

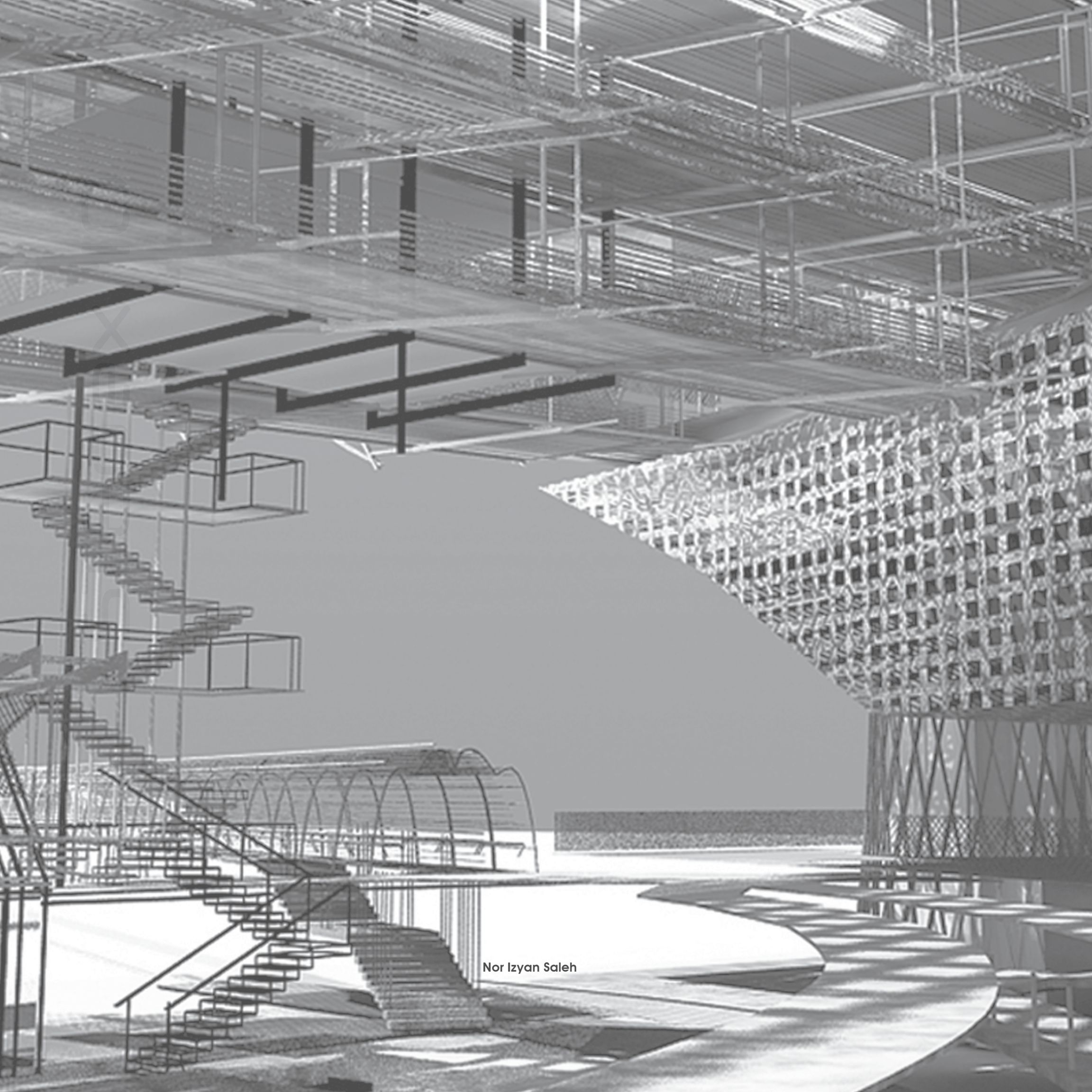


# STEdex '10

SUSTAINABLE TROPICAL ENVIRONMENTAL DESIGN EXHIBITION

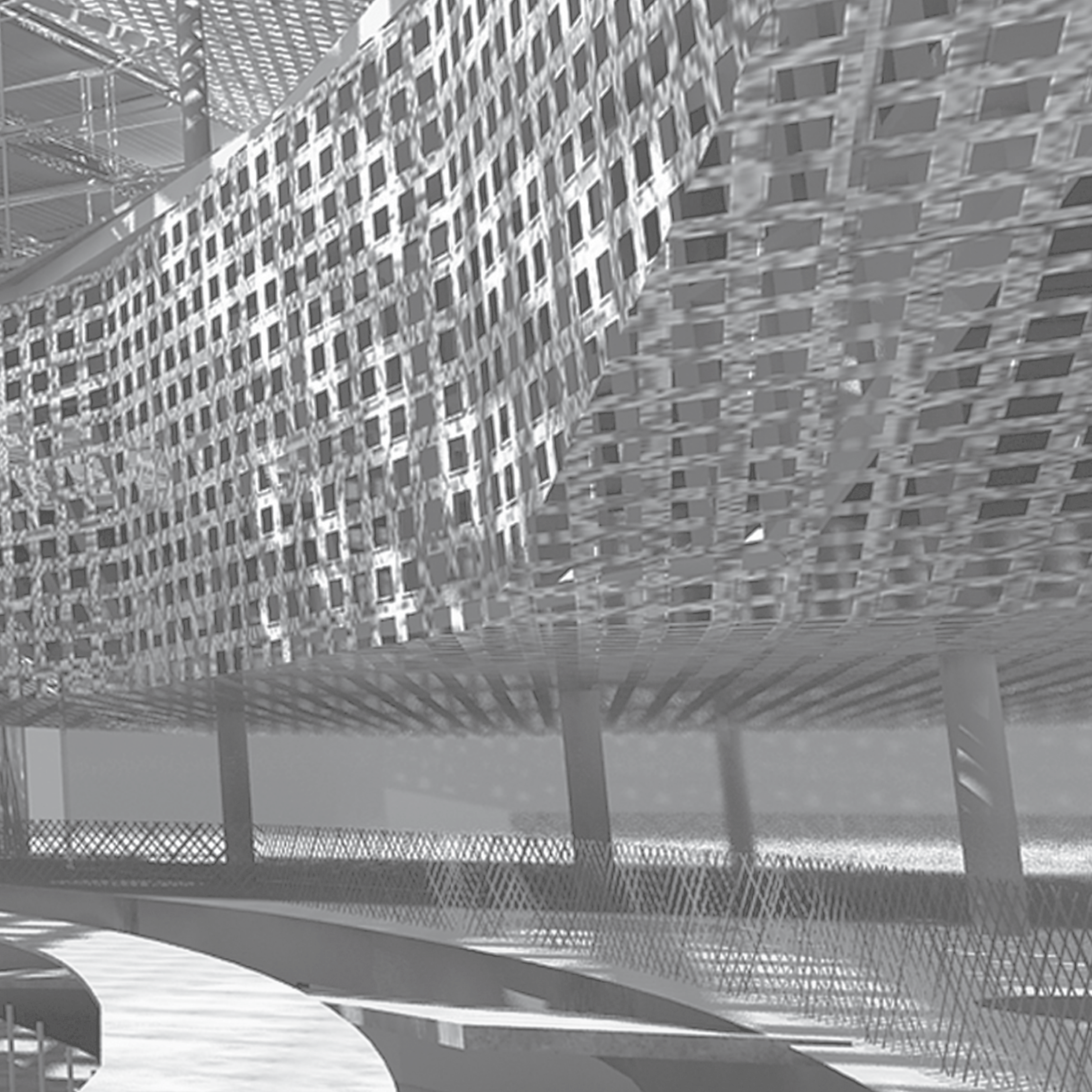
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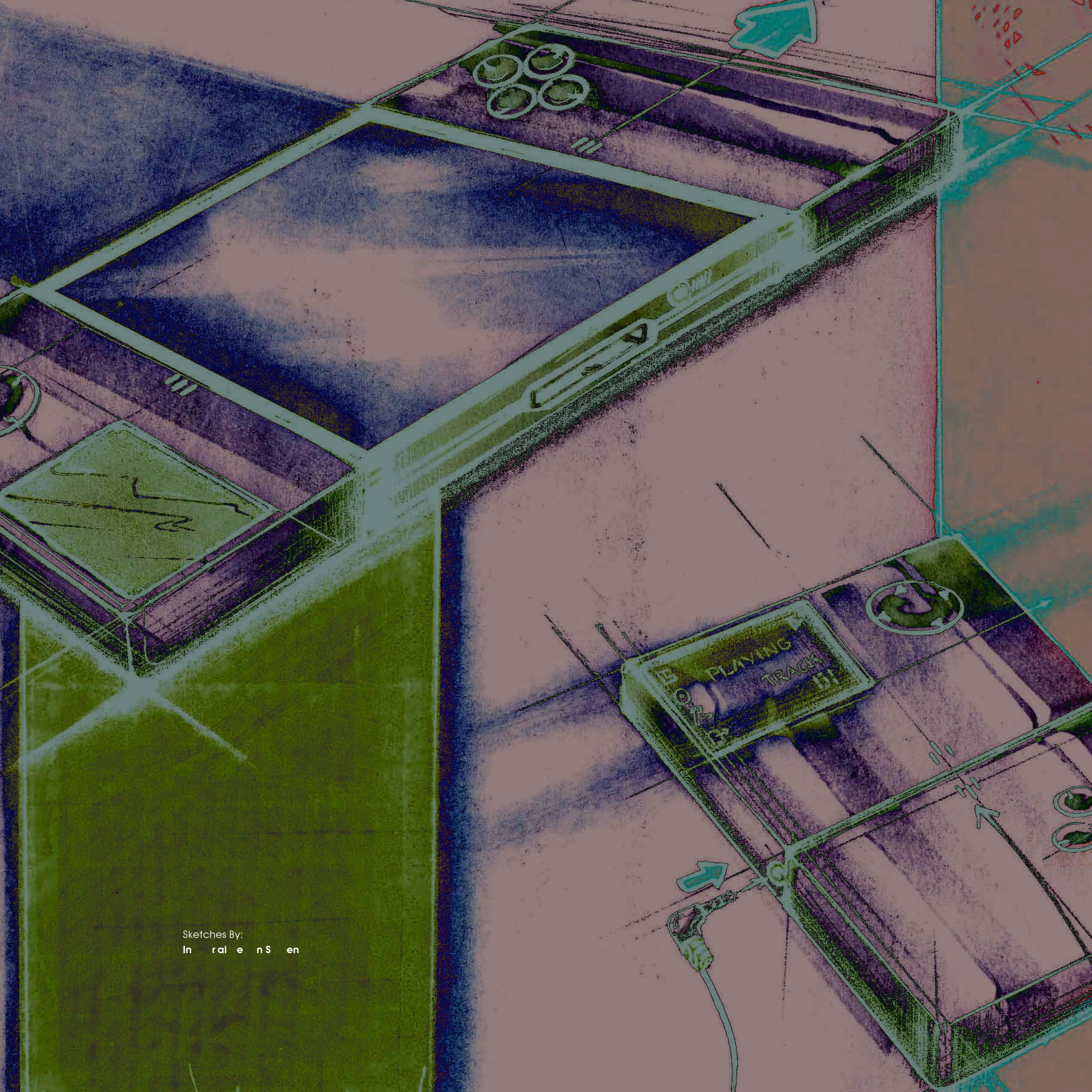


Nor Izyan Saleh









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# STEdex '10

SUSTAINABLE TROPICAL ENVIRONMENTAL DESIGN EXHIBITION

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Nasir Baharuddin  
Osman Mohd Tahir  
Rahinah Ibrahim



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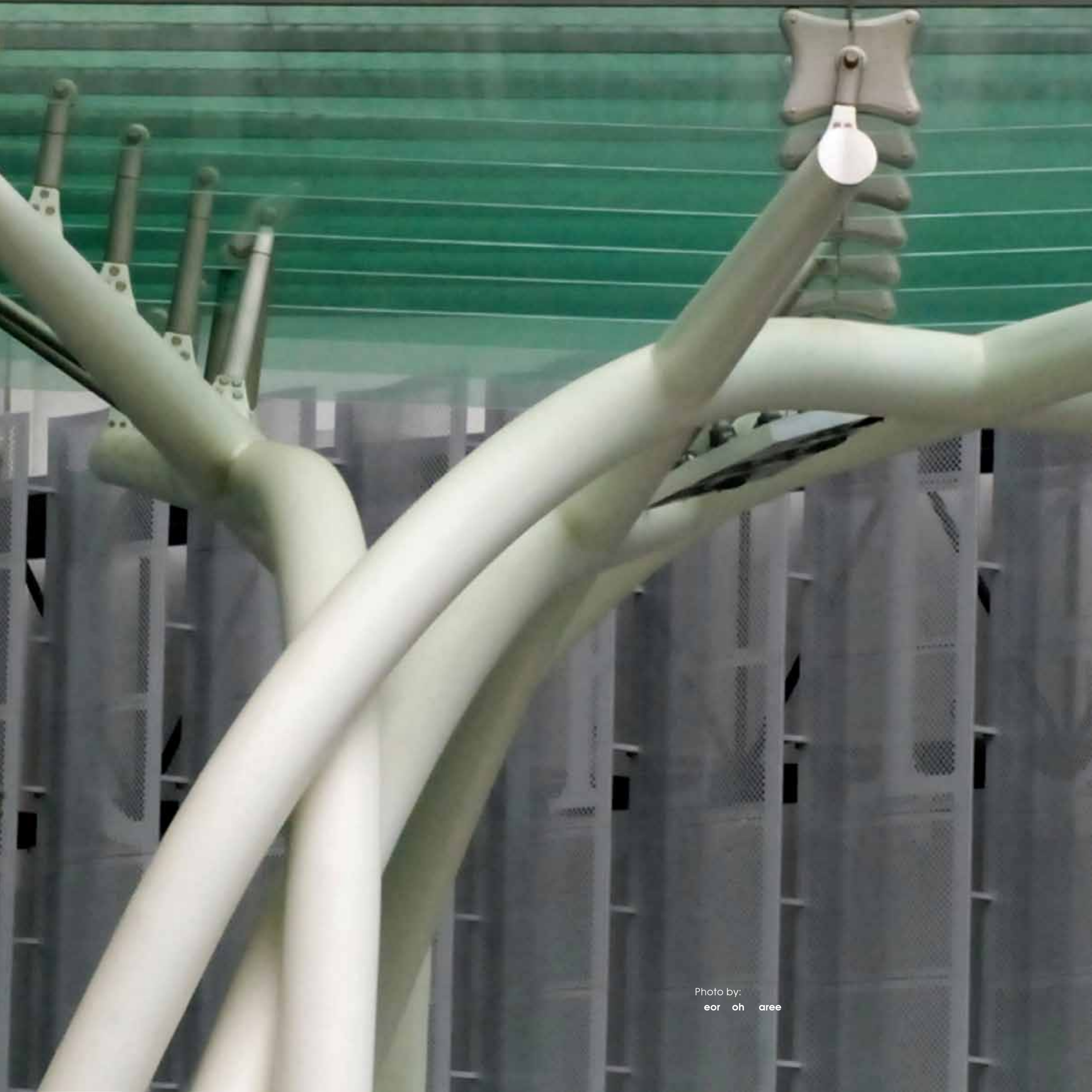


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# Preface

**Sustainable Environmental Design Exhibition** aims to promulgate ideas from creative and innovative sustainable solutions in the design and planning of the tropical environment. This exhibition is timely as it is an avenue to share new and improved knowledge among multi-disciplinary professionals towards a common goal in sustainability. Sustainable Tropical Environmental Design is a niche area for the Faculty of Design and Architecture, Universiti Putra Malaysia as outlined in the faculty's strategic plan. This idea is continuously being instilled through our teaching and learning to students, research activities and professional services.

This year's STEdex'10 showcases for the first time, artefacts and design ideas from architecture, landscape architecture and industrial design departments as well as a special chapter on winners of design competitions. It reflects a consolidated effort and work of all faculty members and their students. The selected artefacts for the exhibition have undergone meticulous reviewing process at departmental and faculty levels by invited prominent juries. STEdex'10 underlines and highlights our perspective on tropical design process and emphasises the achievements and understandings on the importance of addressing issues and problem-solving solutions towards sustainability.

It is hoped that STEdex'10 will be a source for further dialogue in sustainable design and practice in discovering new approaches and meaningful sustainable solutions for our tropical environment.

**Dr. Mohd. Azhar**  
Dean, Faculty of Design and Architecture





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Na r ahar n





# Editorial

STEdex'10 collects artefacts in exploring the meaning of production, thinking and process that pervade the terrain of dialectical paradigm with a new meaning of 'time space of sustainability'. STEdex'10 pulls together artefacts that in over a year have attempted to make sense of this emerging arena with most essays adopting a bird's-eye view in looking at what are often called 'sustainable' and 'being tropical'. In our realm, a tropical sustainability meaning focuses on ecological and biological pattern and social fairness. We take the stand that sustainability extends across global citizenship. Herewith, it is the search for a civilisation that is capable of extending hospitality to twice as many people on the planet as today without ruining our present biosphere for the successive generations.

Sustainable development in this perspective is about searching for local livelihoods. It is searching for a decentralised and non accumulation-centred forms of society involves in the process of regenerating such communal behaviour and social fairness in a situation of place and matter. Nationally, for example, sustainable lifestyles for the urban middle classes would give peasantry and tribal communities more control over their resources. These sources are being expressed through critical observations and translating those imaginations into 'real' things. As part of our vision, the formulated expression is provided through texts that are theorised through creative explorations and site propositions. They synthesise a place or a function into a certain significance through elaboration of the visual mind and reasoning.

This year's exhibits also include collaborative contributions from the industrial design field giving more excitement to the pages. Their artefacts are cutting edge design proposals that are based on cosmopolitan localism. These products energised the Industrial Age that travelled against time and dimension for equipping humans. They use resources of biological and industrial time in which, design becomes an intention of intellectual activities facilitated by knowledge, imagination and intuition. In their attempts to construct and determine the future or to search for some order in potentially existing matter of time and emotions; the basic functions and technologies have been driven through the magical border between the present moment, the unknown and the undetermined. It is a proposition of scale and function which presents the mode of living, behaving and embodying the ambience towards thinking patterns and contexts.

STEdex'10 starts with an essay about cultural design approach. It is followed by a collection of selected artefacts from three departments: Architecture, Landscape Architecture and Industrial Design. A special chapter is included to showcase outstanding studio works that have won local and international accolades. In all, the writings and the descriptions of the text are dialogues manifesting the condition of time and conceptual operation in designing a need and reaction to change. They respond to positions taken by others, putting a message across to an imaginary audience and they converse an author's conversation with himself when looking—either consciously or unconsciously—into his own culture and environment and their social acts.

**Na r ahar n**  
Curator, STEdex'10





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# er en n ' e n' o re eal l ral a or

Rizal Rahman





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Na r ahar n





# Design 'Environment' More Real Cultural or

Rizal Rahman

## Abstract:

New designs should support the everyday environment and should refer to existing designs that are familiar to users. These would help to motivate designers to develop culturally localised designs that allow products to be manufactured and relevant to users' current lifestyles. Despite the growing number of studies on cultural factors in marketing research, designers have not been given much opportunities to present their designing skills and thinking in conducting such research related to culture thus leading to product improvement. This article describes a framework and results of adapting a "practice-led" research-based approach to understand cultural factors of a specific ethnic group in Malaysia whose members migrated from traditional rural life to urban industrial setting. Findings from adapting this method have been generated into a design-research guideline for designers and product planners to understand users' culturally determined needs when developing a cultural product.

Keywords : culture, product design, design research.



The original motivation for this work was to seek ways for designers and producers in Malaysia, as an emerging industrial nation, to provide appropriate products for local consumers and their culture rather than simply responding to global norms. However, it was soon recognised that the central factor was not so much the particular conditions in Malaysia but rather that the population was experiencing rapid changes. It was seen that similar economic and demographic shifts were happening in many parts of the world and design works moved on to consider the role of designers in this context.

## User-Designer-Product Interaction

Product developers are coming to understand how the interaction between users, products and environment can play an essential role in product development process (Green & Klien 1999:92; Taylor et al. 1999:217; Von Hippel & Kat2 2002:821). These authors indicate that a successful product or system requires a high level of interaction between designers and users. In many cases, however, designers are still predicting the users interactions with products based on their previous knowledge and experience. Popovic (1999:26) argues that in most product development processes, designers still find it difficult to predict theories concerning users' needs with respect to the products they use. Thus, according to Jones (1992:216), designers should take part and engage more in the social life of the users by experiencing their lifestyles.

Norman (1988:85) points that there are a number of cases of products that were produced without proper research into users needs and limitations which led to problems involving users' interactions with those products. In general, research reveals that non-physical merits of product-user experience—such as aesthetics, emotion, pleasurability, product 'soul' and cultural factors—tend to be neglected, overlooked, misjudged or entirely ignored in the pursuit of factors such as physical styling, functionality, usability and ergonomics. In most cases, the manufacturers tend to make the least amount of change possible to make an existing product acceptable to the targetted culture (Lawson et. al 2003:9). Reese et al. (2001) and Rodriguez et al (2006) also claim that many non-physical aspects of designing a product have been overlooked in product development processes.

## Designing for Culture

Outstanding design can come about via many sources of inspiration, ideas and experiences involving a wide range of specialists from different fields of expertise (Wasson 2002:72). Nevertheless, many factors that have influenced the designs developed by manufacturers have been overlooked. For example, how products become accepted by users is an issue which tends to receive much less emphasis than technological changes and material-oriented product development.

Therefore, the benefits made by cultural factors in the marketing of a successful product has largely been neglected. It seems to be a forgotten element of the product development process. However, a number of scholars and design thinkers have emphasised the importance of integrating the culture of users into product development. Thus, over the course of recent years, there is an increase of interest in understanding users' cultural needs as an important aspect of the design process (for example, Fernandes 1995; Diaz 2009).



Bloch (1995:22), in his consumer response studies, argues that preferences for product form are much driven by cultural factors and claims that nearly all Japanese auto manufacturers are setting up their studios in the United States with the aim of ensuring the commercial success of their products by paying more attention to understanding Americans' culturally determined needs and demands. Fernandez (1995), studying design competitiveness in global markets, states that a region's culture and quality of life are significant elements in the product development process despite moves towards global communications, economy and awareness. He stresses that designers should demonstrate more responsibility for the impact of their designs, not just by meeting the customer's need but also by preserving cultural variety and values.

