security of Houses

Transparent concrete is actually a translucent (semi-transparent) concrete building material. Made up of fine aggregate, water, cement and 4% optical glass fibers by weight of concrete^{1,2}, it was developed in 2001 by Hungarian architect Aron Losonczi. Nowadays there are many producers of transparent concrete which used different special names such as i.light from an Italian company and Lucem produced by a German company. The diameter of the fibers varies from 2 micrometers - to 2 millimeters. Thousands of fibers run side by side transmitting light between the two surfaces of each element. Glass fibers lead light by points between the wall-surfaces. Shadows on the lighter side will appear with sharp outlines on the darker one (see pic.). Applications for translucent concrete in various forms can be found in places such as in hotels, offices, bars, as well as in malls

and shops. It could also be as a partition wall between the living room and garden in houses. Striking light effects create an extraordinary ambiance and attract the attention and interest of guests and customers. It could be applied to the house's garden walls for security and decoration purposes. Most household break-ins can be prevented by simple and inexpensive security precautions. garden walls are made from transparent concrete, both the decoration and security will be improved. This is because the main hiding places for thieves are behind the walls of garden that

surrounds the house. In addition, the transparent wall will help the surveillance by the guards and CCTV cameras. Thus, the transparent concrete is a good idea in assisting security of houses in near future due to its transparent property.

¹ Kellogg, Craig, "Space-Age Concrete Blocks That Let You See the Light." New York Times. (Late Edition (East Coast)). New York, N.Y.: Apr 15, 2004. pg. F.3.

² Gomez, Kevin, "LiTraCon shows concrete in new light." Construction Contractor (Australia), Aug. 2005.





NATIONAL HOUSING POLICY

The National Housing Policy (NHP) was officially launched by Deputy Prime Minister of Malaysia, Tan Sri Dato' Hj. Muhyiddin Bin Hj. Mohd. Yassin, on the 10th. February 2011 at Putrajaya International Convention Centre.

The goal of the NHP is "to provide adequate, comfortable, quality and affordable housing to enhance the sustainability of the quality of life of the people". Meanwhile the three main objectives as outlined in the NHP are:-

- To provide adequate and quality housing with comprehensive facilities and a conducive environment,
- To enhance the capability and accessibility of the people to own or rent houses,
- To set future direction to ensure the sustainability of the housing sector.

The NHP is formulated based on six thrusts and twenty policy statements in order to achieve the objectives stated above. The six thrusts of the NHP are:-

- To provide adequate housing based on the specific needs of target groups,
- To improve the quality and productivity of housing development,
- To increase the effectiveness of implementation and to ensure compliance of the housing service delivery system,
- To improve the capability of the people to own and rent houses,
- To sustain the housing sector,
- To enhance the level of social amenities, basic services and liveable environment.

It is envisaged that the implementation of the National Housing Policy will provide a well defined focus to achieve a progressive and sustainable housing sector by government agencies at the federal and state levels.

Full details of the National Housing Policy can be reached at http://www.kpkt.gov.my/lain_terbitan/DRN_KPKT_(ENG).pdf

HRC News January - June 2011



HRC won the third place for "Anugerah pejabat Terbaik" in conjunction with Appreciation and Quality Day of Faculty of Engineering UPM for year 2010.



Appreciation to ex-staffs; Akmalina Azmi, Ida Suhaila and Illiana Azizan for their hard work and dedication to HRC.

A Two-Day Course and Design Workshop on Design & Construction of Precast Concrete Structures had successfully held on 11-12 April 2011 at Cyberview Lodge Resort & Spa, Cyberjaya. This course was jointly organized by Housing Research Centre (HRC) & Construction Research Institute of Malaysia (CREAM). The speaker is Dr. Kim S. Elliot, consultant advisor of CREAM.



Welcome our new Research Fellow, Prof. Dr. Ramazan Demirboga. Previously, Prof. Dr. Ramazan was the professor at Department of Civil Engineering, Faculty of Engineering, Ataturk University Erzurum, Turkey. His research interest include building and construction materials, advanced concrete technology and materials engineering.

