ENVIRONMENTAL SENSITIVITY IN ARCHITECTURE

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Malaysia was badly affected due to the big flood occurred in December 2014. The following year, 2015 evidenced the struggle of the community to assist and rebuild the affected areas and communities. In responding to this catastrophe, for the STEdex 15/16, the Department of Architecture discusses on the issue of environmental sensitive architecture varying from the understanding of the environment and communities to the proposing of shelter prototypes for the victims of natural disaster. In many cases the natural disasters occur because of the destruction of the environment caused by environmentally insensitive development itself.

As defined by BREEAM (Building Research Establishment Environmental Assessment Method), an environmentally sensitive architecture is “an architecture that uses renewable sources to generate energy; that use passive techniques for ventilation and illumination; that incorporate, maintains and recycles greenery, water and waste; that advances the use of environmentally conscious construction techniques and foster a liveable and viable urbanism”. Looking at the current developments in Malaysia, the level of sensitivity toward the environment is still at the lower side. The understanding of the environment and the affects and influences is critical to ensure that any design in architecture is sensitive and responsive to the environment. In the article titled ‘Site Analysis and Ideas Propagation in Architecture Design Process’ discusses the importance of the environment i.e the site, in generating ideas and concepts through the use of three dimensional substances. The exploration of design from concepts to real building which relates back to the environment is also discussed through the article titled ‘Application of Concept in Design: An Academic Challenge’.
Human beings, being part of the environment, are also among the main concerns in design. Developments are made to cater the needs of human beings as individuals and communities. The importance of spaces created whether indoor or outdoor must be practical and liveable. The exhibit titled “Desired Characteristics of a Compact Living from the Perspective of Architecture Students” showcases the exploration in understanding indoor spaces through drawings. The spirit of the space and space identity are something that cannot be ignored in creating lively and functional spaces. The paper titled ‘Public Mural Art Installations in an Urban Cultural District: Place Identity under Scrutiny’ discusses more on the effects of street arts in improving place identity and outdoor spaces. Community centres have been seen as one of the public spaces that improve the relationships among communities. Centres that are designed sensitively connected to the community and the environment can benefit the community around them which is being discussed in the paper titled ‘An Architectural Intervention: A Community Connector’ focusing on the roles and potentials of community centres as a public space. With regards to the understanding of human needs and environmental influences, innovative design for the communities can be produced. ‘Transformable Instant Community Shelter (TICS)’ is one of the innovative design in meeting the needs of communities affected by the natural or environmental forces.

In the year 2015, the Department of Architecture, UPM embarked on a sustainable community project affectionately called ‘Teratak Semai’. Led by Assoc. Prof. Ar. Meor Mohammad Fared, Dr. Wan Srihani Wan Mohamed and Dr. Shafizal Maarof, the department, collaborated with the Office of Ahli Dewan Un-
dangan (ADUN) Chenderiang, Tapah, Perak to build houses for the Orang Asli community at Kampung Batu 16, Jalan Pahang, Tapah, Perak. The Teratak Semai project received financial assistance from Malaysian Medical Association (MMA) and cement supplies from Lhoist (Malaysia) Sdn. Bhd. During Teratak Semai Phase 1 from 29 January to 17 February 2015, nineteen (19) architecture student volunteers worked together with the community Orang Asli at Kampung Bt. 16 to complete 4 houses. While during Teratak Semai Phase 2 from 17 August to 5 Sept. 2015, thirteen (13) architecture student volunteers assisted the Orang Asli community at Kampung Batu 16 to construct 6 more houses.

The Teratak Semai project has provided an opportunity for the architecture students to work on ‘live project’ and undergone ‘experiential learning’ at its best. The students learnt about building houses on stilts using concrete piers and timber structural frames, and gained valuable knowledge on harvesting bamboos from the jungle and weaving them into wall panels. They have also been exposed to the sustainable life style of the Orang Asli community. The Teratak Semai project also has empowered the Orang Asli community with knowledge and skills to build stronger houses that can last a bit longer. It has been observed that a few months after completing their houses, the Orang Asli community with their new found knowledge and skills have extended their houses on their own initiatives!!!

Hopefully with continued support and financial assistance, the Teratak Semai will ‘continues to build more homes for the Semai people and planting seeds of hope to a community’.
JURY REVIEW
ARCHITECTURE
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Consistent dissemination of informative and fresh ideas is crucial to keep architectural dialogue alive. STE-Dex stands out due to this contribution – it initiates and propagates dialogues to promote creativity and uplift awareness on contemporary built environment-related problems that are very much human-centric. The collection of artefacts presented by the academia of architecture discipline for STEdex 15/16 embodies this ambition. Architecture is a universal expression of design that has the potential of relaying positive vibes such as warmth, respect and care. This year the artefacts exhibit concerns over betterment of urban spaces, quality design processes, and systemising construction for improved performance.

The paper entitled, “An Architectural Intervention: A community connector”, addresses the plight of urban poor. The paper concurs with common view that cities tend to harbour tensions between groups of communities of varying origin and background. The authors began with explaining the space programming for the urban communities, followed by deliberation on design decisions leading to the physical outcome. In the shape of an urban infill development that accommodates a blend of community-based programmes, the artefact is a probable solution to boost the wellbeing and productivity of the growing size and complexity of urban communities in Malaysia.

The authors for the second artefact entitled, “Concept in Architectural design – an Academic Challenge”, set to demonstrate the fundamentals of architectural concept where the process of translating and transforming are regarded as the essence of good design resolution. Two studio outcomes were used as the basis to illustrate this position – one is in the form of
an outdoor chair located within a public part, and the other is an object organiser.

“Transformable Instant Community Shelter” tackles the subject of transitional structure for disaster-hit victims. Escalating occurrence of natural tragedy in the country has made resilience design a major subject of research interests. In this project, the authors identified factors relating to speedy constructional assemblage, uninterrupted supply of resources, and users’ needs as the primary source of problem solving inquiries.

The forth research entitled, “Community Kiosk in Urban Fabrics”, exhibits ingenuity in creating functional and meaningful architectural objects from recyclable materials, namely timber shipping containers. The works are in the form of kiosks installation that could enliven in-between urban spaces through its function and architectural appeal. Another scheme that examines constructional system is “Architectonic spacers”. The artefact resulting from a rigorous research exhibits innovative design resolution that set to achieve quality construction delivery performance through improved building assemblage and prefabrication.

The scheme entitled, “Compact living from the perspective of young designers”, explores the concerns, aspiration and interpretation of quality living by youngsters residing in the urban area. In working out the design resolution, the designers are challenged by key issues relating to limitation of resources, in terms of space and financial support.
“Site analysis and ideas propagation in Architecture Design process”, captures the process of generating design ideas using the project site as the design generator. As a result, the artefact is a design outcome that is sensitive and respectful of its surrounding. “Cultural Center in Bukit Nanas” also highlights the concerns on the project site, examining on how to minimise the impact of architectural insertion in an urban context. The scheme is in the form of a camouflaged design outcome that balances the need to create human establishment, with environmental protection of natural elements in the surroundings. “Public Mural Art Installations” is yet another proposal that portrays concerns for urban spaces, taking Public Art as a point of discussion. Creation of Public Art has begun to be accepted as an element of tourist attraction in Malaysia, and an important ingredient in cultural planning and place making. The artefact affirms the benefits of Public Art installation, capturing richness of urbanite’s experiences triggered by Public Art installation programmes.

In conclusion, the issues presented in this collection of works and the ideas behind the creation of the artefacts may not be new, nevertheless their potential in helping to stir healthy engagement of architectural thoughts and exploration of architectural possibilities are praiseworthy.