According to Portigal (1997), a successful product should be seen not just as a technical solution but also as a package of cultural solutions. Its success is also due to a successful understanding of the values, institutional arrangements and economic notions of the culture the product is targeted at. Portigal (1997) also claims that a product's function, ergonomics, and cognitive aspect should be understood by designers and argues that the key ingredient in developing a successful product is a degree of which, he coined as 'cultural fit'. Users culturally determined needs may be particularly unpredictable in a changing society. Additionally, as pointed out by Squires (2002:105), it is always a challenge for designers to know who their users (or stakeholders) are. According to Leinbach (2002:3), design should no longer be seen as a styling shape or just an art object but products should be designed and produced with appropriate features including cultural aspects which could provide a more competitive edge in the market. Rodriguez et al. (2006) have suggested that in creating products for current emerging markets, designers should become involved in a deep understanding of the needs and context of the people within it.

It is becoming increasingly difficult to ignore the changes in users' lifestyles, tastes, demands and cultural values with the products people employ in their daily lives. Moving from traditional rural to advanced industrial urban (example from this article's case study), users have been introduced to the interplay of conflicts between cultural values and the processes of adaptation. As culture is understood to be a 'way of life' and is integrated with products that people use (Hofstede 2005), the study of products' transformation and understanding users' experience can be useful for designers in attempting to understand and respond to this situation. In this situation, designers are required to offer more than just an improved version or a new product, but rather an appropriate design and social engagement system in which design and designer can both play a role in the social investigation that informs designing.

#### Research Framework

In recent years, 'practice-led' design researchers have developed techniques that have enabled them to gain insights and develop holistic thinking about products, services, environments and systems. These include exploring both new possibilities (Bowen 2009) and the constraints of a given situation (Rodriguez et al. 2006).

Design researchers such as Squires (2002:105) and Rodriguez et al (2006) have demonstrated 'user innovation toolkits' (Von Hippel 2002) that operated by incorporating the development of sketches. Prototypes have provided users with freedom of experience in sharing their thoughts and aspirations, a strategy which



could be useful in informing the design development stage. Further, Rust (2004) explained that designers have the ability to imagine new circumstances and could creatively ‘design’ a practical environment for people to experience a ‘new world’.

Designing and doing research formed the main components of the methodology for this investigation. In general, methods and techniques of integrating design into the research process or designing research are generating a great debate amongst the academic community and design thinkers (Glanville 1999, Burdick 2003). However, in current design research situation, they have proven to become useful and effective research tools among design researchers (Bowen 2009, Marchand and Walker 2009, Evans 2009, Rahman and Rust 2009, Rahman 2010). Framework for this investigation is generally built up into two (2) main components which are continuously interrelated and contributed to each other. The first part focusses more to an account of how products interact with stakeholders in their cultural environment.

The second part focusses on the process of developing a specific design for culture which can be used to analyse and evaluate the understanding that was gained from the earlier stage. The social inquiry works involving stakeholders will directly inform the design development process which in return would assist in the continuous social inquiry works.

This element from “practice-led” design research approach is employed to provide an arena for investigating how stakeholders respond to the conceptual designs of cultural products and explore techniques that designers might use to work in this area.

Here, the design work is a continuous process alongside the social inquiry and responding to insights emerging from it. In turn, a set of conceptual designs were developed in the practical design work and are being used as provocative objects (conceptual designs) bridging users’ cultural determined needs and inspiration to products while the programme of interviews and group works (design workshop and discussions) proceeds. This conceptual design work continues to be a continuous process alongside the social inquiry and responding to insights emerging from it. In turn, a speculative conceptual design has been used as instrument in this research as the programme of interviews proceeds.

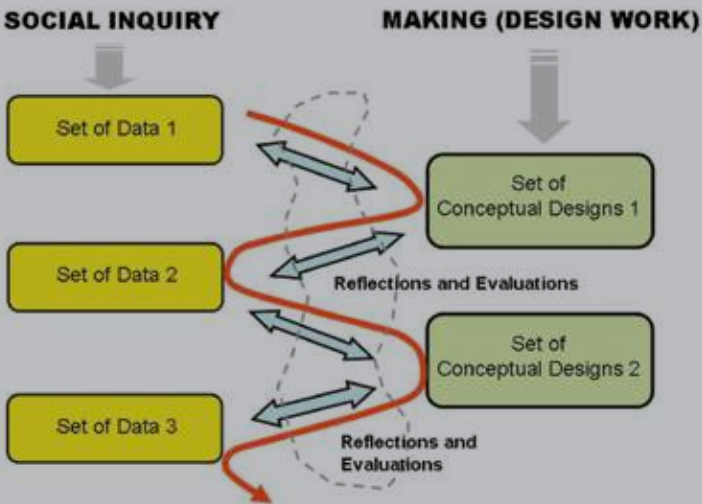


Fig. 2 - Research Work and Design Scheme



Both processes, designing and doing social inquiry is more likely to provide good results for this investigation. Thus, in the designing process the output could only reflect to the possibilities but with no absolute guarantee since this design work is validated by the social inquiry work and its output.

#### Analysis

The analysis process has been developed based on social science's qualitative data analysis techniques in generating themes and coding together with reflective process that fed tacitly into the designing activities as well as informing explicit analysis. In practicality, both designing and analytical actions are contributing to inform each other and assisted to progress the analysis process.

#### Methodological Findings

This section will only be focussing on methodological aspects. Part of the research work was to produce conceptual designs in the form of visualisations to assist researcher and research subjects in exploring possibilities in user-product-interaction. It is also to explore different ways of using these design visualisations with stakeholders. The presentation format, the concepts selected and the physical settings for the interactions with stakeholders affect the productivity of interviews and discussion sessions. Below are some of the productive approaches identified in the research work influence stakeholders' engagement:

Presentation formats influence participants' engagement. The early design presentations were in printed handout form and in 2 dimensional visualisation formats. Having these 2D illustrations for the interviews and workshops had its own disadvantages and limitations. For example, when showing 2D illustrations to the participants, the actual use and practical problems of the designed product could not be tested to evaluate the real practice and actual environment where the product should be operating. In this situation, participants had to imagine how the products might work based on the visualisations shown to them. The alternative approach of changing its presentation format from photo real into 2D illustrations has triggered participants engagement not only to discuss about the physical aspects of the products but also to other non physical aspects such as its practicality and function.

Selecting familiar cultural types (such as kitchen tools) triggers active participation. Having conceptual designs developed from existing familiar cultural products also encouraged active participation in the stakeholder sessions. Using these familiar forms did not just assist in developing future design ideas, it also mobilised the implicit elements of culture through participants' use of the product as a starting point for speculation about improvements and discussion of related practices and beliefs. This indicates that products that already have strong connections with users will be more productive than novel futuristic products which might cause the discussions to digress into other non related areas.

To connect with the cultural constraints in engaging with participants, some cultural constraints need to be considered. The researcher discovered that each of the interpersonal activities in the research required a different approach. For example, expert interviewees could be contacted formally and directly because they shared the researcher's professional understanding and recognise the value of the research, whether they were cultural authorities or



a policy expert. Thus, an expert interview does not require any special care in preparation or incentive for participation. However, the situation was different when it came to conducting home interviews. There was no formal source that could lead the researcher to suitable people. This required the researcher to have some knowledge of local settings. For example, some participants were found by asking diners at traditional food stalls for recommendations to other potential participants.

Friendly Introduction session is essential to deal with 'local' culture. The introductory phase was essential to building rapport and enabling the development of further dialogues. From the experience, researcher recognised that participants' responses were heavily influenced by their social background and the education system they had experienced. As design formed the central part of the design workshop sessions, participants' first reactions to communication revealed a rather passive response and less interest in extending their dialogues and developing their ideas about the research subject. To overcome this, the researcher created some activities based on selected shared topics of interest to engage and facilitate their communication with him.

#### Conclusion

Lowgren and Stolterman (1999:18) stressed that by exploring new methods and techniques, a designer could extend his language and his repertoire of tools for different design situations. A central feature of this work is the use of design practice and its outcomes to provide part of the environment for engaging stakeholders in their homes or other familiar environments. The designer also must develop good skills of interacting with and observing stakeholders. To develop appropriate skills in this approach, as well as understanding its principles, designers must experience them in action such as through pilot studies.

This is evident above where the designer is using research methods to understand the subjects and their culture as preparation for the main body of work. The designer/researcher will need to pay attention to certain features in developing their design work. These include developing appropriate design presentation formats, selecting familiar cultural objects and being able to identify flexible 'relevant' products. Methods of engagement with participants must also take into account participants' background, culture and environmental settings.

In summary, it was observed that the designer could not predict the course of cultural factors. However, through this practice-led approach, the work has identified that particular elements of culture might be useful for designers in new product development. This kind of contextualised understanding cannot be gained in studio work (Ireland 2003:22). However, it requires engagement with stakeholders and, as Bowen (2009:137) Rahman & Rust (2009) and Rahman (2010) have indicated, stakeholders cannot envisage future possibilities without a stimulus such as the introduction of a conceptual design or artefact.



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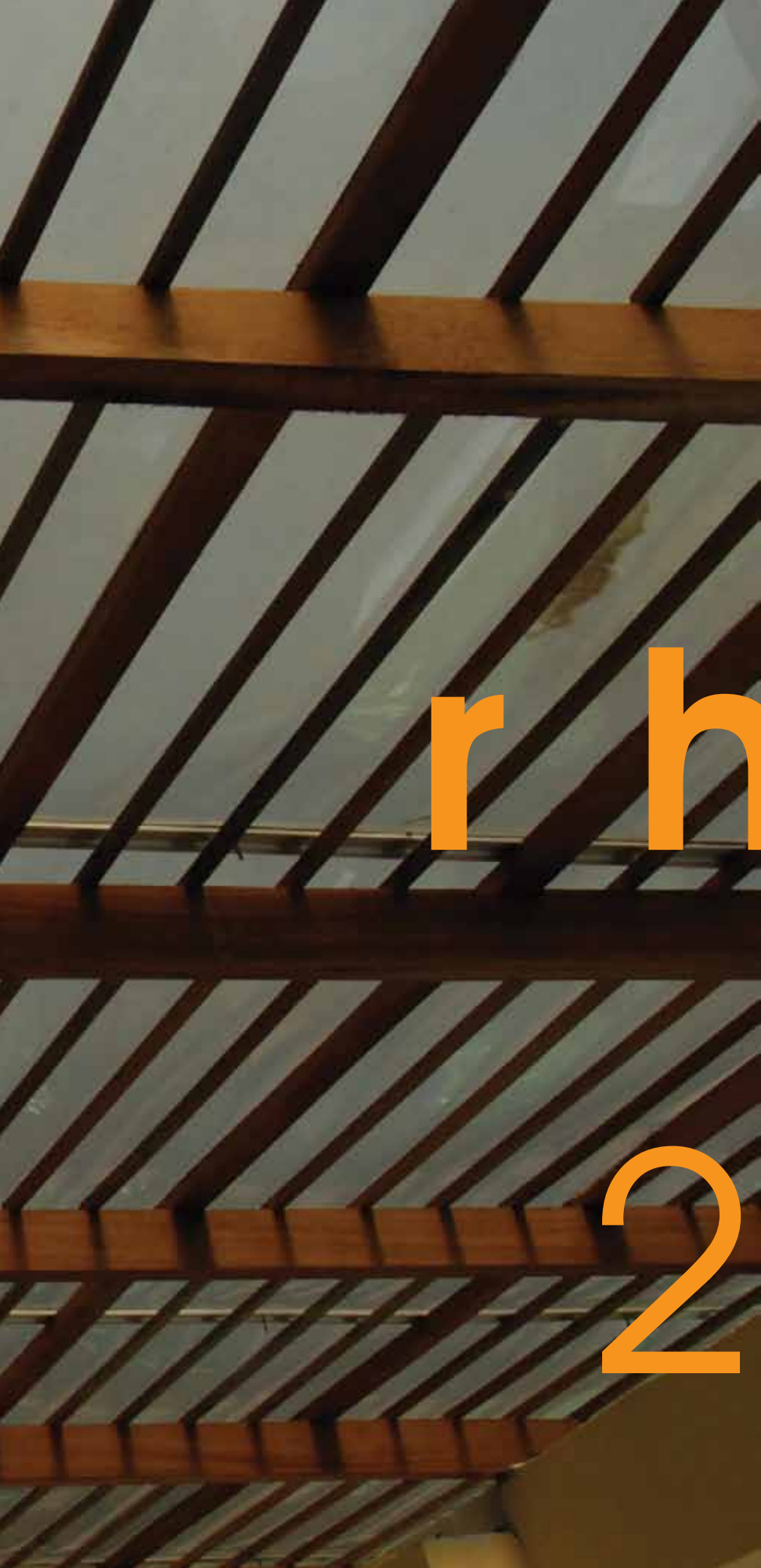
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Meor Mohammad Fared

STEdex'10



## e Nature

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Nature, in her grand splendour and purest form, has been a source of inspiration for artists, designers and architects throughout the ages. Vitruvius, the 1st century Roman architect, asserted that “architecture is an imitation of nature”. In his treatise, *Ten Books on Architecture*, he elaborated that “as birds and bees built their nests, so humans constructed housing from natural materials that gave them shelter against the elements”.

Abbe Marc-Antoine Laugier later expounded the idea in his *Essay on Architecture*. He asserted that “architecture as in all other arts: its principles are founded on simple nature, and nature’s process clearly indicates its rules”. He argued that a man in need of shelter against the scorching sun, retreated into the forest to seek refuge within its thick foliage. When rain came pouring down, he ventured into the cave that protected him against the dampness. However, to escape the darkness and foul air of the cave, he yearned for a dwelling that protected him against the searing heat and the dampness from the rain and yet provided him natural lighting and ventilation. Thus, with his ingenuity, the ‘rustic hut’ with its vertical posts, horizontal branches and inclined leafy roof, was born. From the logical creation of the ‘rustic hut’, Laugier deduced three essential elements of architecture – the column, the entablature and the pediment.

Organic architecture, coined by Frank Lloyd Wright, espouses the harmony between human habitation and natural world through sympathetic design approaches that blend a building with its surrounding. Architect and planner, David Pearson, through his *New Organic Architecture: The Breaking Wave*, listed rules in the design of organic architecture. He asserted that design should “be inspired by nature and be sustainable, healthy, conserving and diverse”. It should “unfold like an organism, from the seed within, grow out of site and be unique”.

For Academic Session 2009/2010, the Department of Architecture strived to infuse *DesigNature* in its architectural design studios. DesigNature encompasses the *Sign of Nature*, *Design with Nature* and *The Signature*.

The Sign of Nature reflects the approach of studying the elements of nature. Students are encouraged to seek inspiration from the purest form of nature. Some students even utilised natural elements such as tree barks, twigs and vines in their compositions. The series of installation works by the First Year students, best exemplify this notion of observing and applying the elements of nature in their designs. Twirling Web by Chan Chong Chong, a Second Year student, aptly portrays the intervention of a man-made object against nature and “embodies” the concept of organic ornamentation.

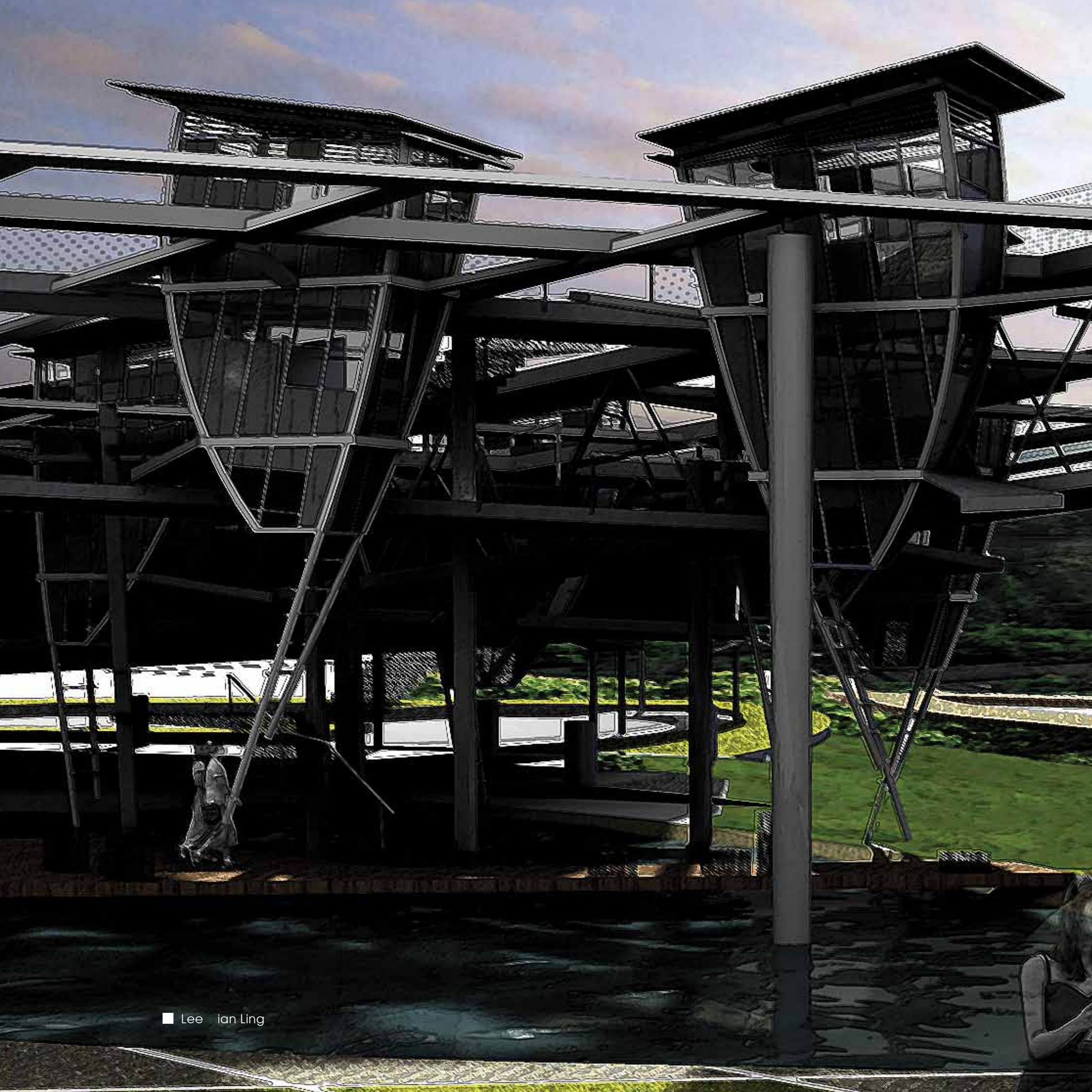
Design with Nature was interpreted differently by First Year, Second Year and Third Year studios. The First Year studio dwelled on designing against the backdrop of an idyllic nature of a beach front. Putrajaya and Taiping are two distinct cities providing Second Year students with challenges in designing within the nature of a structured and planned city versus a heritage city. The Third Year students explored the *Nature* of themselves in the Pavilion of Personalities – Exposition of the Self. Meanwhile, the Amphibios-Boatel offered challenges for students to design an accommodation for seafarers near a waterfront. Students had to understand the nature of relationship between *man*, his *watercrafts* and the *ocean*. The Third Year studio culminated with the notion of Design with Nature through the creation of an office complex within an urban lung.

The Signature reflects the desire of each student to create an iconic structure. As they were making their marks in the architecture field, students strived to conjure masterpieces with their studio projects. Either within the idyllic beachfront of Langkawi or the serene setting of Taiping Lake Garden or the urban park of Padang Merbok in Kuala Lumpur, students have left distinguishable styles and lyrical architectural melodies of their creations. Their creations either blended harmoniously with the surrounding or purposely “grew out of site and be unique” as noted by the jury.

The year 2010 marks 10 years of architectural studies at Universiti Putra Malaysia. The programme has trained 196 graduates in Bachelor of Design (Architecture) and 24 graduates in Bachelor of Architecture. Ten years is a short period to measure the success of a program compared with more established programs at UiTM, UTM, USM and UM. Nevertheless, within the short period of existence, the architectural programmes at UPM have received their respective accreditations from the *Lembaga Arkitek Malaysia*. These successes and achievements should be attributed to the pioneering staff who had laid a strong foundation for both programmes to grow and flourish.

To commemorate this milestone, a celebration en-titled “Architecture” was held on the 4th October 2010 in conjunction with the World Architecture Day. The whole day event culminated with the Appreciation Night where 10 classes of architectural students gathered, reminisced and celebrated 10 years of architectural studies at Universiti Putra Malaysia.









3

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## Exploration

o Ina Shar

The challenge for the First Year programme is to train or coach the architectural thinking process in the architecture field. Students are first exposed to architectural artefacts around them, creating awareness on the appreciation of aesthetics, materials forms, colours, textures, etcetera. The intention is to let students explore 'ways of seeing' for understanding and interpreting objects, places or events. By learning to look beyond the obvious, the 'hidden' qualities will be discovered. Hence, a subject could be seen as something with its own identity which each student could interpret differently.

The objectives of the First Year were met when students' knowledge and understanding improved. They were able to distinguish between conceptual and representational definitions of design elements—such as point, line, plane and volume—and design principles. They could visually interpret and define design elements and principles in their architectural design projects. The students were also trained to communicate their design intentions by means of two and three dimensional drawings, models and illustrative statements by transforming them into design outputs that incorporated all senses in creating the ambiance of an articulated space.

Projects were arranged to cultivate the imagination. The first semester started with a 2D Exploration that lasted 4 weeks. An introduction to the visual language was made possible by 2D Exploration through self-expression and artistic appreciation. Visual language was the basis of design creation and there were numerous ways of interpreting the visual language. It required students looking into possibilities of partial or total transformation, modification and deviation. The second project was called 3D Experimentation and was completed in 4 weeks. The project involved the students' understanding in design at three-dimensional (3D) level. The experimentation of forms and materials culminated in three dimensional transformation and creation of volumetric forms. The final project for the first semester was an Installation and took about 5 weeks to complete. This project served to complement the two earlier projects that required students to further explore the possibilities of incorporation with other dimensions.

In the following second semester, students were introduced to space and the emphasis was on designing interior spaces. A Living Quarter, a successful 3-week project dealt with interior spaces, circulation, spatial organisation in addition to materials, colours and textures to create a desired ambiance. The next project was called 'A Studio Tower' in which the understanding of spatial order and composition was further honed. For this project, they designed and experimented with a vertical space which required them to apply their knowledge on vertical circulation such as the staircase. Additionally, with the introduction of massing form and envelope enclosure, students could grasp the idea of structure and construction in their studio towers. The basis of the studio tower design theme originated from paintings from well-known artists.

For the final project in the first year, students were presented with a project called "Getaway". It was a holiday house to display their skills in understanding spatial quality, mass and form, building envelope and enclosure, and basic construction methods. Natural lighting and ventilation were considered in designing the holiday house. Proposals for innovative sun-shading devices were also requested to show their comprehension of environmental physics. In addition, knowledge on structure and construction should be evident in the getaway.

The artefacts produced and shown by students are well balanced in terms of creativity and skill development. The projects managed to uphold students' interest levels and broaden their knowledge and perspective about architectural design and the expected level of commitment from the profession.

# ry Review

N r z ee

The initial programme is about the realisation of abstract thinking and its development into the physical with particular emphasis on the experiences of the product or outcome. To this end, the groups' installations are more successful in generating responses as they tend to be vague enough to elicit varied responses and not too obscure as to obtuse some.

While more individual projects do manage to bring about intriguing physical forms based on the studied expression of abstract ideas by others, there appears to be a lack of awareness as to the spatio-forms generated through the exercise. This becomes more evident when students started creating actual architectural pieces and a clear dichotomy arises from all too generic architectural conventions of space in contrast to the more inspired, personal expression that envelopes it. In other words, the jury finds the expression of abstract only in the overall form but not much in the contained spaces within.



# n e e er e on

Na r ahar n

This installation intends to activate and represent the creative desire from studio practice to the public space. The students explored the basic medium of objects to question their autonomy, authority and history which were relevant to the contemporary context. The objects would form some kind of performance with body, nature and pattern of the site combining the experience of self, object and site in defining a new architectural space. The position of the objects and how they react to their own location would create a distinction of aesthetics in space and the social space in perceiving the purpose of object that reconcile the matter and people. The matters become the object of interaction, in which meaning arises out of the encounter between a spectator and the artwork.

## Project 1: Genesis of Reflections

The idea for Genesis of Reflections is derived from the local element of spinning *gasing*. The work is composed into a new sphere of approach within a site specific context to capture the attention and enlightens the surrounding. The medium-CD-creates a perplexing response in which natural sky light would affect the surface of the CDs thus giving them an optical floating reflection. The wire connecting the CD to the metal rod gives instability to the material causing the disk to spin and flicker in the wind. In addition, the space of installation and performance has no direct representation to self-consciousness or reflectivity.







Ahmad Farellrozan Fauzi, Bu Yeng Yeng, Chong Pui Kuan, Tengku Mohd Faiq Tengku Zakaria, Haslina Ismail, Nursahida Aripin, Muhamad Nur Mustakim Abu Bakar, Sarina Samin Zabri Elias.



STEDEX '10







## ro e e o o on

The deComposition involves five wooden pillars. They are carved with basic geometrical shapes resembling totem-poles. The Installation is a historical rejuvenation attempting to bring the spirit of culture into a new context of space. The top of these wooden poles were interconnected with rattan thus responding to the natural element projecting the dynamics of biological systems that are moving and not static. The wooden poles were structures on the earth's physical formation to contrast the existing architectural world of concrete.

Ang Shaw Hern, Clement Cheam,  
Amalina Asilah Azmi Nur Azizah Sawi



### Project 3

The project focuses on exploring the quality of surface and the tangibility of form in two dimensional spaces. By using the natural element in a conceptual process, students were instructed to perceive two dimensional forms to suggest new commodification in how the idea of surface would become the volume of space. The idea of surface, which is normally flat, is changed into a new purpose and perception. The design becomes a 'space composition' where the concept of volume would be decomposed by overlapping the use of materials.



Low Kok Kheng, Chuah in Yi, Sarina Samin Ong Kang Shin

ro e a on o r al In era on

In Contourical Interaction, the surface was constructed into contourical form, continuously repeated and changing by size. The surface was designed by the process of wrapping and weaving according to the formation of the contour. The wrapping activities created different pattern of colour strips that build the intensity of the surface and form as volumetrically presented. The artefact suggests the idea of emotion, form sensibility and interaction.



roe      an      l y o      e re en a on

In Tangibility of Representation, the design saw pieces of tree barks in a different language than the spectators. It invites people to speculate the varieties of planes and how the illustrated surface is built and characterised. The characteristics of the textured natural material evokes a glorious pattern in glooming colour that would strike the observer to feel the curiosity of the tangibility.



■ Ang Shaw Hern, Clement Cheam,  
Amalina Asilah Azmi    Nur Azizah Sawi



# STEDS '10



■ Chen Mei Sien, Muhamad Nur Mustakim Abu Bakar,  
Tan Sin Yee Liang Sze Fatt





ro e   S a n   he S a e

In Spacing the Space, tree branches were overlayed over each other in order to perform the transparency of space and the quality of line forms. The effects of the projected line forms, either consciously or unconsciously, virtually penetrate and acknowledge the 2D physical representation as unlimited surface production. The surface was perceived as unlimited with the layering process forming the picture space and shadow forms. Artificial lighting adds reflective overtones moving shades and shadows following the observer's eye movements.



## er en al o en

oh Shahr n anan

Extending the idea of formulating systematic design activity among the newcomers in architectural field, Clement Cheam in this proposal, provokes a question on how architecture is directly experienced. In answering the question, the coded meaning of 'phenomena of emergence' inspired by the contemporary computer programming artist, Anthony Mattox, was recontextualised through semiotical translation of animated projection of rectangular planes embedded with radial asymmetric patterns of circular skeletons.







■ Clement Cheam Heng Kit



Clement Cheam later argued that the proposition of embodying perceptual empiricism of human experience in architecture by addressing the movement of bodies in space through programmatic materialised structures together with the actions and events that would take place within the proposed folly. The abstractive communication between form and texture that would emerge from the simple process of repetitive elements would stimulate direct human senses while experiencing the architecture of the folly. The protrusive geometric planes, in providing cantilevered shelter, encourages unstructured playground activities within the designed spaces while it texturises the folly with bold reflection of multilayered shadow patterns.

Overall, the folly shows Clement's maturity in criticising the 'phenomenology of emergence'. While questioning form-function relationships, his design paves the way for more open-ended arguments on the idea of experiential embodiment in demolishing artificial divisions between human, architecture and natural environment.





## heor n earan e

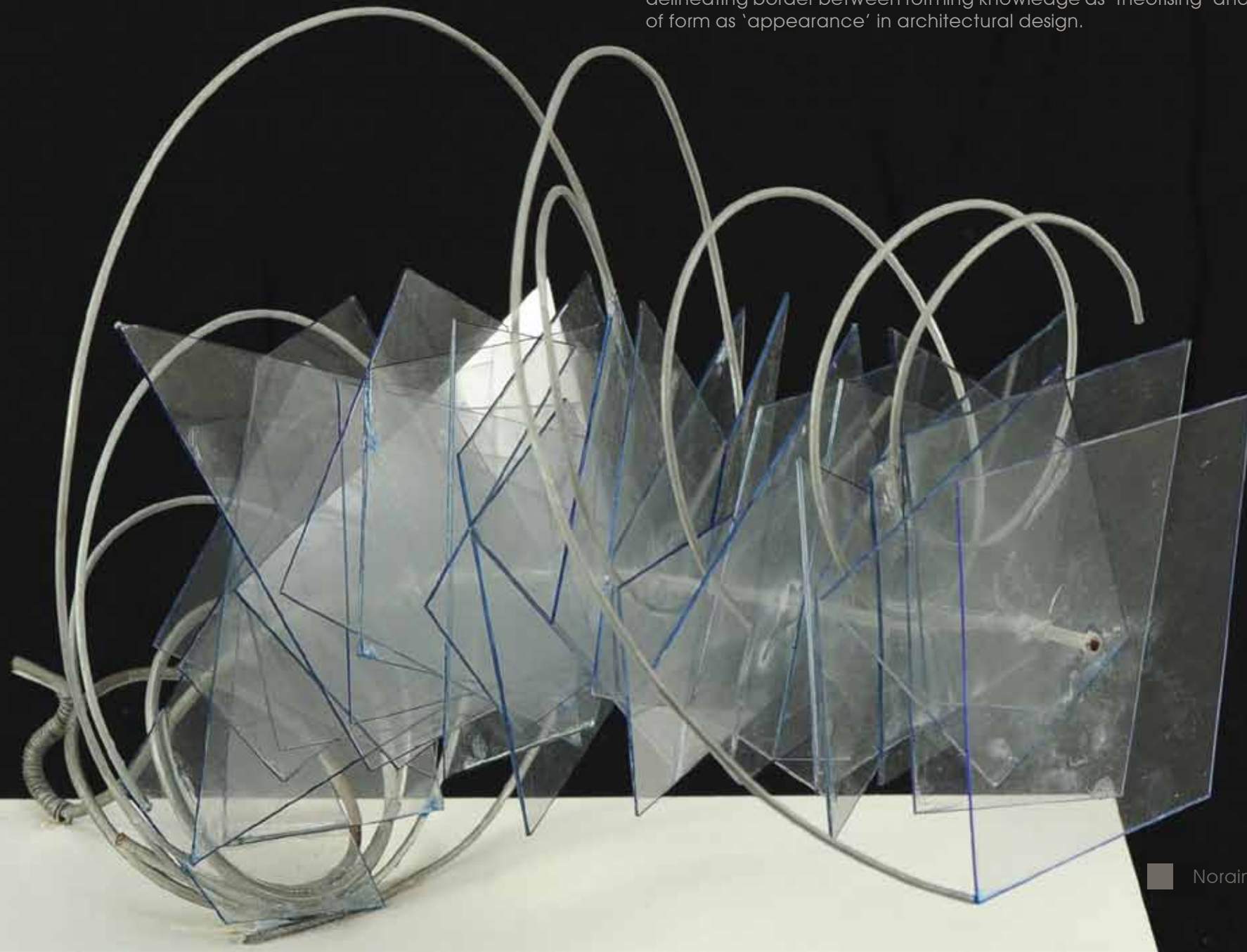
Mohd. Shahrudin Abd. Manan

The project attempts to formulate a systematic design activity among newcomers in the architectural field. The activity is not limited to the intentional physical movements as a constructive discipline in making tangible forms but is also extended to the activity of thinking as an act in understanding normative theory of design principles. Coordinating the activity within progressive cognitive thinking through documented design sketches and scientific skills of quality workmanship through various scales of experimental study models, the whole design processes are eventually manifested in a form, a structure of free-functions with unspecified events. The processes cover the initial phase of introducing students with interdisciplinary discourses of environmental design knowledge followed by analytical critique of design ideology from selected prominent artists.



In this design, Norain perceived artworks of abstract expressionist sculptor, James Rosati as a structured language to be semiotically translated into an existential folly. The artist's experiments in marrying animal formalism with geometric juxtapositions, colour exposures and textural compositions became the theoretical footing while materialising her folly's appearance. Adopting ant as her referential subject, the characteristics of the invertebrate animal were theorised to deconstruct appearance of ornamental images, skin envelopes and exoskeleton frames of her proposed folly.

The folly later augmented the Parc de la Villette of Bernard Tschumi's proposition on design crossprogramming in organising systems of space, event and visibility in unfixing architectural monumentality. It, at last, becomes a mode in delineating border between forming knowledge as 'theorising' and knowledge of form as 'appearance' in architectural design.



Norain Binti Ismadi



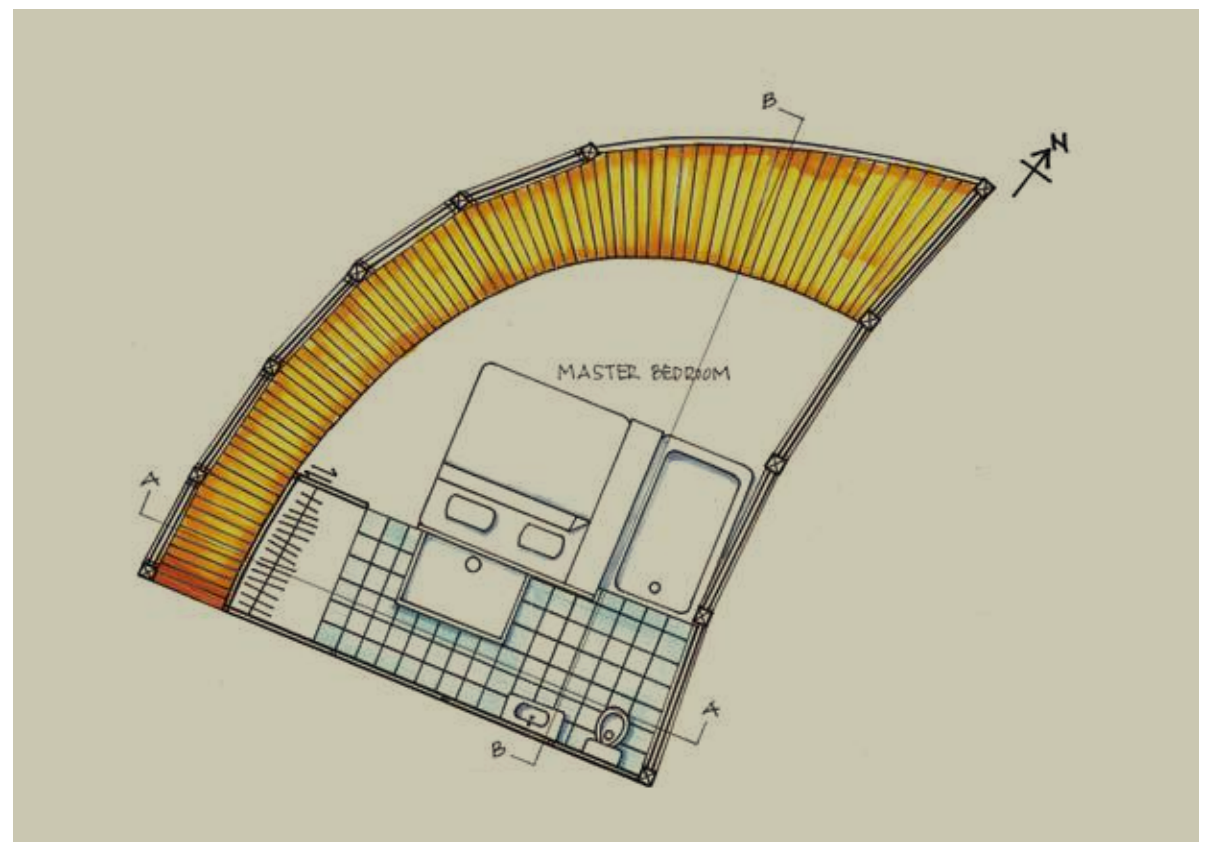
# hy h o on

o I na Shar

A Getaway, is the starter for the First Year students in their spatial design project. It deals with simple site factors. It is designed as a place to appreciate nature while relaxing the mind and body. The site is a secluded beach which permits good view of the blue ocean. The get away orientation successfully captures the serene and majestic view of the sunrise and sunset.

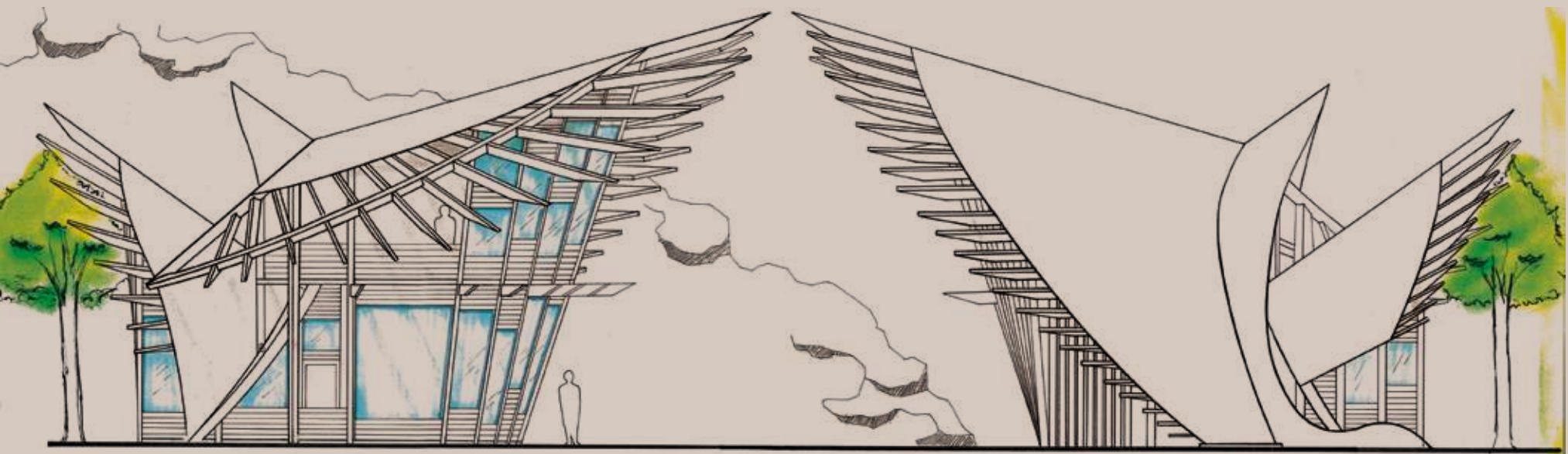
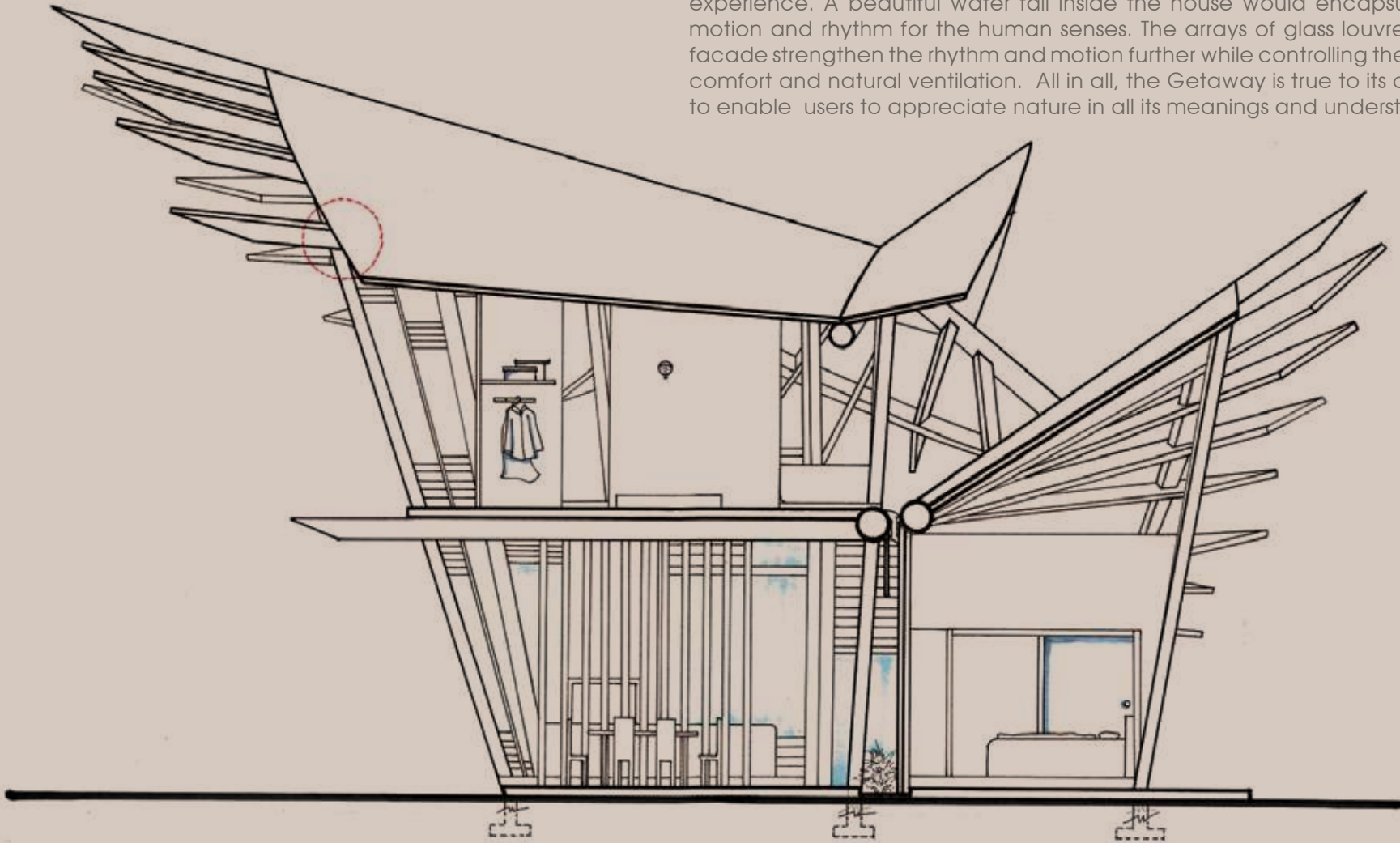
The excitement and the desire in experiencing the ocean and the rhythmic movement of the water are encapsulated in the design concept. The main structure, the skeletal timber structure, is arranged in such a way that creates and embodies the 'motion' concept. The motion starts from the ground and modulates up towards the ocean. Whilst creating the rhythm, the exposed structure also acts as a shading device resulting in captivating shadows playing on the ground. This motional and rhythmic skeletal timber structure has created a very large and sweeping roof, and undoubtedly easily recognisable from afar. Thus, becoming the potential landmark at the area.

For interior, a small garden and water fall are inserted between the living room and kitchen right up to the children's bedrooms to bring nature into the house. A glass partition is used between children bedroom and the living room so that during rainy days water will be trapped and will fall or flow into the house. Water will be visible through the glass partition creating a calming and yet exciting





experience. A beautiful water fall inside the house would encapsulate the motion and rhythm for the human senses. The arrays of glass louvres on the facade strengthen the rhythm and motion further while controlling the thermal comfort and natural ventilation. All in all, the Getaway is true to its objective to enable users to appreciate nature in all its meanings and understandings.







## Shell e rea

o I na Shar

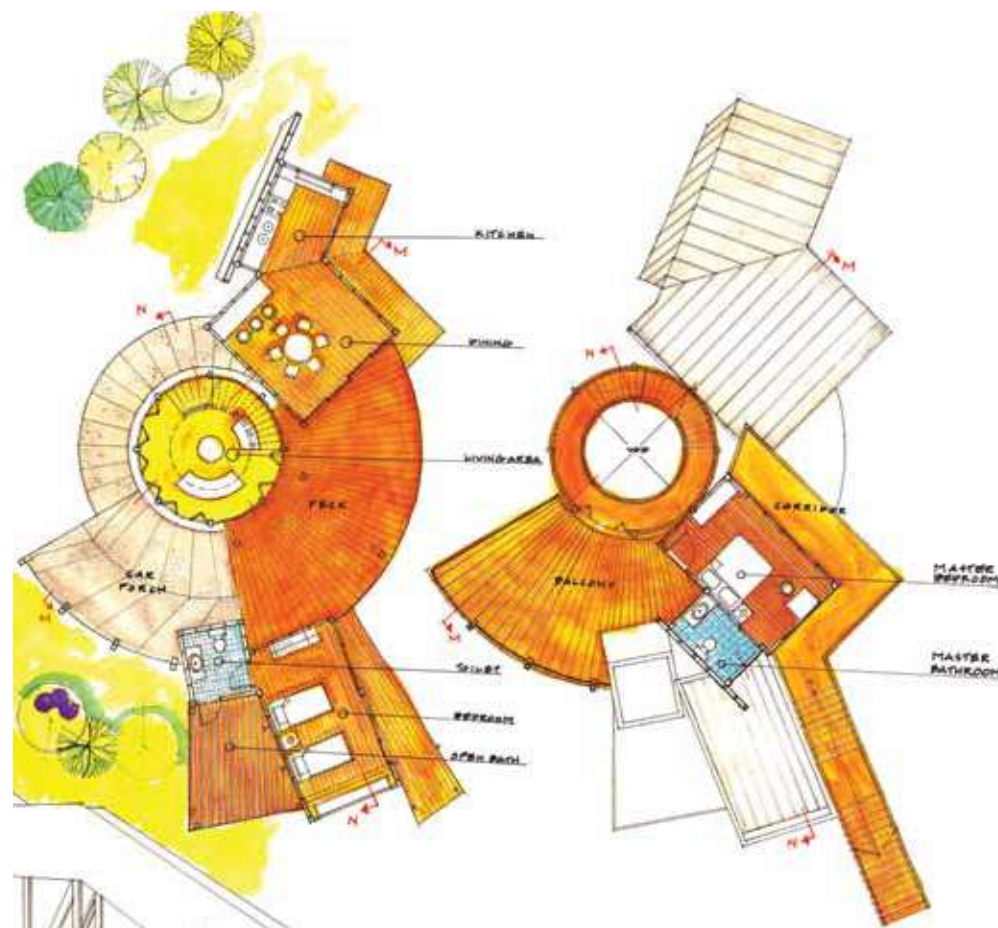
A Getaway, the final project for the first year, is designed to accommodate a family of five in a serene and tranquil environment with the objective of rejuvenating and enjoying the beauty of the natural surrounding. It is designed to respond to simple environmental and site factors where the design intention is to create a perfect hide away that separates the 'real' and 'illusion' yet getting the feel of primordial relationship with mother nature. It speaks local but in a universal language where the space planning contributes to the Malay vernacular housing such as the use of decks in the design.





The design concept was derived from the study of a shell where its characteristics i.e., safe, secure, private, strong and inclusive were applied. The radial organisation, derived from lines at the surface of the shell, was used by Ahmad Helmi as the design approach for space planning and form development. The design processes involved precedent studies, site analysis and programming spatial relationship between the spaces.

The site is a secluded beach in Langkawi which offers the majestic view of the sunset. Thus, an axis of the sunset is taken as a node on the site when designing the spatial organisation. The living room is located at the center of the house and the rest of the spaces emanate from it at different levels of the house while getting the best view of the sunset. The design of decks and the use of shading devices conveniently limit direct sunlight from penetrating into the space. The orientation of the house also helps to define a private space of landscape where it brings the natural landscape into the house. All in all, the design was mainly based on the idea of creating a hide-away where space planning and indoor comfort are the main factors for consideration while maintaining the fundamentals and understanding of basic site factors.



Ahmad Helmi Abdul Zubair





Photo by:  
eor oh are





# 4

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# Selection of a role

oh a r a y a'a ar l ah oh n

The year's projects are organised from micro scale to macro. The very first project, ANTHROPONEST, dwells with the most basic need of a human being-shelter from the elements. The Putrajaya Information Office requires students to deal with the design issues of a public building, albeit a single function with minimum space requirement. In Taiping, the brief was to design a full-blown public building. The proposed Taiping Heritage Gallery has a specific function in conveying the spirit of the past in a refreshingly contemporary context.

## anthropone

Preceding this project, students had investigated the cultural significance, meaning and symbolism of a particular plant in a chosen culture in a project entitled 'prologue'. This understanding has to be conveyed through a poster and interestingly, through a play. This exercise prepares students to appreciate the materiality of building materials in a holistic manner.

Having looked at nature in a new perspective, Anthroponest, the project that succeeds, dwells on the question of how human survive in nature.

Man, like some species of the animal world, achieved a high rate of survival by being able to moderate the natural elements to survive in various climates and conditions. In this exercise, students were instructed to produce a 'nest' for human which can moderate the harsh elements of hot and humid natural setting like the Malaysian climate with its tropical flora and fauna, as well as to protect against the natural enemies ever present from the animal world.



The requirement is to provide a single space, habitable by a few humans, providing a minimum degree of protection from the elements. However, what really distinguishes man from other species is the ability to think of abstract ideas and associate meaning to these objects. Therefore, in creating the nest, abstract ideas drawn from observing nature must be evident in their proposal. The level of abstraction is opened for students to explore, be it a pattern observed in nature, the survival techniques of a certain plant, the decorative pattern found or the intangible human emotion evoked by observing natural phenomena.

**Putrajaya Information Office**

Putrajaya is a new township built in an old palm oil plantation south of Kuala Lumpur. It is meant to be the hub for Malaysia’s federal administration. The planning of the city is such that it is meant to cater all federal government offices in one district. It is a reasonable strategy to gather several government agencies in a well-planned district as an administrative city. However, with numerous agencies sprawled in the district of a sizeable area, the task of locating a place of business can be quite daunting. The proposal is for an information office to be located at the heart of Putrajaya Boulevard, a 4 km vehicular spine running from the Prime Minister’s office in the northeast, to the Putrajaya International Conference Centre to the southwest.

The office is to serve as a one stop info centre for visitors who have business with government agencies around Putrajaya, providing information and direction to the various offices. Visitors can also expect to have personal consultation on the general guidelines of various official procedures for the different agencies. A bus stop is also provided for hop on - hop off service buses travelling between the offices. Parking for staff is to be provided on site while parking for visitors is at the existing general parking area situated across the boulevard.

## **a n e r a e a l l e r y**

Architecture is not only about designing a building but also designing a 'place'. One of the overriding ideas in architecture is to identify the spirit of the place and translate it into design. Hence, it aims at a building in harmony and affectively right for the place. This project producing trains students to capture the spirit of a place and translates it into the design of a gallery. The place chosen for this exercise is Taiping, a town rich with the history of colonial Malaya. Its corners and streets remind us of our historical connection with the Great British Empire. The declaration of 40 firsts in Malaysia (first railway, first prison, first swimming pool, first lake Garden, etc.) shows how important this town is in shaping the history of Malaysia. The whole town is teeming with a unique genus loci (the spirit of the place), making it a good choice for this exercise.

A gallery is to be proposed in the Taiping Lake Garden vicinity to provide a one-stop centre for visitors in a hurry to have a glimpse of the historical of Taiping. The proposal calls for a gallery facilities meant to depict the rich history of Taiping while at the same time, capturing the spirit of the town for its visitors.



# ry Review

N r z ee

The selected works are refreshing examples by students whom, as they are developing their awareness of architectonics behind the familiar world around them, strive to manifest them as detached as they could from what they have already known. Such a process is commendable at a stage as early as their sophomore year. The components of the selections do evoke familiarity but there is not much left to it after the ideas are put together. Such opportunities would further allow students to tacitly expand their knowledge and sharpen their acumen of the more technical aspects as they strive to make their unique ideas work.

The projects display the generosity in the latitude granted to the students in exploring their own ideas rather than constantly binding them to the generic, the conventional or the clichéd.

## rl n e

N r al lah ahlan

The anthroponest project touches many aspects of survival within the rainforest setting of Ayer Hitam forest reserve. Located more than 6 meters above the ground, the design incorporates lightweight timber construction.

Despite the lush vegetation and insect interferences, the author finds the surrounding playful and worth exploring. His twirling web-like design reacts as a vertical circulation route and a safety barrier. Given the fact that it is built more than 6 meters above ground, the design celebrates the forest's lushness at slightly more unique vantage points. The irregular overhead structural arrangement is designed to shade the spaces underneath from excessive sunlight in a way that creates a second layer of silara that portrays a man-made intervention that complements with nature.





The rhythmic arrangement of the intertwining structure distinguishes between the human spaces and the natural surroundings. By creating radial structures, Chan Chong Chong disguises his anthroponest to imitate the spider web.

The project embodies the concept of organic ornamentation, a strategy that is in accord with the natural setting of the hot and humid rainforest of Malaysia. Splendid vertical circulation evokes the challenging atmosphere of gravity defiance. Nevertheless, the journey promises not only as an aesthetic engagement but also encourages interaction with the surrounding biome.



Chan Chong Chong

# Sl n e

N r al lah ahlan

The serenity of the Taiping Lake Garden is framed through the web openings of Nurul Atteya's Gallery. This modest sprawling structure displays a fine degree of contrast yet settles on the site brilliantly surrounded by century old trees.

Her design highlights series of events starting from the first settlers of Taiping, the tin mining business boom, civil conflicts, moral revival struggle and the Taiping we know now. Located in a close distance with the Taiping Prison (north) and Lake Garden (south), the designer sees her design as a bonding entity that connects those two prominent landmarks.

The interpreted connection is masked using a group of organic-volumetric concrete structure and fuses natural lighting throughout the exhibition and library areas. Despite its massive round concrete construction, the interior space which houses the series of events is sliced with thin web like partitions representing the fine line of time continuum. It is a clever way to optimise the interior spaces, turning them into a one long interior lit up with soothing natural lighting.



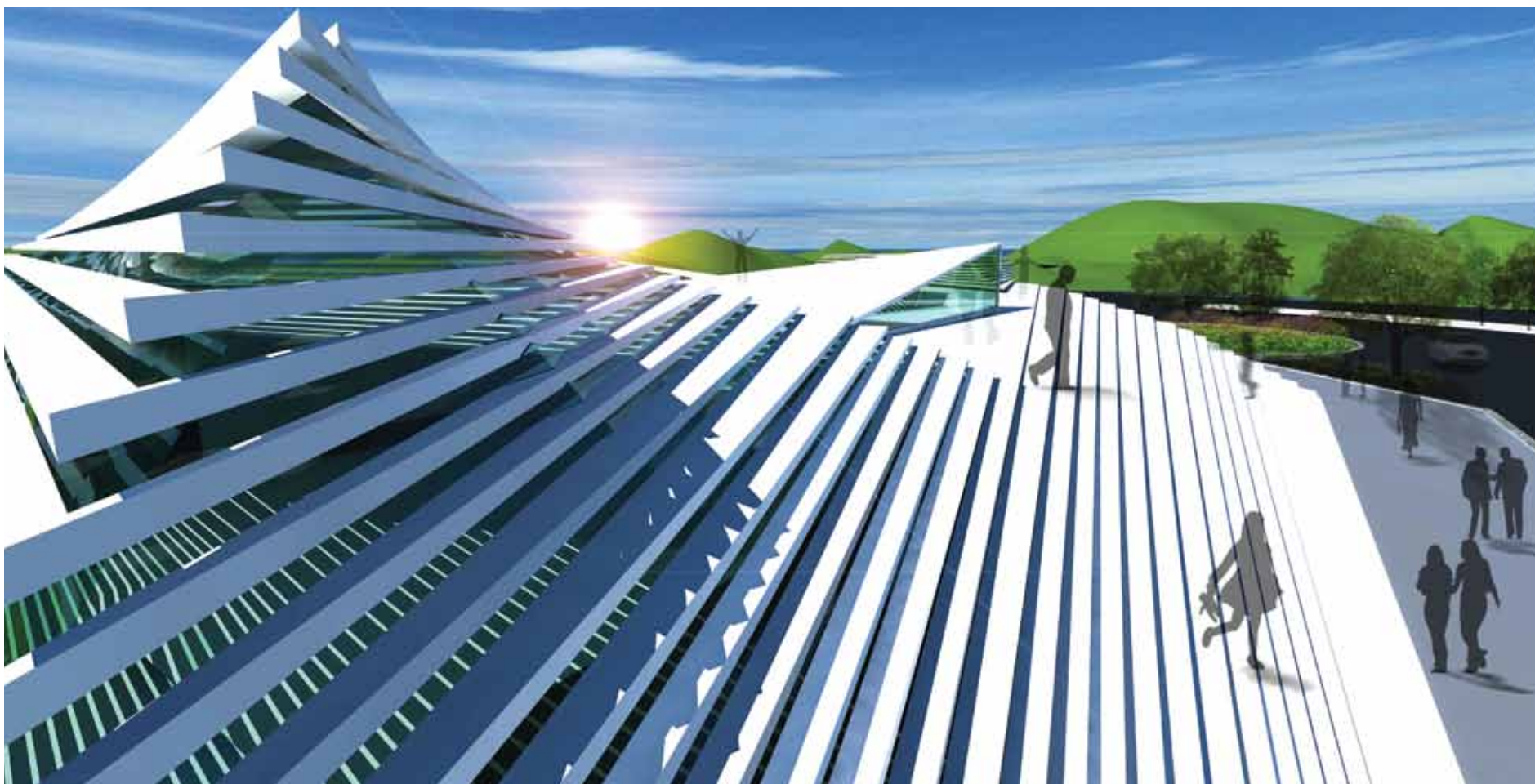


In terms of getting the message of education across, Nurul Atteya introduces a design that manoeuvres its interior spatial programming to highlight Taiping's history. Its inviting form is proposed to attract the local younger generation to 'check out' the gallery's facilities, mainly the library.



■ Nurul Atteya Adnan



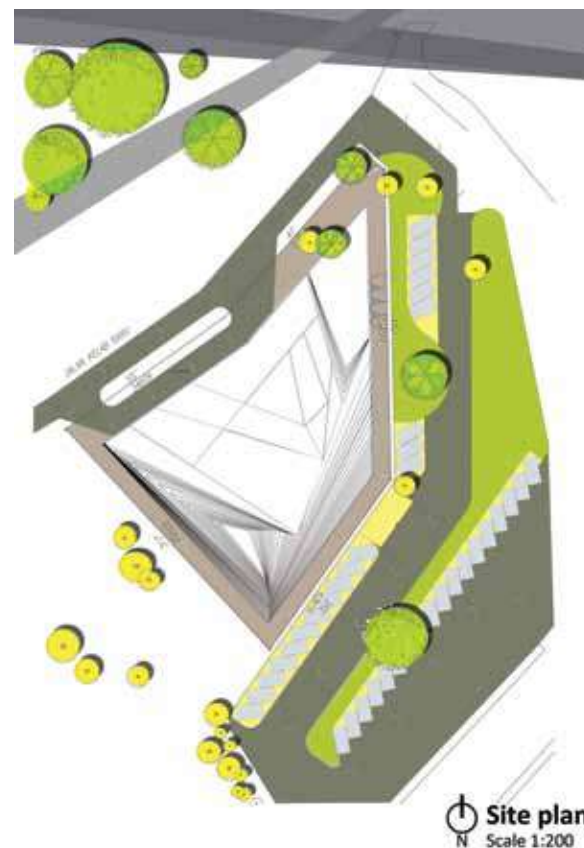


## S rea o ory

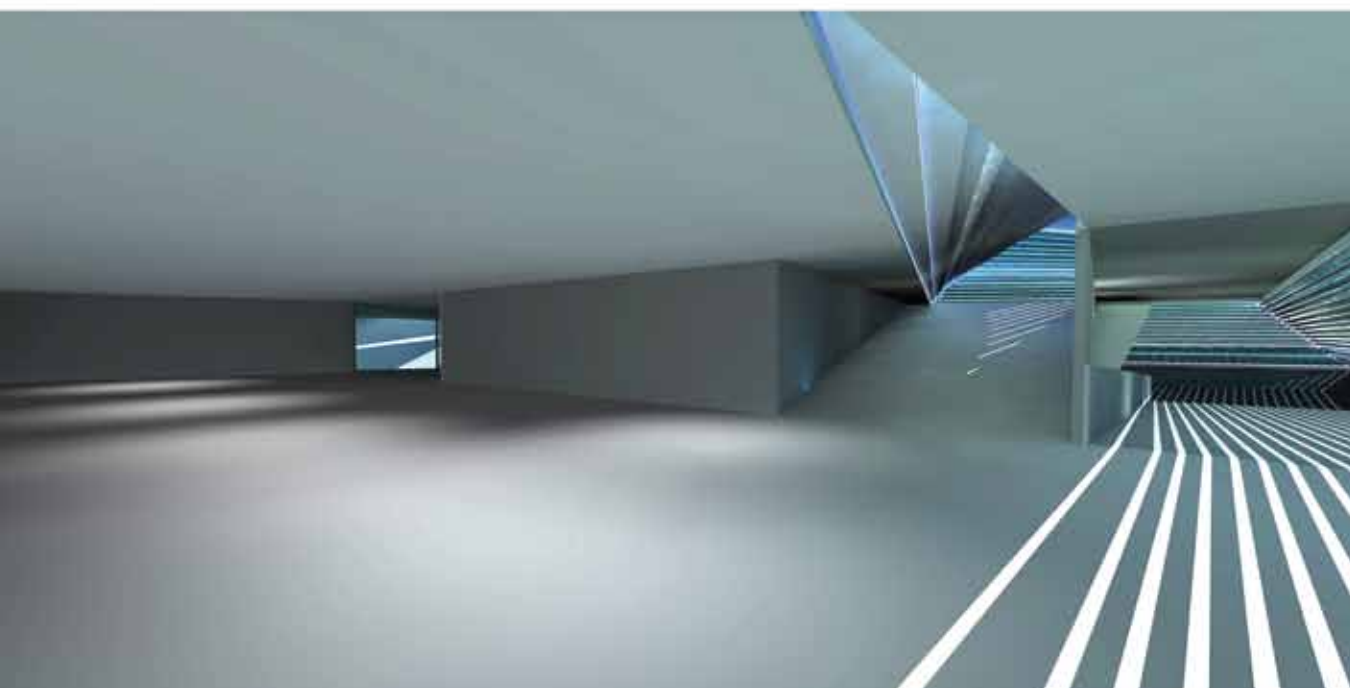
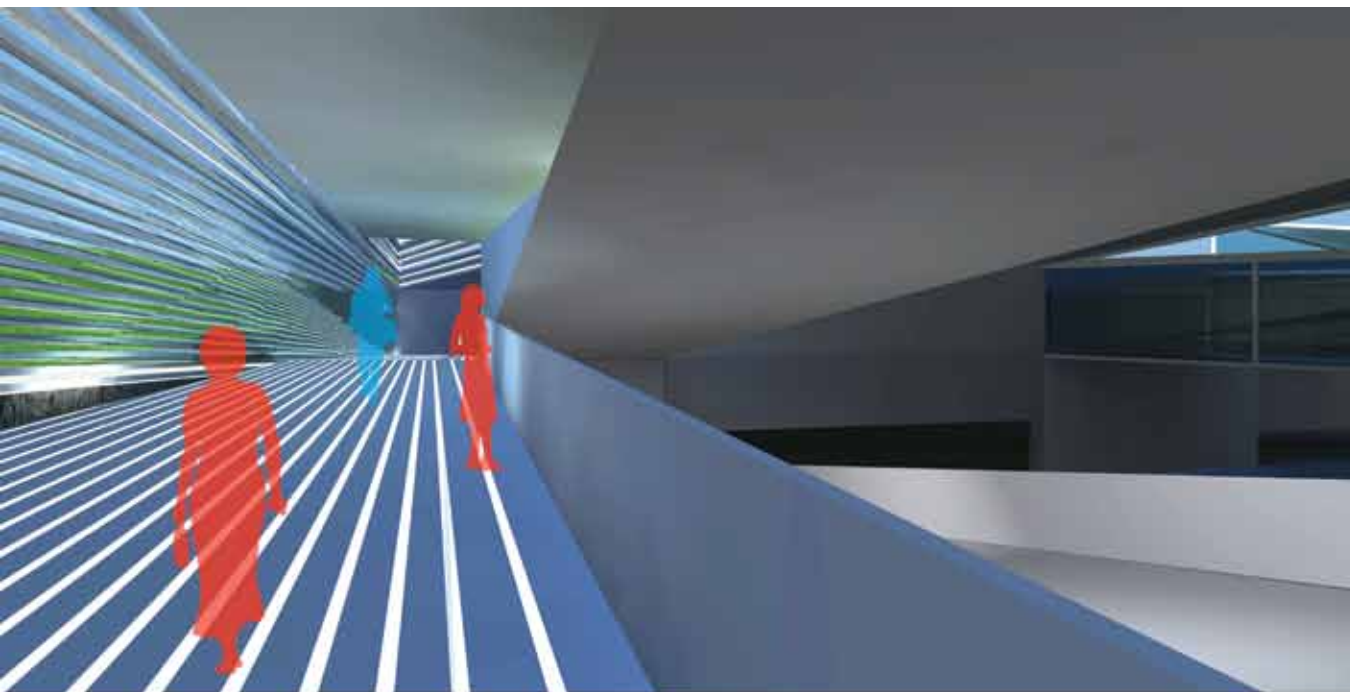
oha a a r a y a'a ar

The gallery is set in a green surrounding of Taiping Lake Garden, the first lake garden in Malaysia. It is meant to persuade visitors to immerse in the rich history of Taiping i.e., the tin mines, the Larut wars and the advent of British Colonialism in *Tanah Melayu*.

The design takes a different approach to buildings of heritage and history. Rather than the feel of a museum of yesteryears, the gallery conveys the idea of universality consisting, of modern ideas of forms and meaning. Strong horizontal lines indicate openings for views, light and ventilation. Realising the artefact status of the lake itself, the gallery is subdued by being pushed into the ground. Nevertheless, being at the edge of a higher ground, the sunken level still enjoys outside views of the lower part of the garden towards the lake.







Non building and anti object seem to be the overriding feature of this proposal. Other than the gentle protrusion of the two entrances on the higher ground level, the spaces are within an enclosure and seems to mimic the existing contour. Nevertheless, the presence of an intervention is made strongly by stripes of white horizontal spandrels. Rather than making a statement of being the house of artefacts which it actually is, it takes the form of a modern shelter for people to view the surrounding of the historic lake, making the connection to the past being felt more strongly. The idea of non-intrusion into the pristine site seems to be served well by the overall strategy. The need to be noticeable is nevertheless achieved by the strong white horizontal spandrels. The connection to the past i.e., direct view of the lake itself, on the other hand, is achieved by the streaks of gap between the white spandrels.

The main spaces are naturally ventilated. The need for air-conditioning is only for the supporting facilities at the rear section at the lowest level. Direct sunlight is purposely allowed to infiltrate the interior to create intriguing play of shadows in the gallery spaces and ramps. Balancing the need between daylight and heat gain is crucial in such an arrangement.

■ ie i lin



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5

# r h No a on heno enolo y

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Wan Sofia Wan Ishak & Nik Ariff Azmee

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# Phenomenology

Kalsom Mohamad, Wan Srihani Wan Mohamed, Wan Sofia Wan Ishak &  
Norazee

The phenomenon that innovation cannot be controlled is fictional. Modern movement that began in the early 20th century evolved as time changed. There are no designs impossible to build as the invention of new materials and products are as recent as the inspirations of the new generations in this chapter.

There are 2 different projects with different scales, requirements and expectations presented here. Each semester has one small-scale project and one medium-scale project. The small-scale project acts as a catalyst to initiate students' creativity in architectural design studio with the intention for tutors to gauge their capabilities in design.

## II N S N IIS- SI N S

The projects' primary objective is to initiate a more individualistic and inspiration-based approach to design in contrast to a more systematic or algorithmic-based design processes. The exercise requires responses to context and brief on individual selected parameters for more idiosyncratic solutions to the same design brief.

On each respective plot, the student designated to the plot designed a morphological statement of themselves which is actually an architectural expression or representation of their own respective personalities. Within that metaphor, the students introduced functions into their pavilions that allow visitors to know more about their respective personalities in the manner and form as per determined by the students themselves.



### I I S

The boatel is a waterside hotel to be designed primarily for boating and other watercraft activities. They offer both transient land facilities for journey breaks as well as a point of arrival/departure for the area around it. This project involved students in all phases of the design process from research to the formal design solution, formal presentation and preparation of the drawings ready for construction.

As it is a new approach to look into hotels for boaters, students are required to do research into the culture of boating and watercraft enthusiasts, design of accommodation within boats or watercrafts vessels, docking technology of watercrafts, and develop understanding above the relationship between man and his watercrafts. Later, it is the individual's responsibility to create the best configuration of docking in relation to the habitat units followed by the other facilities of the boatel and its waterfront environment. The design of accommodation units should have a similar approach as if designing within a water craft i.e., design which does not rely on loose furniture to serve different functions but are fitted or built into the units themselves for easy maintenance.

# ry Review

a ee S h

## S a e or holo y

A dynamic form to resemble one’s self gives a bold interpretation of how the designer sees himself. The multi-level spaces could be denoting the ups and downs in his/her life and the transparency could mean the honesty of his/her principles. On the other hand, the octopus-like form could very well depict the complexity of the persona of the author while the tranquillity of the blue colour could be to mask its deeper mysteries. The interesting spaces draw the eye inwards and, as a pavilion, hopefully the visitor as well. The openness of the structure further aids in the free movements of the visitors.

## ell on

It is often rather a difficult task to depict one’s self, metamorphically, in a physical 2D or even 3D format. This display attempts to do just that. The choice of disjointed forms (in this case like cubes) breaks the clarity with which one can be described. - Often what one is and what one is seen to be could be quite distinct. These disjointed pieces offer just that - a juxtaposition of images, perceived differently when viewed from different angles.

## o ern hale

These hi-tech pod-like structures house accommodation for sailors when on land break. Seemingly growing out of the earth’s surface, the buildings are configured in a grid layout with walkway bridges linking them together and a separate common facilities block. The ground beneath the pods is left free of built space, thus providing an uninterrupted vista from the land out to sea. This outdoor space can be utilised by the occupants for interacting with other tenants or as recreational space. Although at first the units seem to be randomly located, there emerges a distinct order which provides the bonding of individual pods to the overall scheme.



Sea ar n o e

This adaptation of the seagoing vessels of yesteryears is both unique and bold. The individual units accommodate living quarters of seamen respecting the elements, both those that are desired and those that are to be avoided. The design is a bold approach in three dimensional thinking and space planning. The fluid shape and hierarchy of spaces is obviously inspired by the free-form of the surrounding nature thus the project blends well in its site context. The construction of the fabric structure would lend some form of semi-permanence to the project and it would be interesting to see the project change/grow over time i.e., in different form of colour of the 'sails'. This would be a visual delight to be presented with a slightly different form each time a visitor would visit the place.

ele al a o

The aliens have landed This is another scheme offering elevated living pods in the shape of something quite unique and out-of-this-world. The cluster of 'aliens' are located in bushland territory close to the water's edge seemingly awaiting its prey arriving from the sea. This 'alien feel' is further accentuated by the silvery skin and diamond-shaped windows of each pod. The village features jetties by which the sailors would arrive to their land-based accommodation units. Internally, the accommodation provides a hi-tech feel yet the expanse of glass claddings relate the occupants back to the water element from where they came.

o or h o el

This Boatel provides accommodation akin to a boat with creature comforts that are normally expected in a hotel. The shape and configuration of the structure is reminiscent of waves while the windows reflect the expanse of the seafront across the building. The only letdown is how the boatel seems to be actually so detached from the water body, when a closer dialogue could be held between the two.

# Space or holology

Ng Han Hung's pavilion is a

The morphological interpretation of a pavilion that depicts one's personality is very much based on personal preferences especially in the choice of forms and composition. What is immediately perceived of this pavilion are such preferences by Ng Han Hung which could only hint the personality responsible.

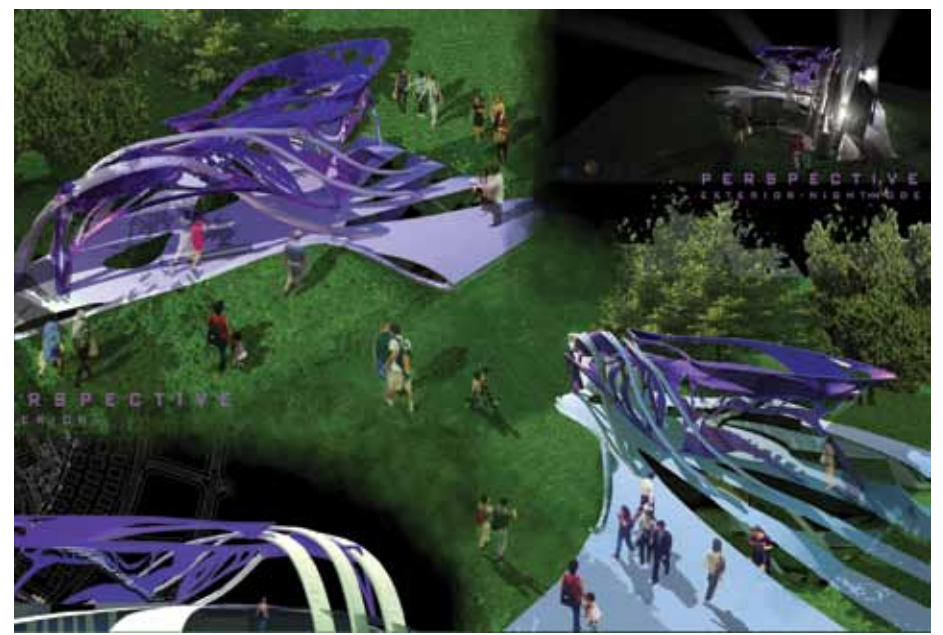
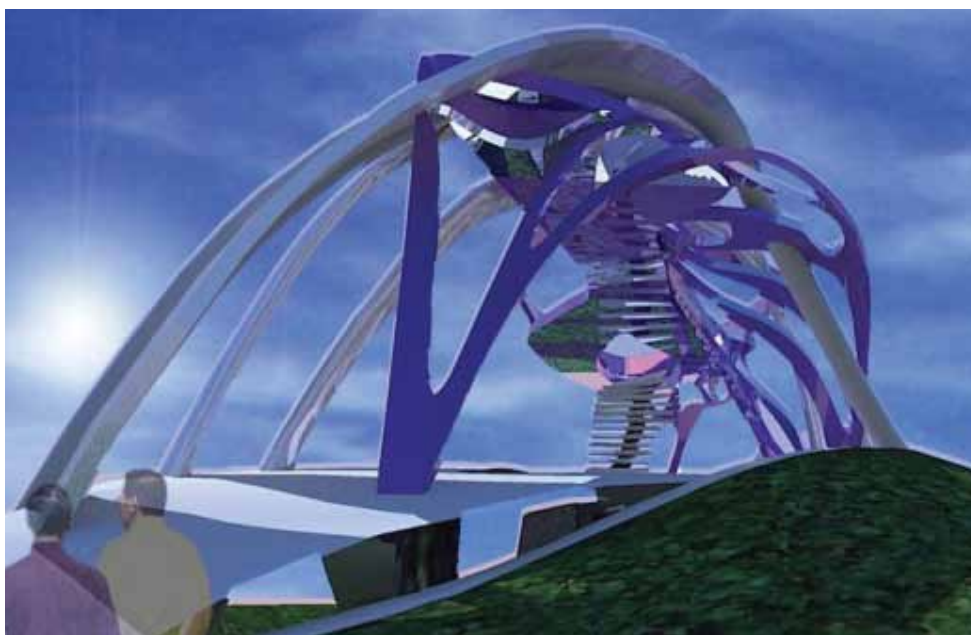
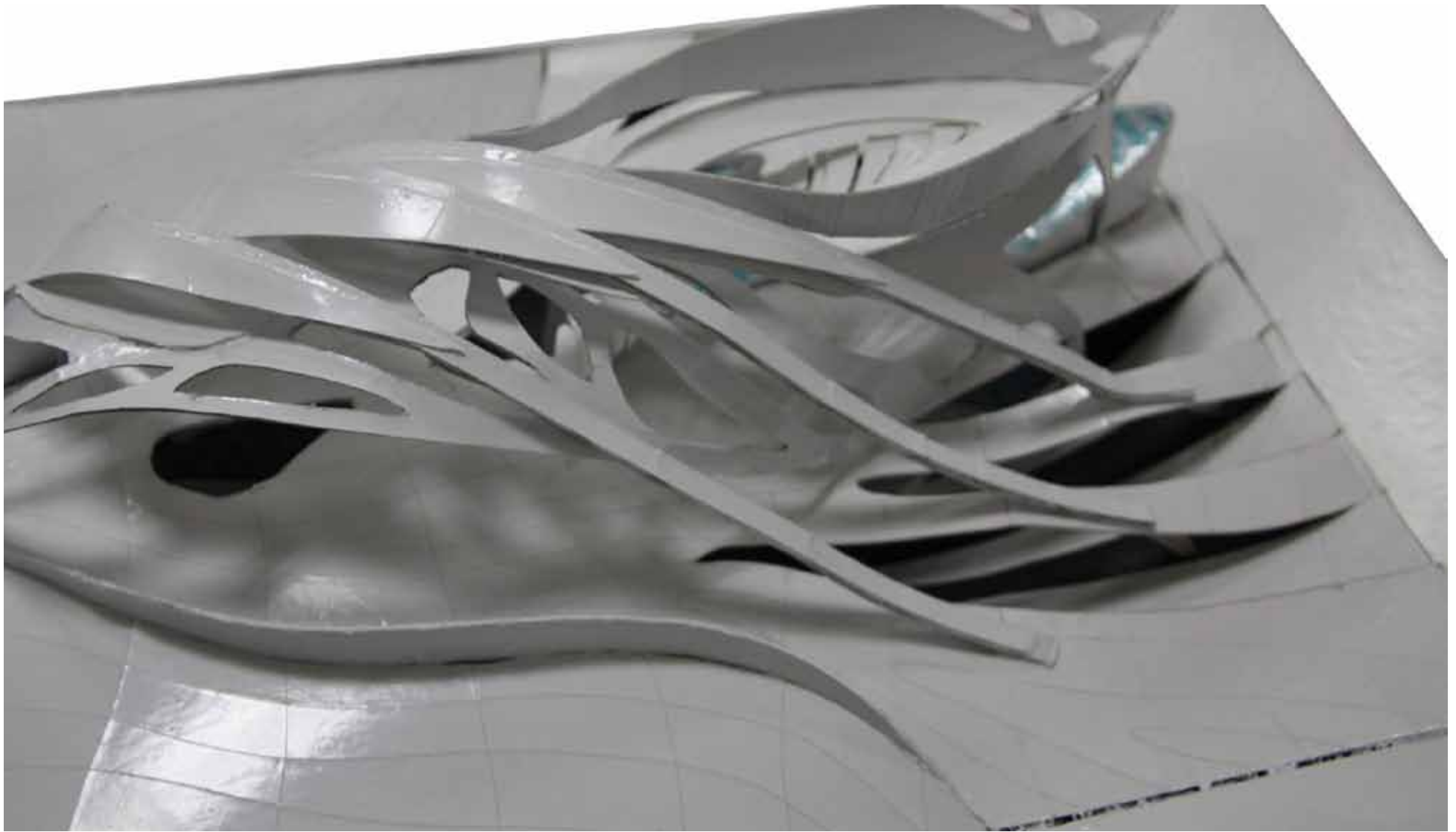
However, a clearer manifestation of the personality can be experienced by a visitor when he or she goes through the pavilion. The form therefore functions at the very least, to draw the visitors into these experiences.

Using architectural conventions to lead, such as stairs that go up or down, the ultimate experience might not be fully perceived by the visitors as the designer has intended unless actual labeling or narration is provided in situ. Nevertheless, the choreography of the movements throughout the pavilion and the character of the spaces could be as much as what the author would want others to experience about him even if his ultimate message escapes them.





Ng Han Hung



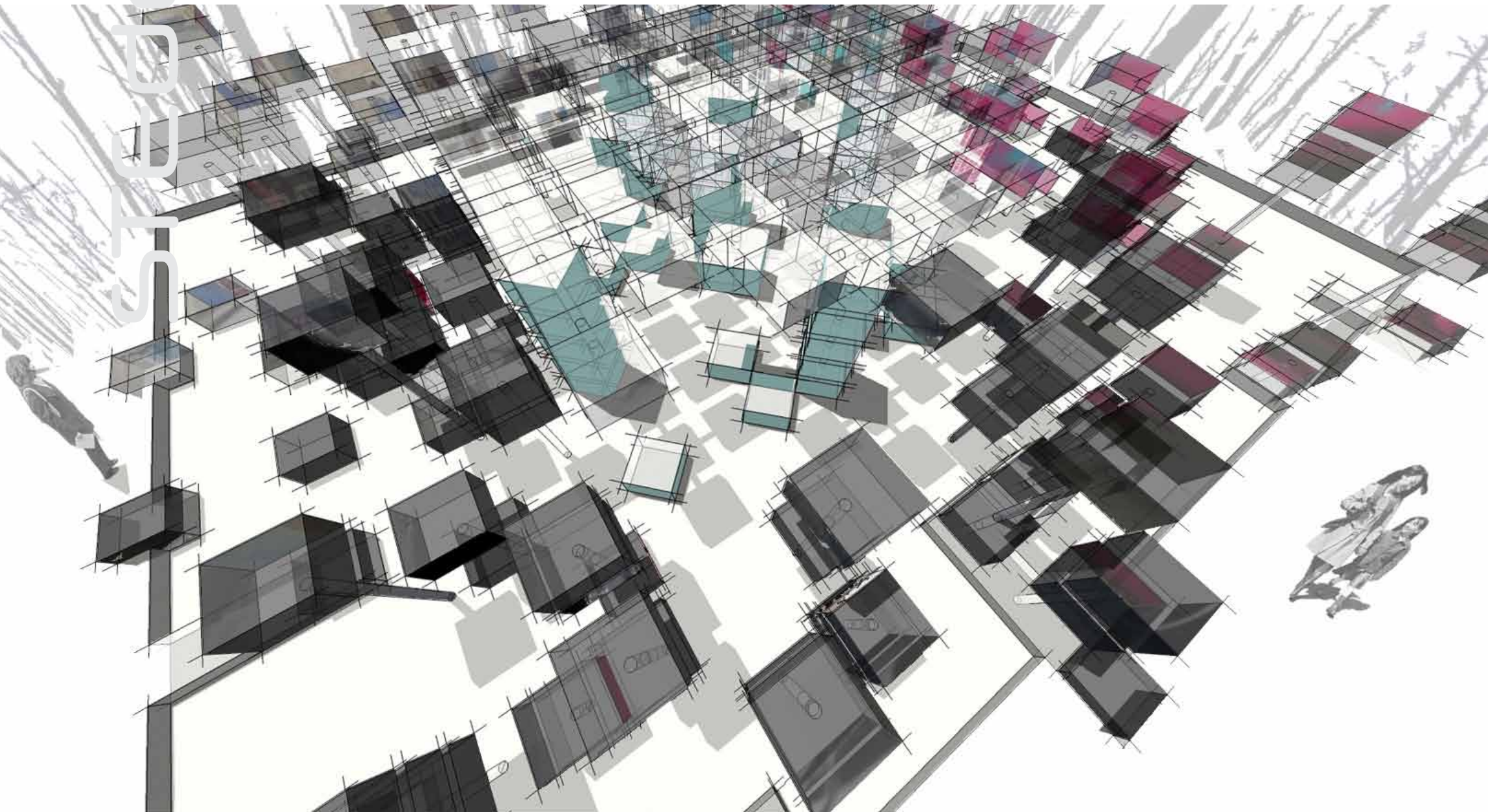


# ell on

N r z ee an Sr han an oha e

It is only befitting for a cyber-aged generation to rely on the analogy of pixelation when describing about themselves or their personalities. In illustrating one's personality through a pavilion, the Clifford Loh decided to manifest the many facets of his personality through extruded pixel-like components. These 'pixels' are displayed using various electronic medias which are among his many interests as clues to what he is all about.

These pixels will naturally become modular components that will be used to create the spaces as much as it does the form of the pavilion. However, the mere witnessing of an audio-visual presentation would be a rather impersonal way of getting to know the personality of a person. To circumvent this, the pixels are also used in different configurations to provide varying ways of witnessing the presentation. Many of these ways require active participation of the audience such as their use of seats, steps, tables, towers, etc.

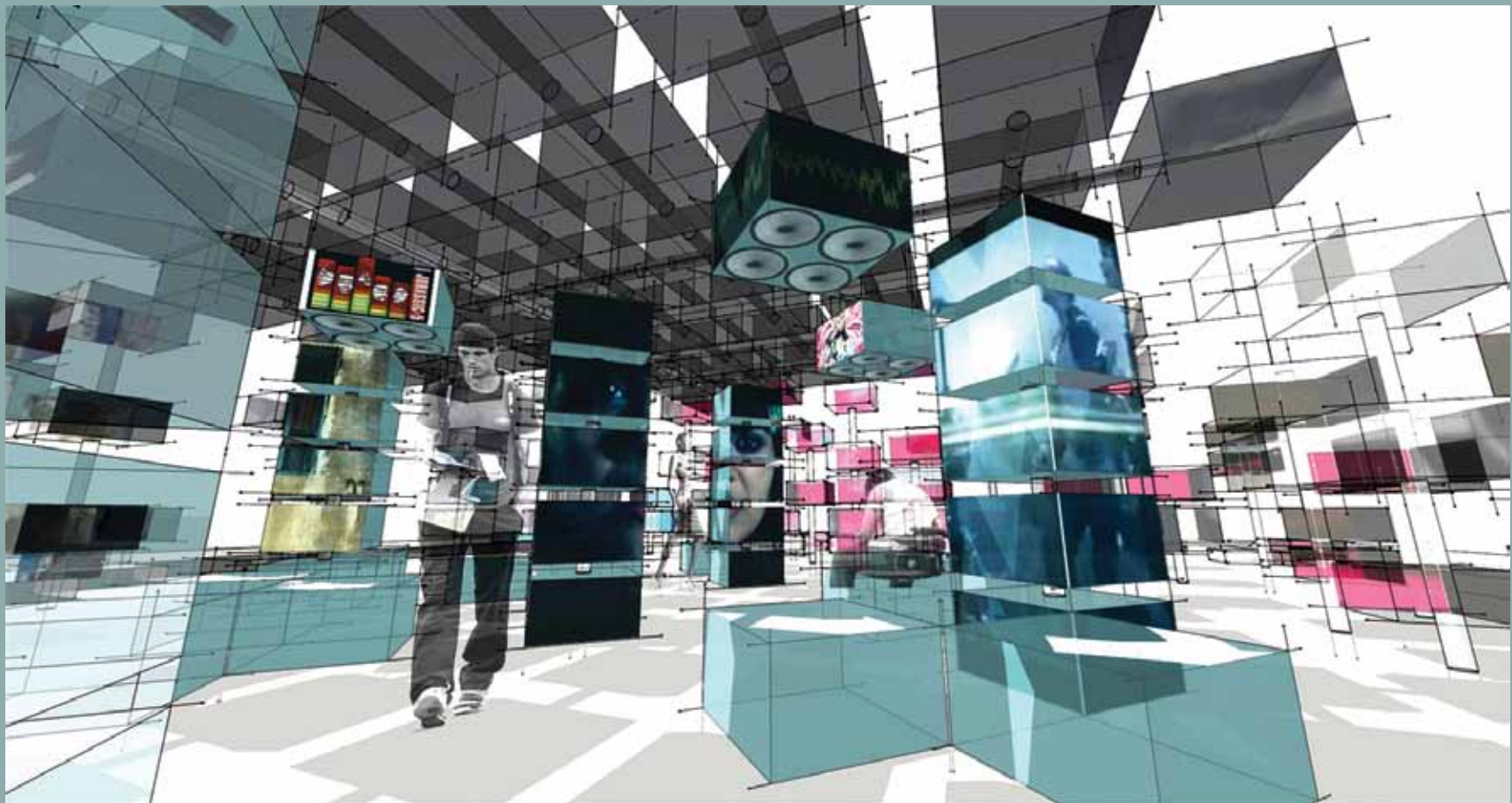
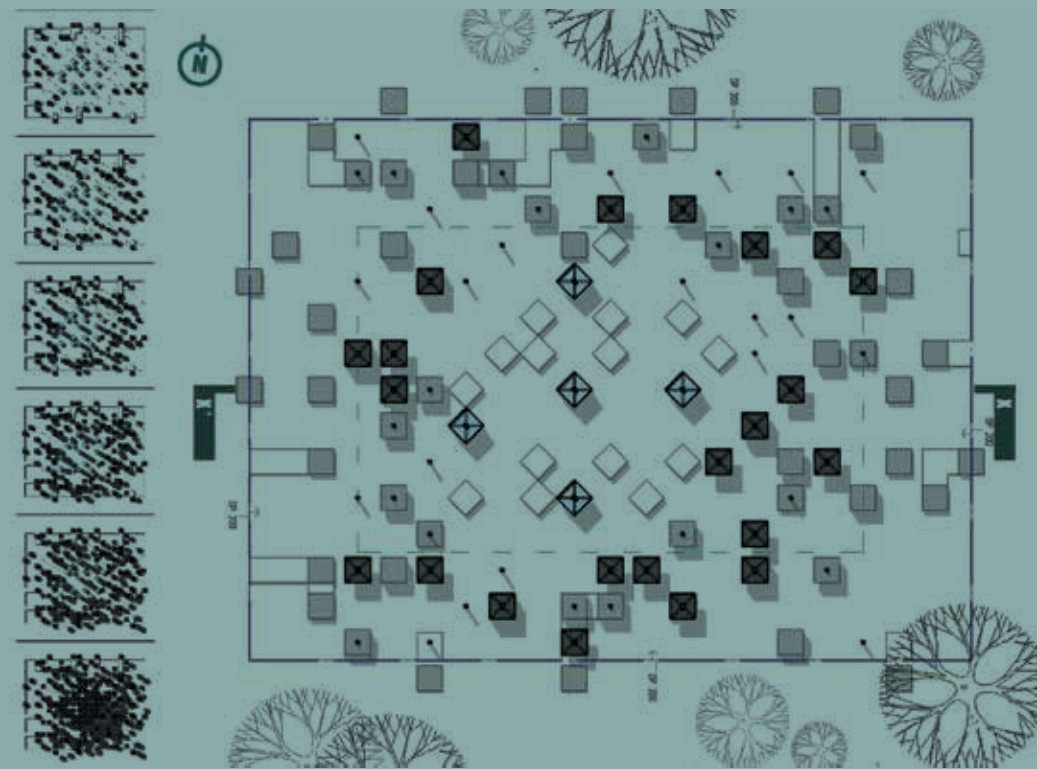




As much as the pavilion would be an event of sight, lights and sound, it is also one of change as the modular components could be reconfigured even by the audiences themselves. However, there are limits to these changes as determined by Clifford Loh by the use of key components which are fixed in order to maintain the integrity of the overall image he has wished to portray.

The designer, therefore, is more than willing to accommodate those who would like to know him but the artefact is also making a statement that he would never allow them to change who he is.

Clifford Loh Jia Yang



# o er n hale

N r z ee al o oha a

The artefact is a hotel-based accommodations for those who have chosen a life at sea. It offers them a land break with alternative accommodations that would allow them to enjoy land-based activities.

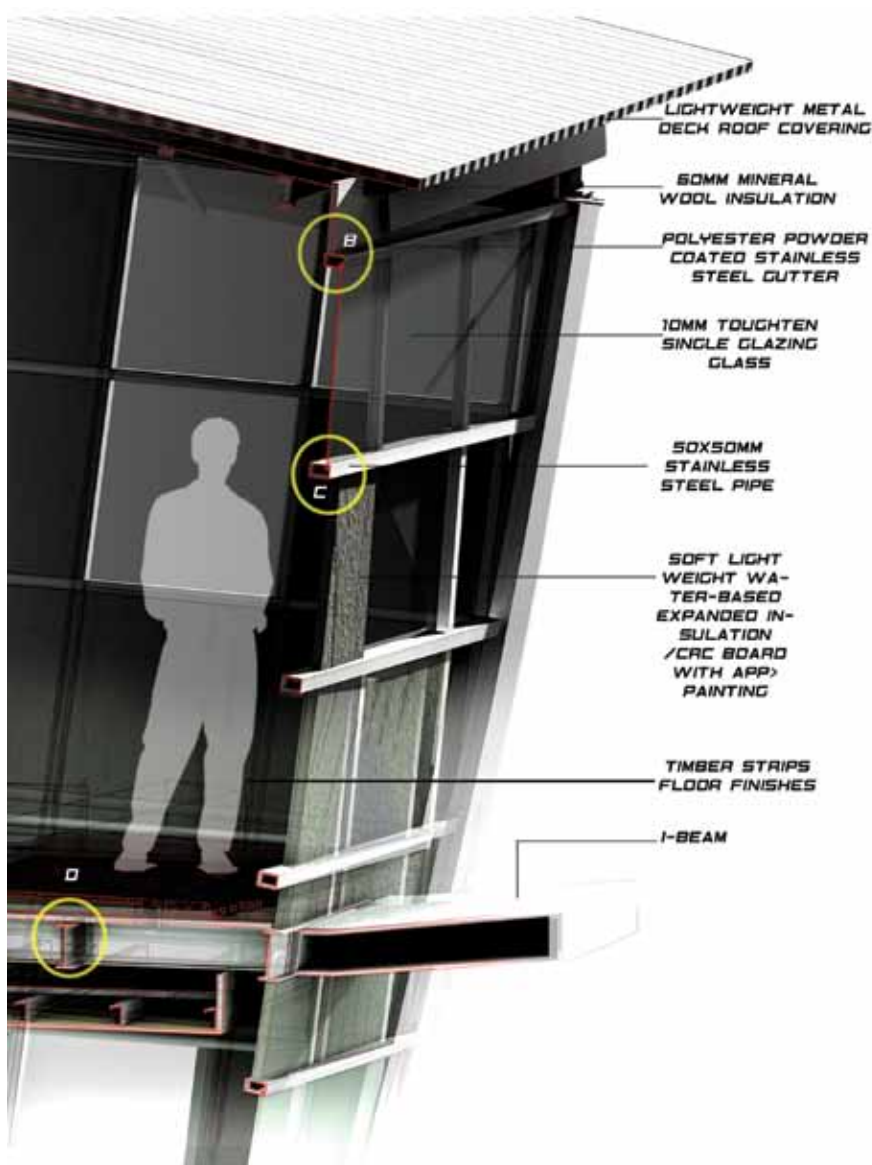
The accommodation units have been designed as a counterpoint to the living facilities of a boat. It is an autonomous living unit while still maintaining a quality that offers a more converse experience from that of generic landed accommodations.

Lee ian Ling designed these chalets to hover over land. Apart from a more interesting relationship with the environment, they also offer immediate access to the land for activities that seafarers could enjoy during their breaks.

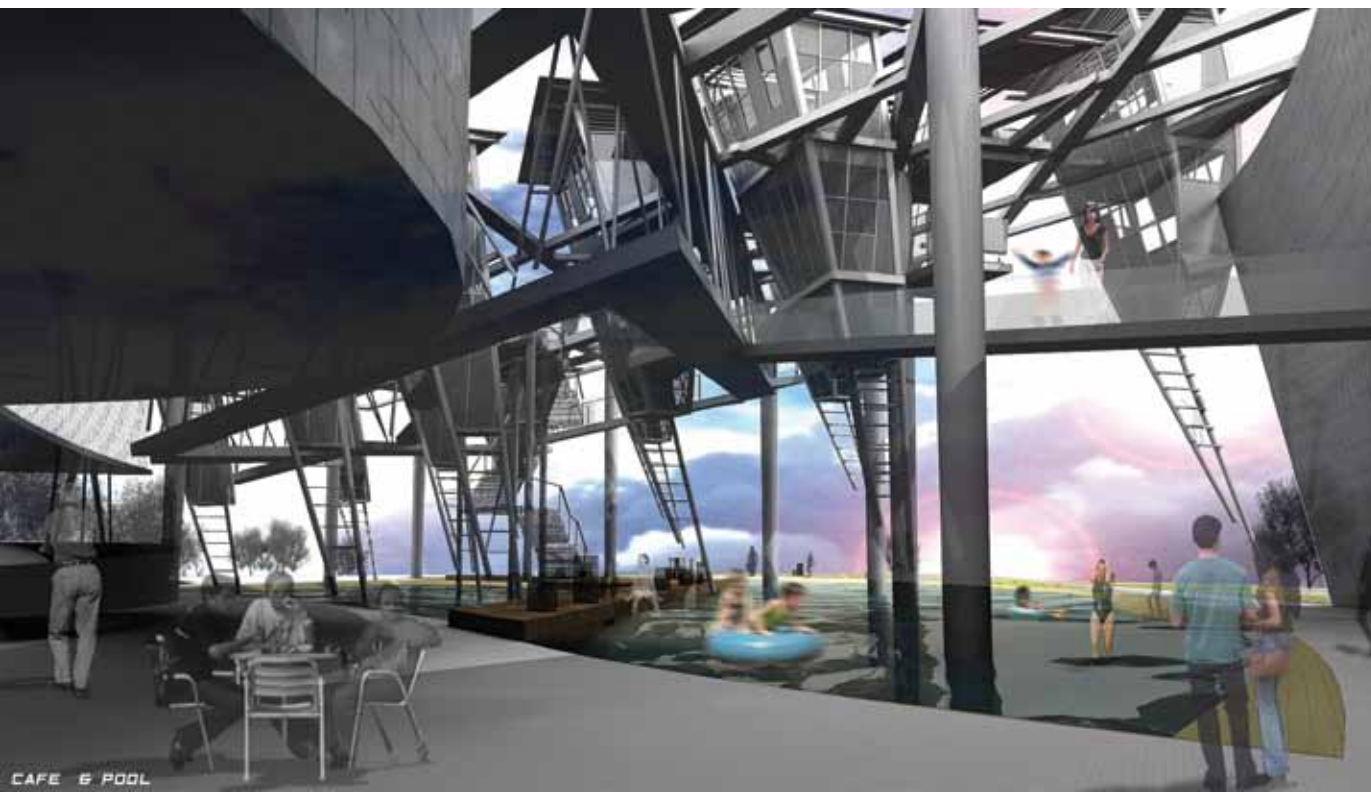
The space beneath the hovering rooms has not been left to chance but has been designed to create perceptual symbiosis with the hovering units for a homogeneous perception of the whole as a single entity.

Environmentally, the whole composition is akin to the traditional *kampung* configuration even though the artefact is much more regulated by the structural grid that holds up the chalets. Nonetheless, the placement of the chalets within the grid is recommended not to be regulated depending on their occupancies.

The hovering chalets themselves have been designed to relate to both the seafront environment at the upper levels as well the ground levels at the lower deck. The choice is then left to the occupants as to how they would prefer to spend their time in them while on land.







Lee / Ian Ling



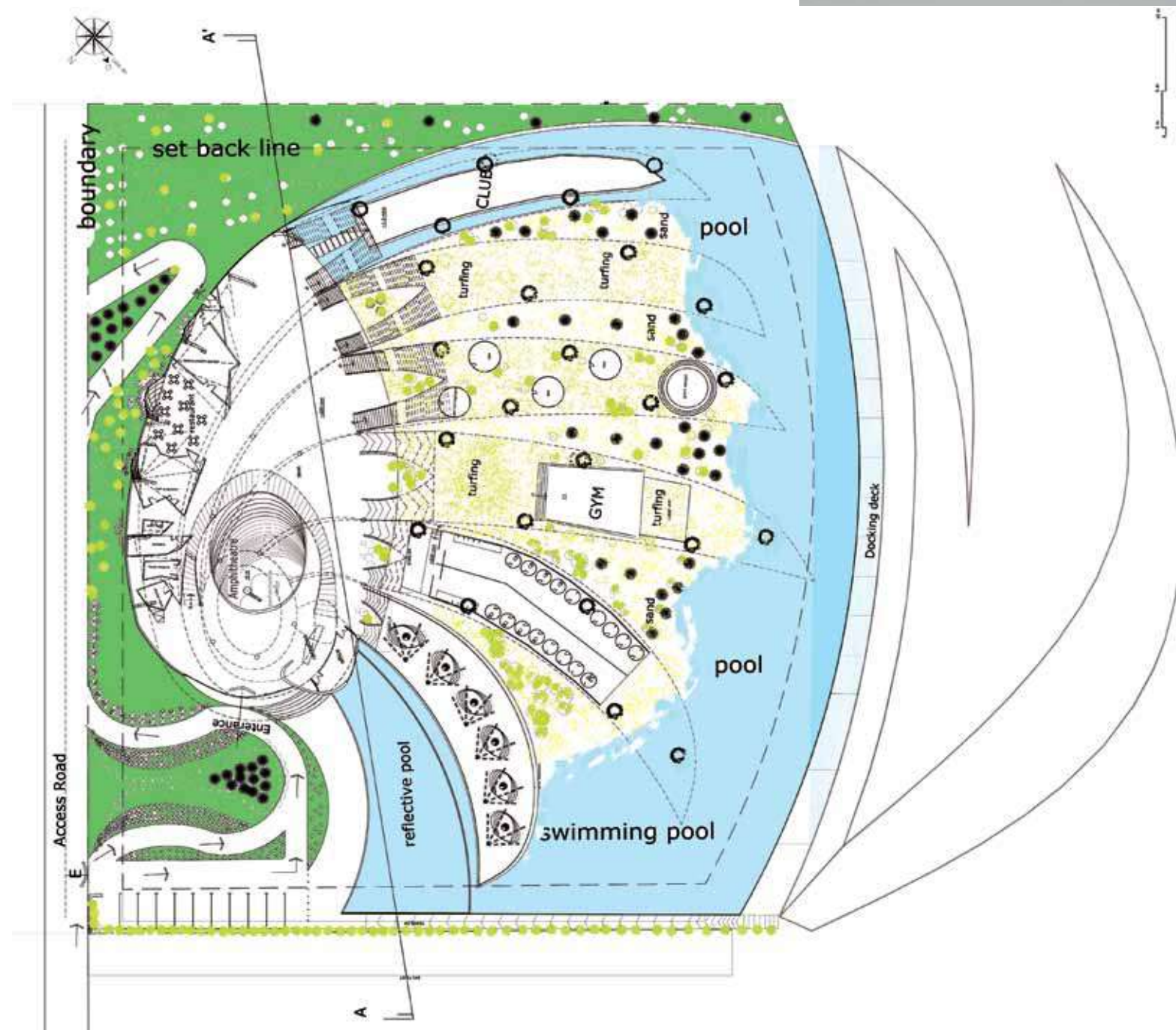


# Sea ar n o e

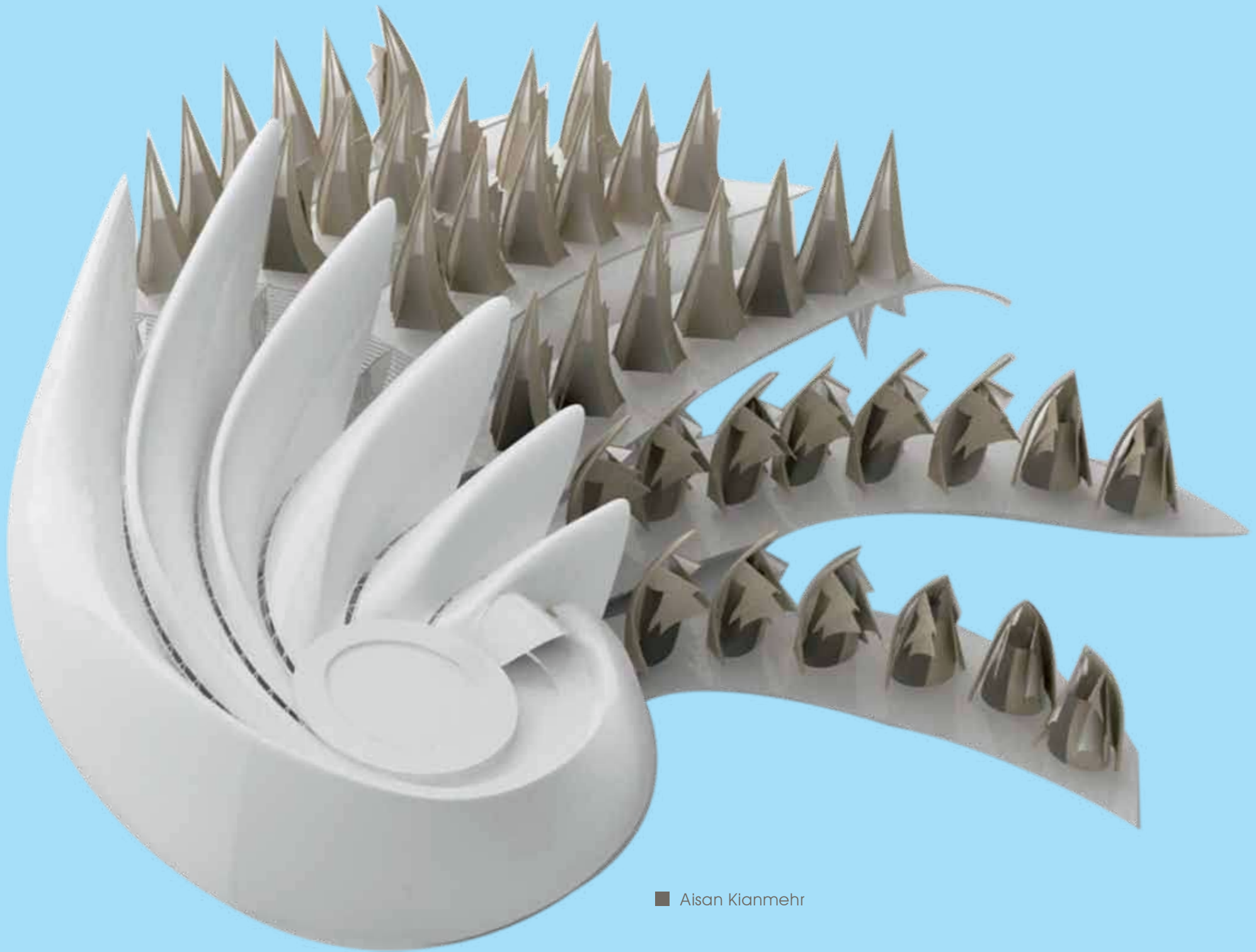
N r z ee al o oha a

This hotel for seafarers is designed by Aisan as land extension to their sea vessels. The accommodation units offer a landed alternative to the self-contained living vessels of long faring watercrafts.

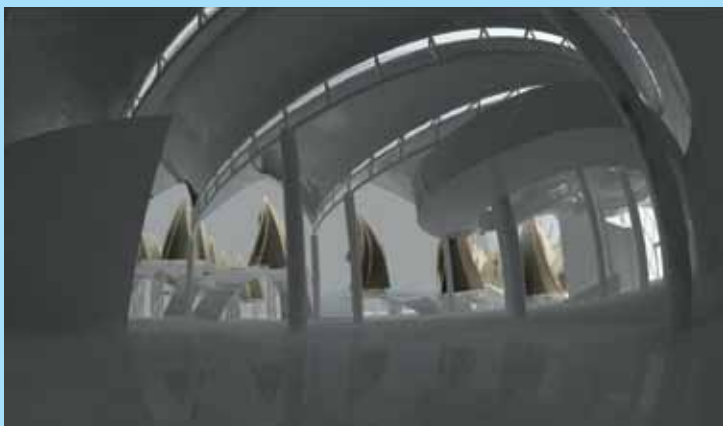
These accommodations are designed as chalets to allow for the same living autonomy as of those boats and are crafted to draw in the environment of the waterfront. This is achieved by the use of wind as well as light scoops to capture the more desirable elements in while shielding away those less pleasing.







■ Aisan Kianmehr



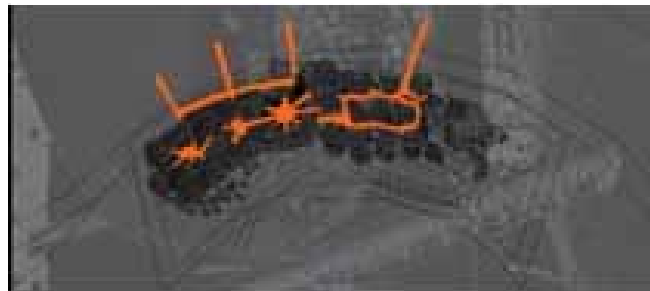
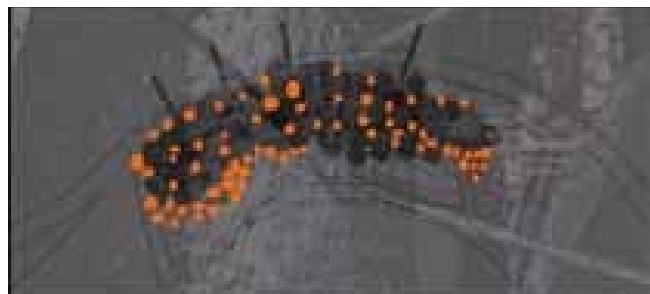
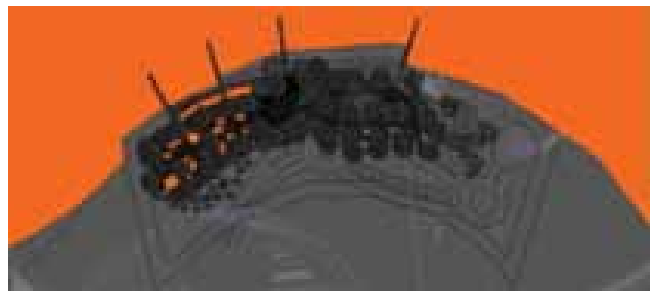
The chalets are placed on piers that radiate out from landed communal facilities exclusive to those who seek to take a break on land during their voyages. The form of this central facility reaches out to the seafront with the intention of capturing the sea breezes and spiraling them into the heart of the mass. The spaces within are further crafted out according to the enveloping form thus creating as much as the designer could, a homogenous plan form.

The artefact chooses to provide a hotel type that would complement as well as supplement the seafarers rather than merely a design for a conventional hotel. The latter is deemed to be redundant to those who have chosen a lifestyle on the waters.

# ele al a o

N r z ee an Sr han an oha e

When considering a hotel for seafarers, the immediate question would be how such a hotel could attract them away from their water crafts that would already have all the necessities for day to day living in them. This artefact addresses the matter by creating an environment on land for the seafarers to enjoy when they decide to take a break from the oceanic waves.



Conceptual Diagram

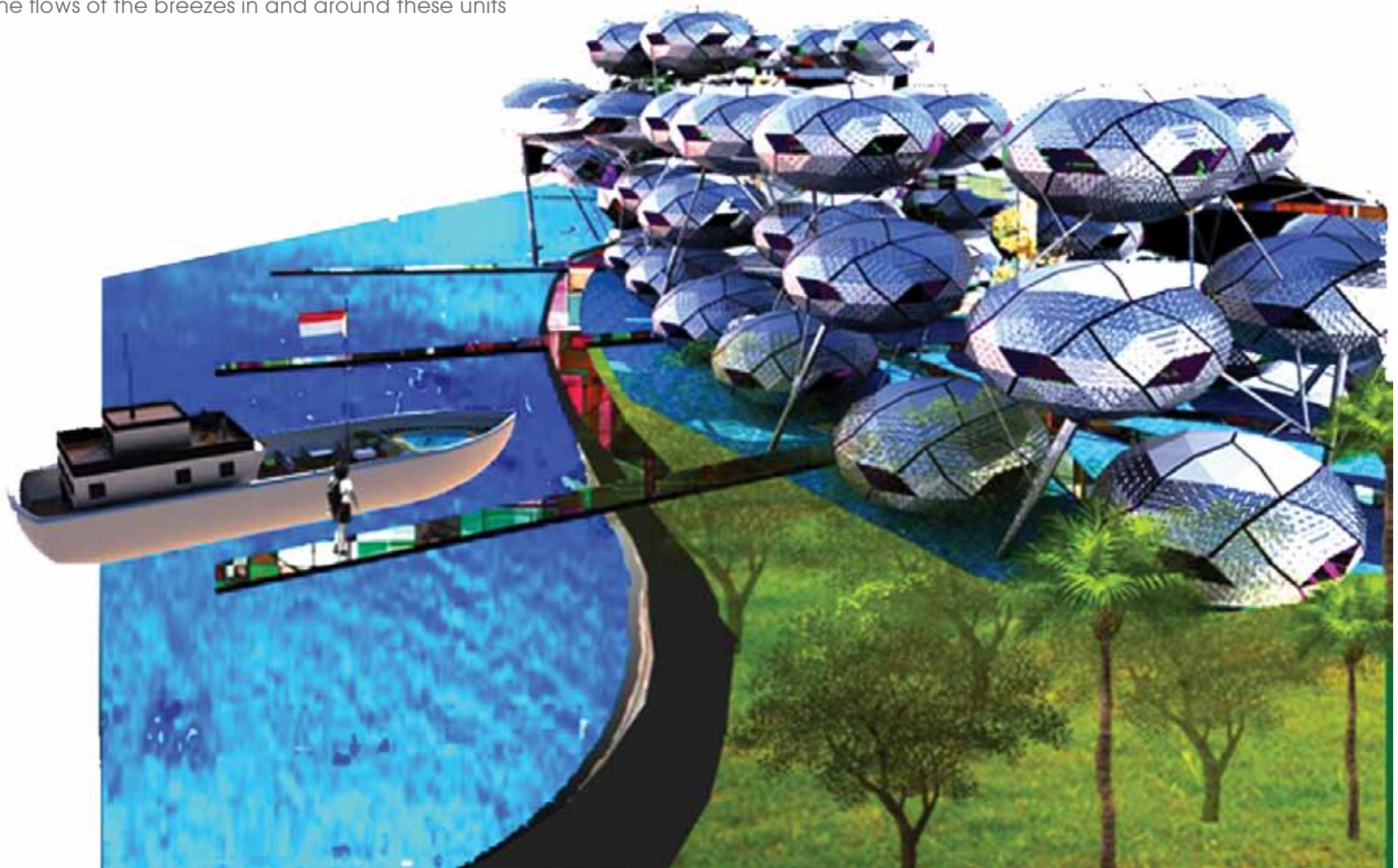




The design approach by Mohd Ramadan begins by crafting the landscape to create a land-sea i.e., amphibios rather than amphibian, a resort for the enjoyment of the seafarers on their land break. The intention is to draw them into an environment that would be conducive for resting, pleasure and delight. The other issue would then be to retain their choice for solitude as is correctly assumed to be part of their intentions for taking to the seas in the first place.

The accommodation units have been designed with this in mind by deliberating on how solitude could be attained within the facilities for a community of seafarers. The artefact answers this matter by providing solitude through isolation. Hence, the units are designed as chalets that hover around the amphibios resort allowing the occupants solitude at higher levels while still maintaining an intimate relation to the communal facilities.

The isolation of the units also allows their relationships with the surrounding seafront environment, particularly for the sea and land, to be developed by the flows of the breezes in and around these units



■ Mohd. Ramadan Shahabudin

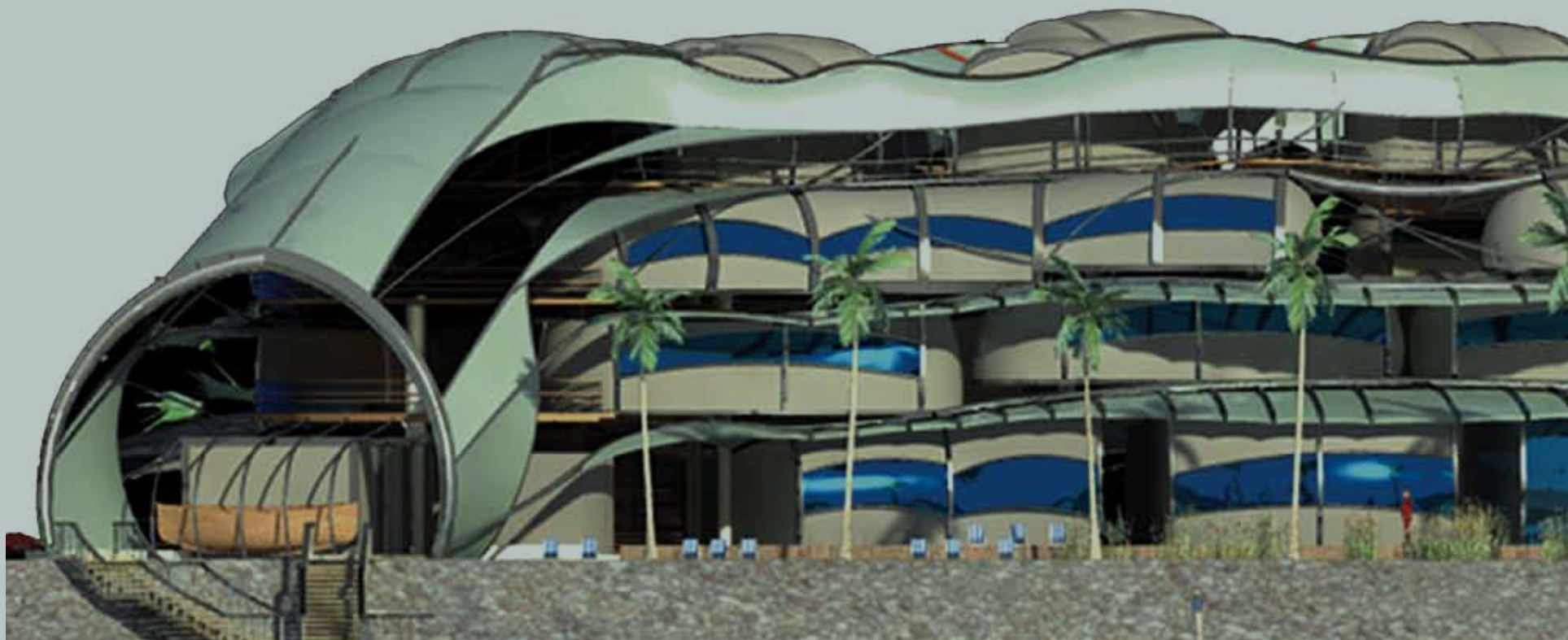
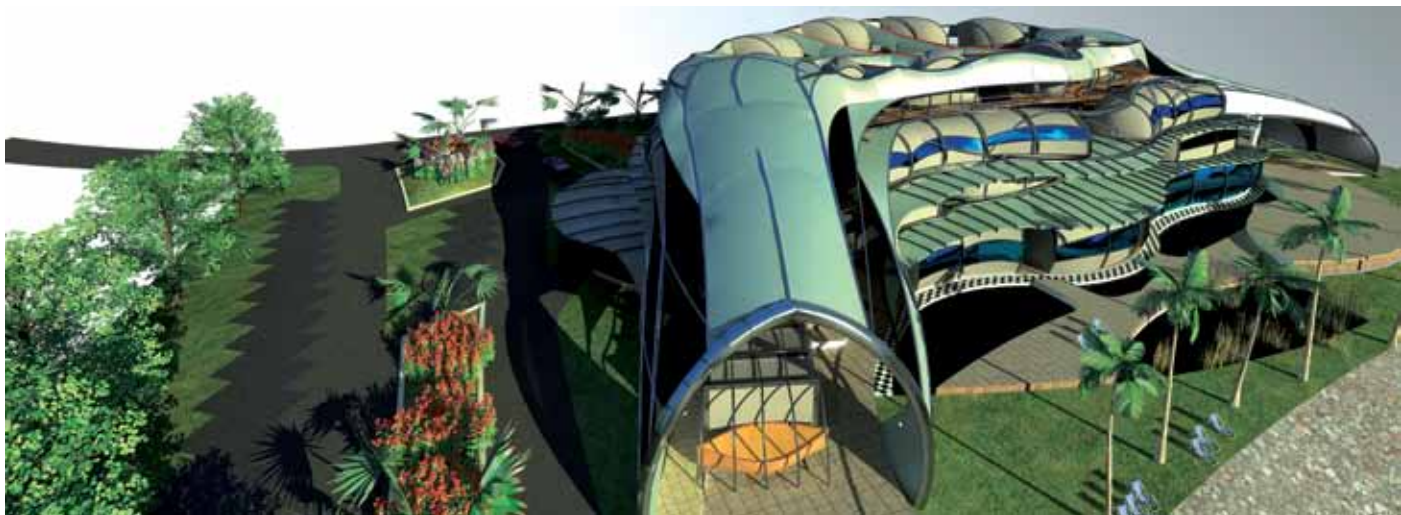


# o or h o el

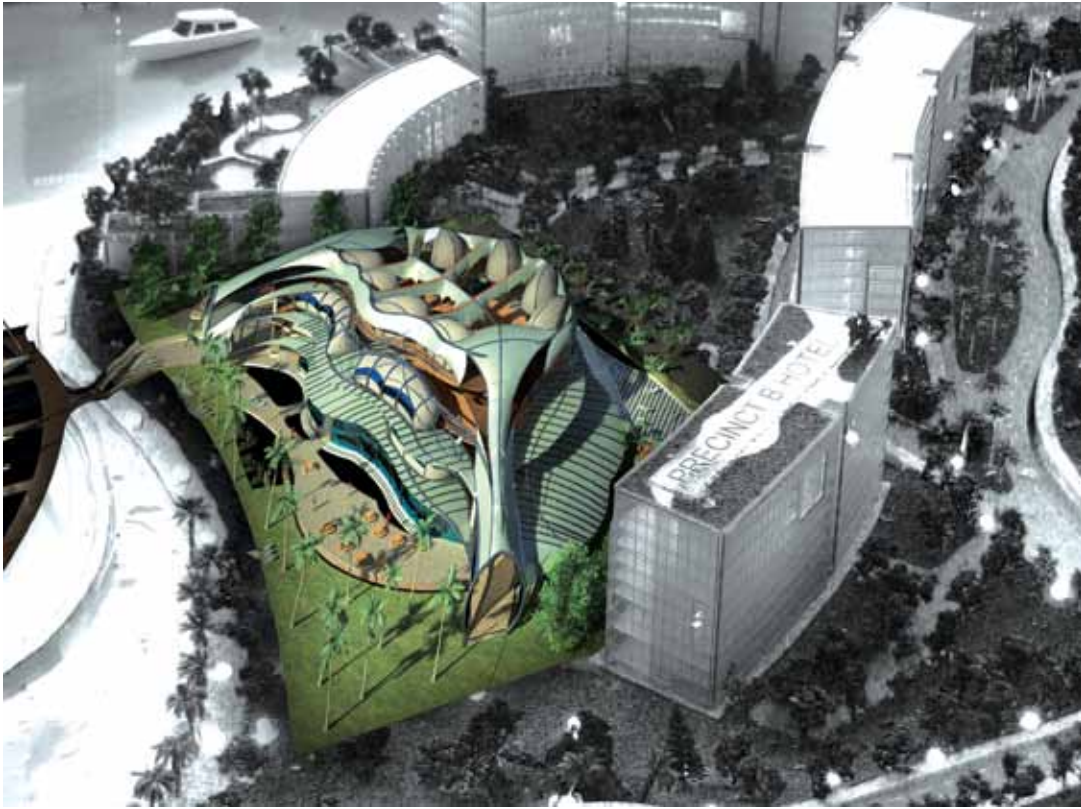
N r z ee  
eor oha a are

The Biomorphic Hotel seeks to provide seafarers, a break from the waves within an insular entity as a contrast to the open sea or seafront environment that they would have become accustomed to.

The biomorphic form of the boatel will be an environment for resting, pleasure and delight that would be enhanced by an internal garden sanctuary. The biomorphic accommodation units surrounding this garden relate them to the omnipresent seafront environment. It creates a more localised primary amphibious quality within the complex in relation to the land-sea dichotomy that surrounds it.

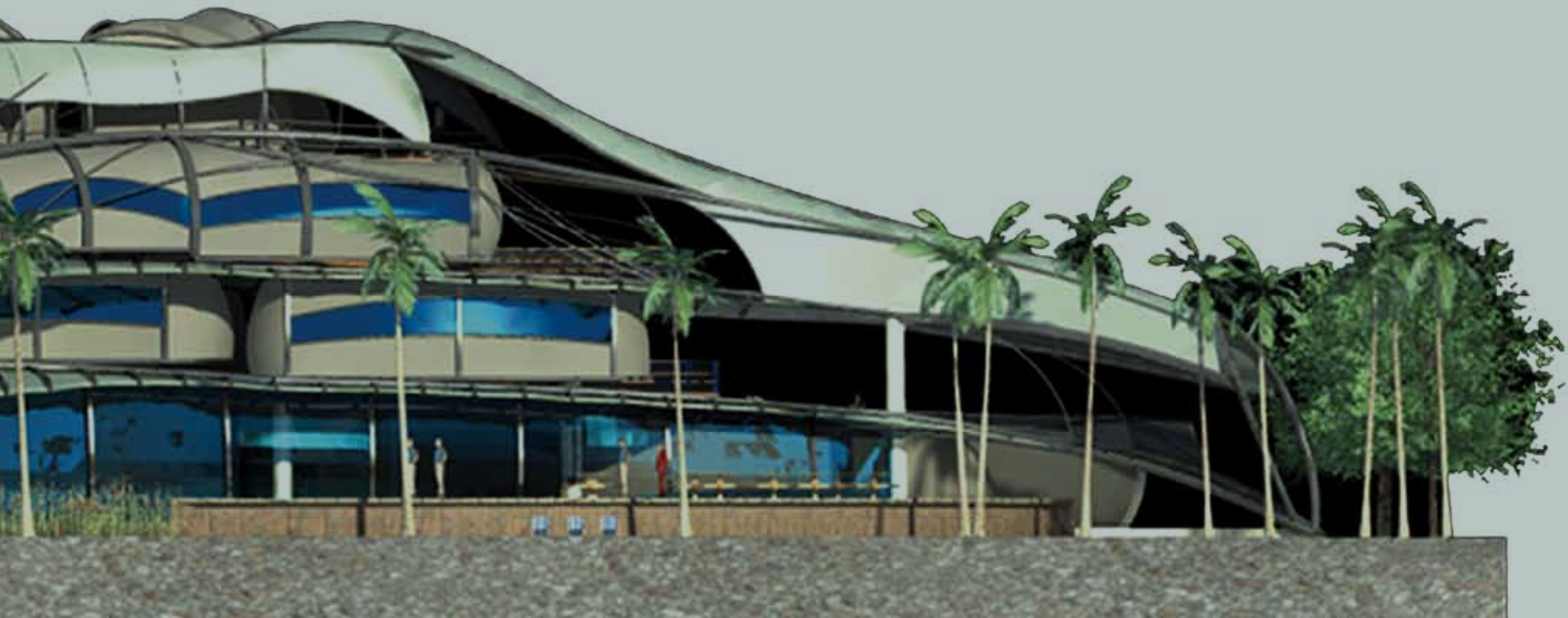






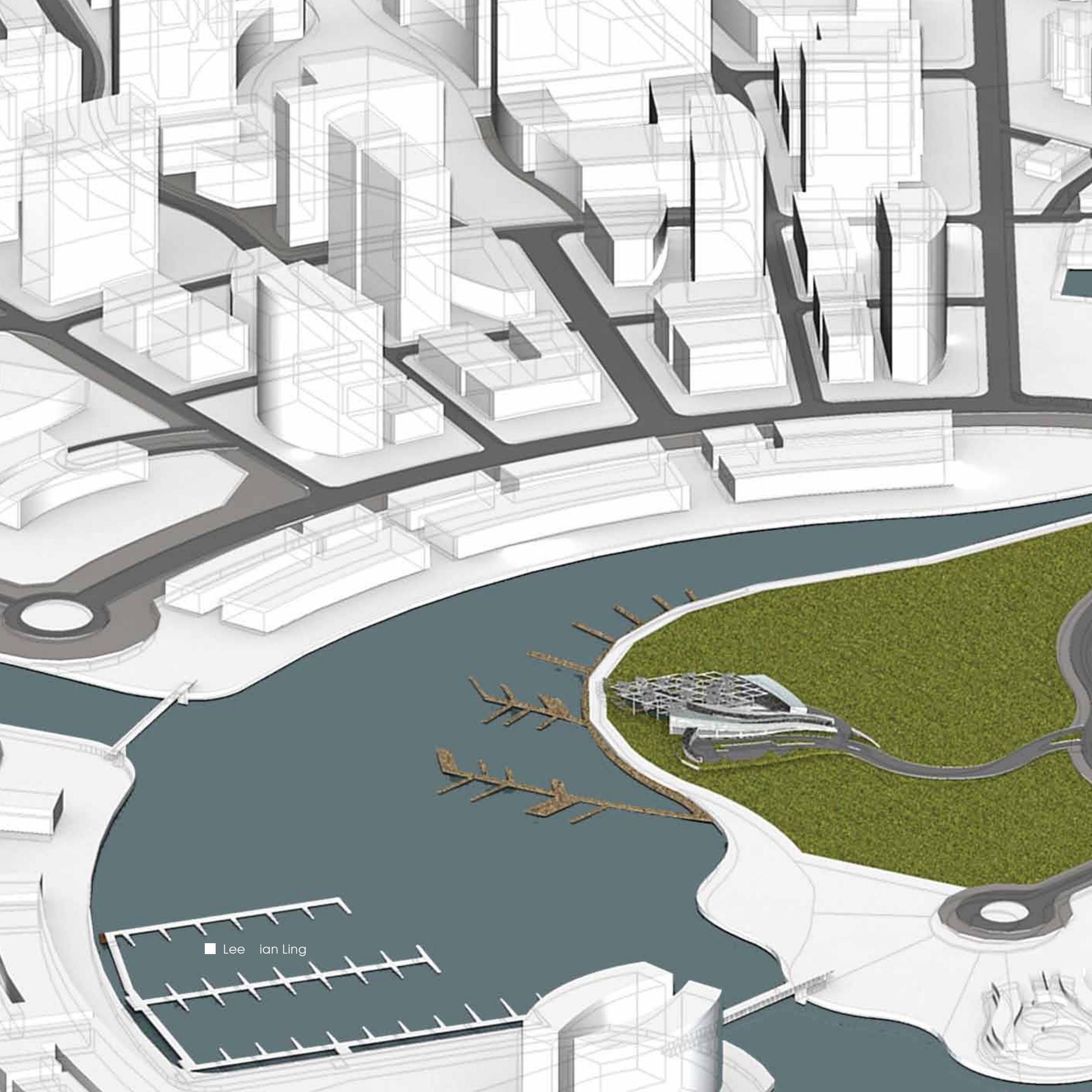
The accommodation is designed by Mohamad Khairul with more emphasis as supplementary living spaces to the living facilities already available within the watercraft themselves. They could therefore be used as either day or night spaces depending on how the seafarers choose to spend their time at the boatel and the amenities that it provides.

The skin enveloping the boatel is not designed to seal it hermetically but is only used for shade and, where necessary, to shield. This is to allow natural land and sea breezes to waft through the entire complex. Thus, reducing the need for large volume air conditioning. To this end, the artefact could have achieved this substantially more if the units were much further apart hence allowing more effective cross ventilation throughout the complex.



■ Mohamad Khairul Asri Yaacob





■ Lee Ian Ling





# r an Na ral a on

al o oha a an Sr han an oha e  
Wan Sofia Wan Ishak & Nik Ariff Azmee

ry e e  
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# Urban Narration

Kalsom Mohamad, Wan Srihani Wan Mohamed, Wan Sofia Wan Ishak &  
Norazee

For their final semester in the Third Year, students are required to design building within an urban context. They started by creating an object in an urban setting and culminated with designing an office complex in the heart Kuala Lumpur.

## NI

'An object is a form of material existence distinct from its immediate environment.'

## Enoia

An architecture as an object is not necessarily bad but tends to compromise the possibilities of what it can do with its existence. Applying anti-object in architecture attempts to look at architecture not only by its physical forms but also the experiences and emotions that the architecture creates and evokes. Another way of looking at it is that, it is a narration of an architecture to its environment and users. This project requires students to design creative conceptual application through perceptual and experiential development and not merely from arbitrary forms or symbols. It is based on four conceptual functions: ACCRETION, BUOYANT, CAPRICE and DYSTROPHY. They are to apply a designated conceptual function architecturally unto a given site within an urban setting to resolve and develop the conceptual function with only the criteria of perception and experience.



INTERNATIONAL JOURNAL OF GREEN BUILDING

The Green Building Movement is becoming an immediate issue in the modern world and there are needs to spread the awareness among professionals, in governmental or public sectors. The emphasis on sustainability, energy efficiency and environmental friendly buildings have liberated new ideas and technologies on ways for our built-environment to sustain the natural resources but still continue to be developed for future use. The vision for the Green Building Centre is to generate interest, knowledge and participation. It has to be designed with innovative ideas that offer new experiences not only to its visitors but more importantly to those working there. Making the centre as the urban lung students are required to find a new definition to inhabit it for the various functions with the office working space as the main focus.

The Green Building Center is a one-stop source of “green” information, products, resources and expert support to help members in the building industry and the public to create a healthy, environment-friendly, energy efficient and sustainable building through education and examples. Therefore, a good working environment is proposed to explore such design that is environmentally sensitive by maximising passive design strategies (optimise natural lighting with consideration on minimum heat gain and glare) as well as recycling of materials. There is also the need to address the requirements of barrier free building design.

# ry Review

a ee S h

## oyan l e

The project is to design a 'buoyant' space in an urban context. The use of the ring-like structures or 'rubber-bands' creates a space seemingly enclosed yet very much open.

The location of these rings at different levels and allowing viewing of different angles make them multi-functional as supports, benches and simply fun playthings. The pool further enhances the 'buoyancy' factor and makes the whole creation fun for city families to experience. Every neighbourhood should have a fun centre such as this

## rea h n ayer

The design attempts to create a 'breathing' 'green' office building on the periphery of Kuala Lumpur's urban 'jungle'. It is located next to Padang Merbuk (a recreational sports ground), a century old Sikh Gurdwara (Temple) and a secondary forest. It masks the hustle and bustle of the city next door and the regular clanging of the trains passing nearby. The structure resembles the dense foliage separating it from the city proper. The facade of the building, with its many facets, similarly attempts to mask the noise from busy Jalan Parlimen. The woven-like bands of skin will undoubtedly create solids and voids, pockets and openings to let the building breathe and function without extensive use of mechanical aids. A myriad of columns resemble bamboos growing densely in a forest, yet the open ground floor provides visual continuity from the sports ground. The building, thus, 'floats' lightly over its base and is a testament to a living and breathing green building.



**Ne**

This is another attempt to create an urban lung by having an office building that responds emphatically to the tropical city-edge site. Using a simple, straightforward and regular grid-like structure, the design attempts, in an almost deconstructive manner, to break the monotony of the facade by an interplay of solids and voids and otherwise blank planar surfaces to portray messages to those outside. This scheme also retains the sports ground underneath the building by using cantilevered floors above it.

# y ro h al e on r

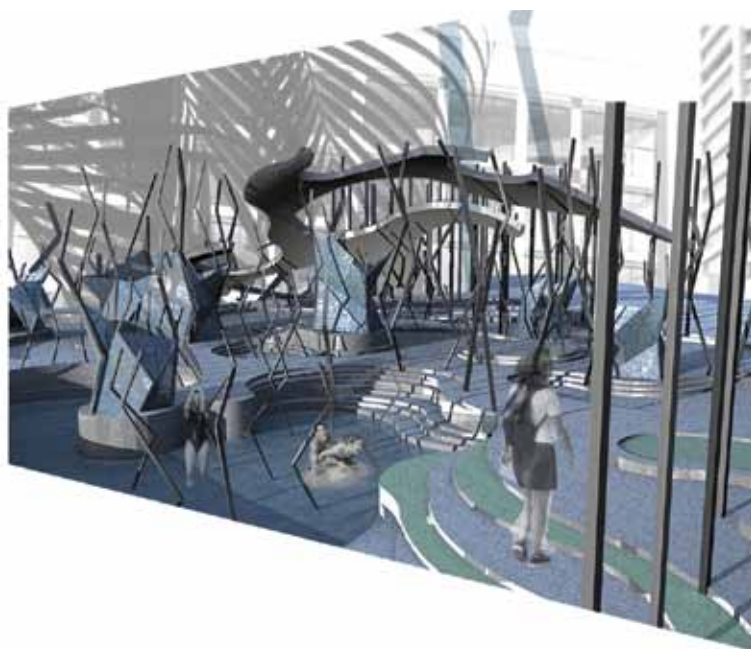
N r z ee

The artefact is about the transformation of an urban space which dictates a conceptual precept titled dystrophy.

Lee Ling Ling develops this conceptual precept in the creation of spatial qualities without having to rely on spaces that have been predefined by objects such as buildings. The artefact displays a more organic spatial development in this quest as an alternative to the generation of spaces from the more algorithmic design procedures. With this approach, Lee Ling Ling has developed spaces that respond directly to the surrounding environment without the intermediate building envelope.



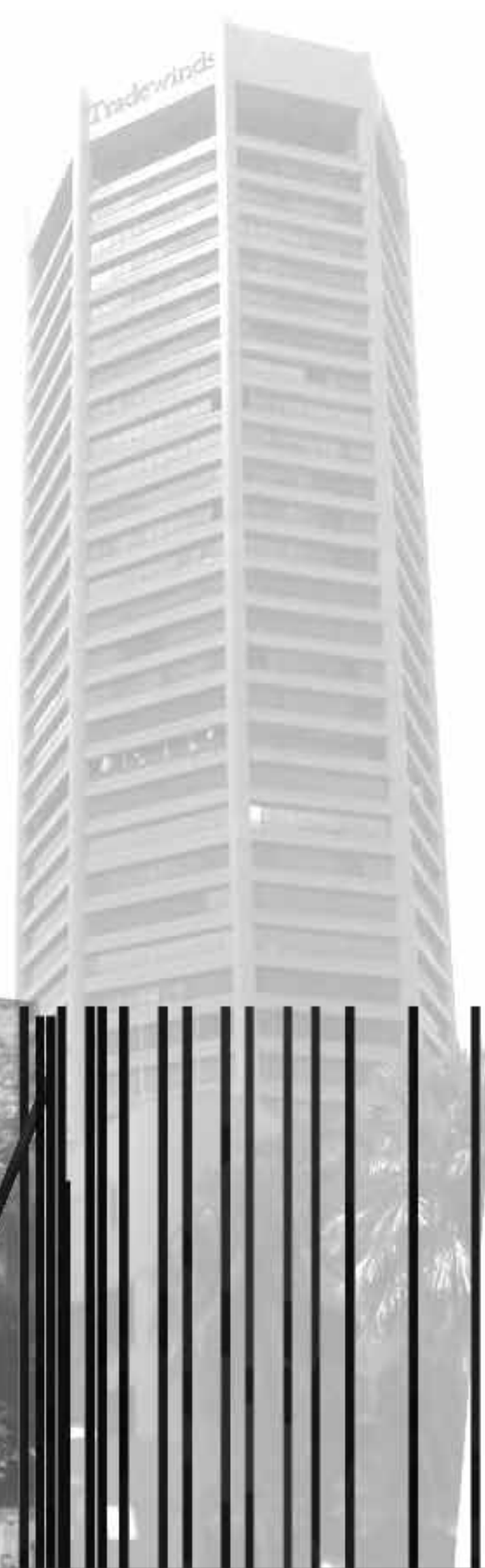




■ Lee Ling Ling

The space generating dystrophy of the artefact is not only confined to spatial qualities but is also applied to the spatial organisation. This has created a fine line between chaos seeking order and order that had undergone dystrophy but allowed to result in chaos. Regardless of this conflict, the spatial organisation is just as organic and is much more immediate in its response to the surroundings.

The dystrophy of the artefact has also created unpredictable textural counterpoints to the existing texture of the surrounding built-environment. These resulted in exciting frame forms of vistas to the surroundings. Furthermore, its organic layout breaks the formality of the urban order within which it nestles. The artefact has therefore imposed dystrophy onto the urban scape as much as it has unto itself.

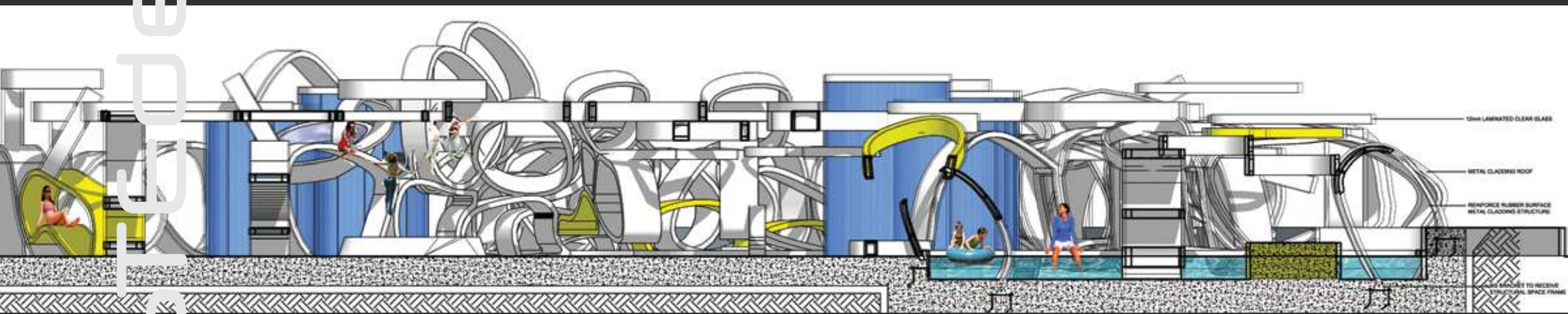


# ocean life

N r z ee eor oha a are

The artefact intends to transform an urban square by a conceptual precept which is in this case buoyancy without the reliance on building forms as objects. It makes a more immediate transformation of the space in relation to its surrounding context.

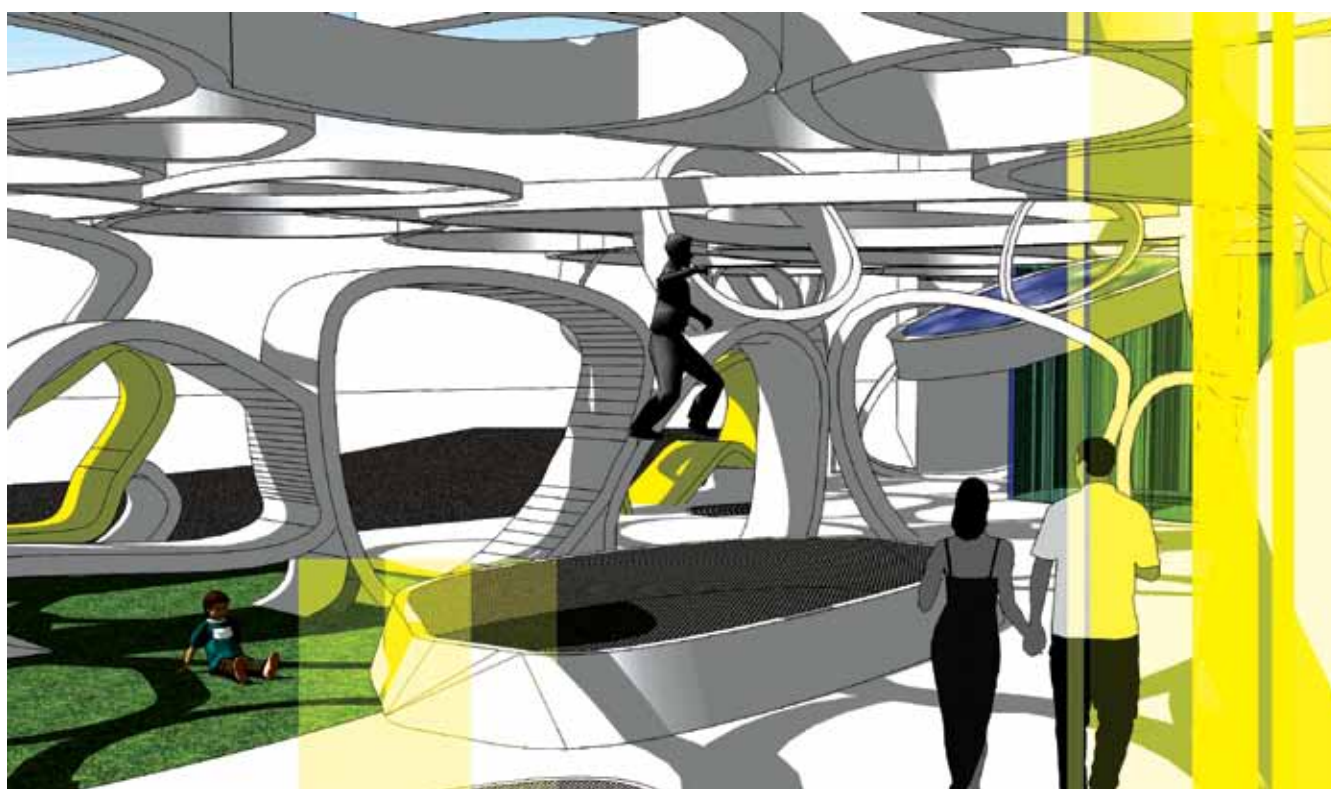
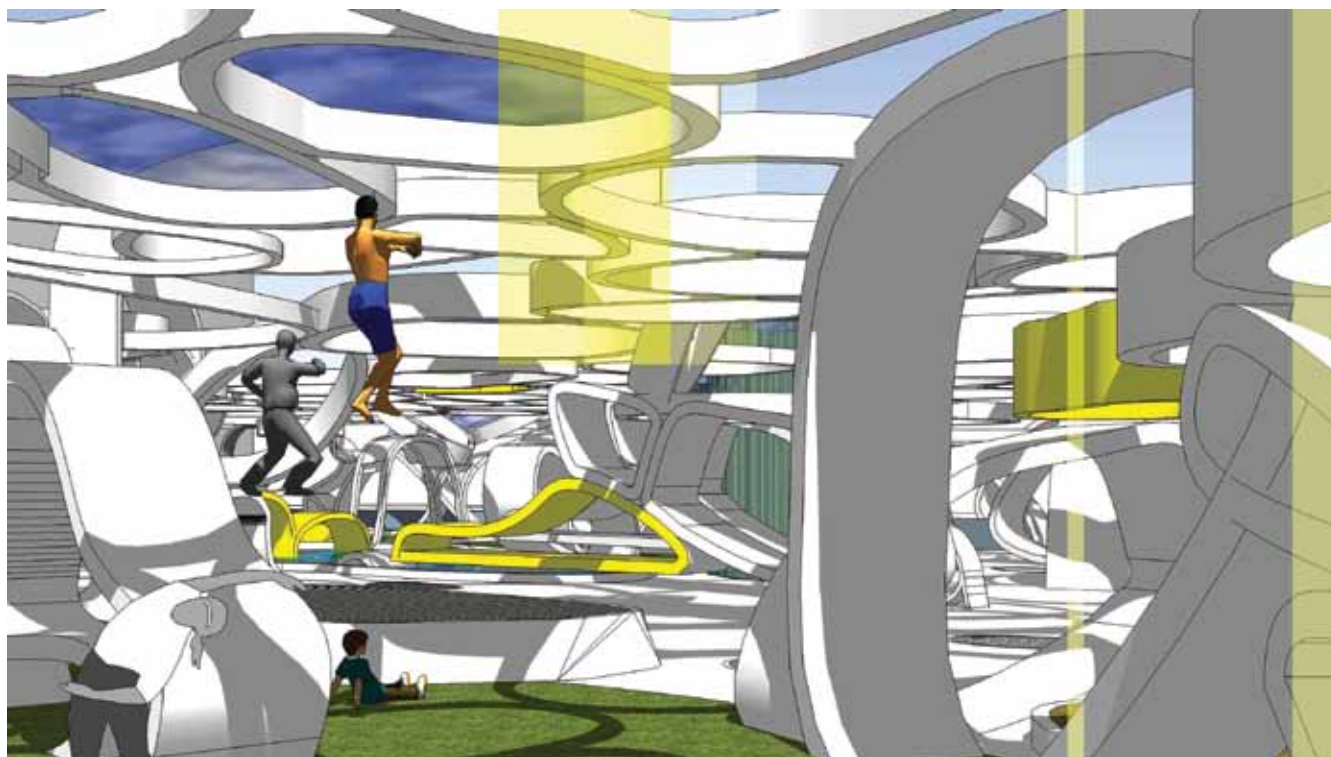
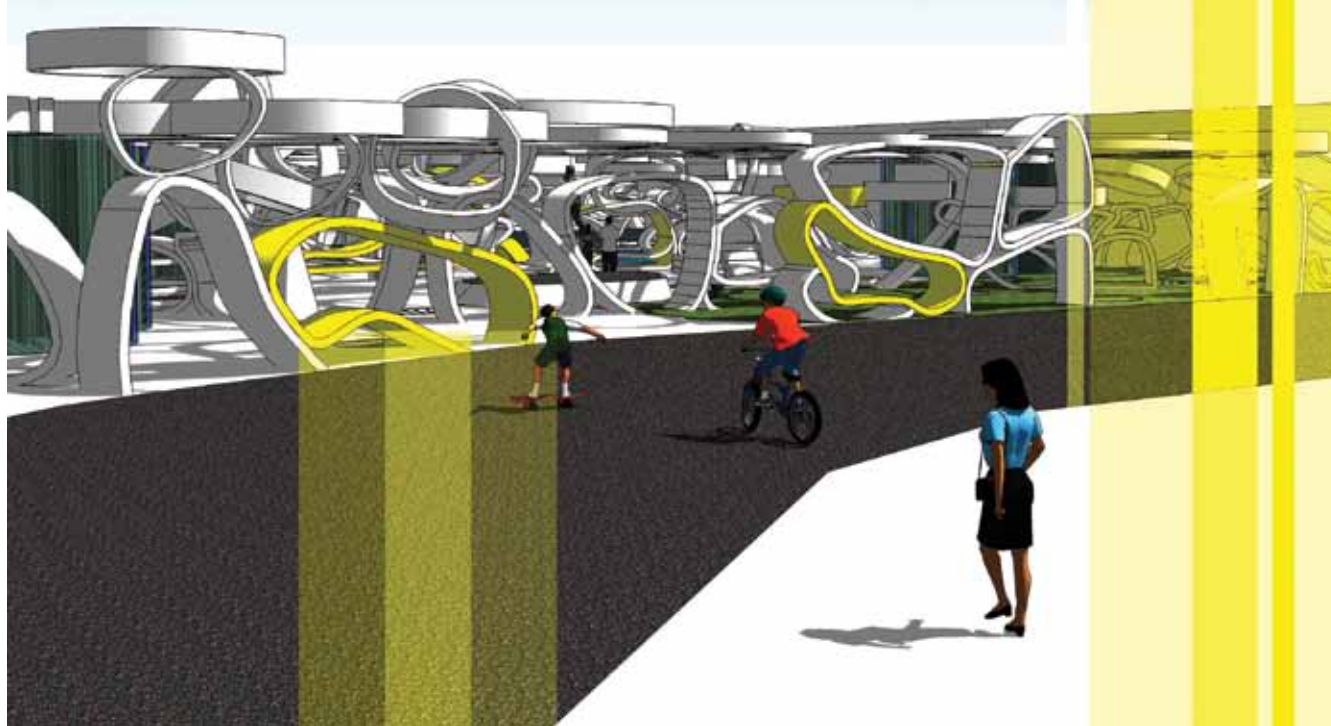
However, it is questionable if the iconic component that resembles the elasticity of rubber bands is suitable to denote buoyancy. In the overall composition, there is an undeniable impression of buoyancy throughout the urban square. Along with creating this perception, the components also define interesting pockets of spaces throughout the square in the overall composition.



The elastic-like components themselves are of varied benefits to visitors. They can be used as seating, ledges and supports for canopies as and when the situation arises. They also provide ready frames to form cubicles with an added water body for the pleasure and delight of visitors.

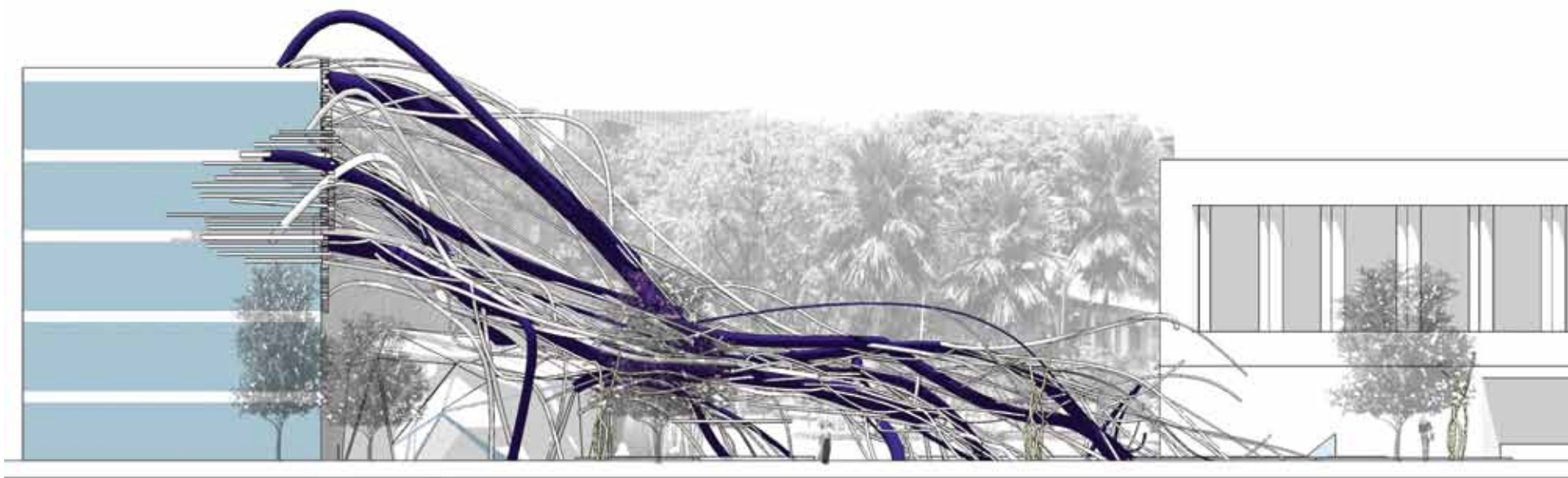
The perception of buoyancy further creates a much lighter feel to the square especially in relation to the more robust and monolith-like buildings that surrounds it. Buoyancy therefore is no longer just a matter of perception but also of an evocation on how it makes one feel within it.





■ Huszazaifah Hussin



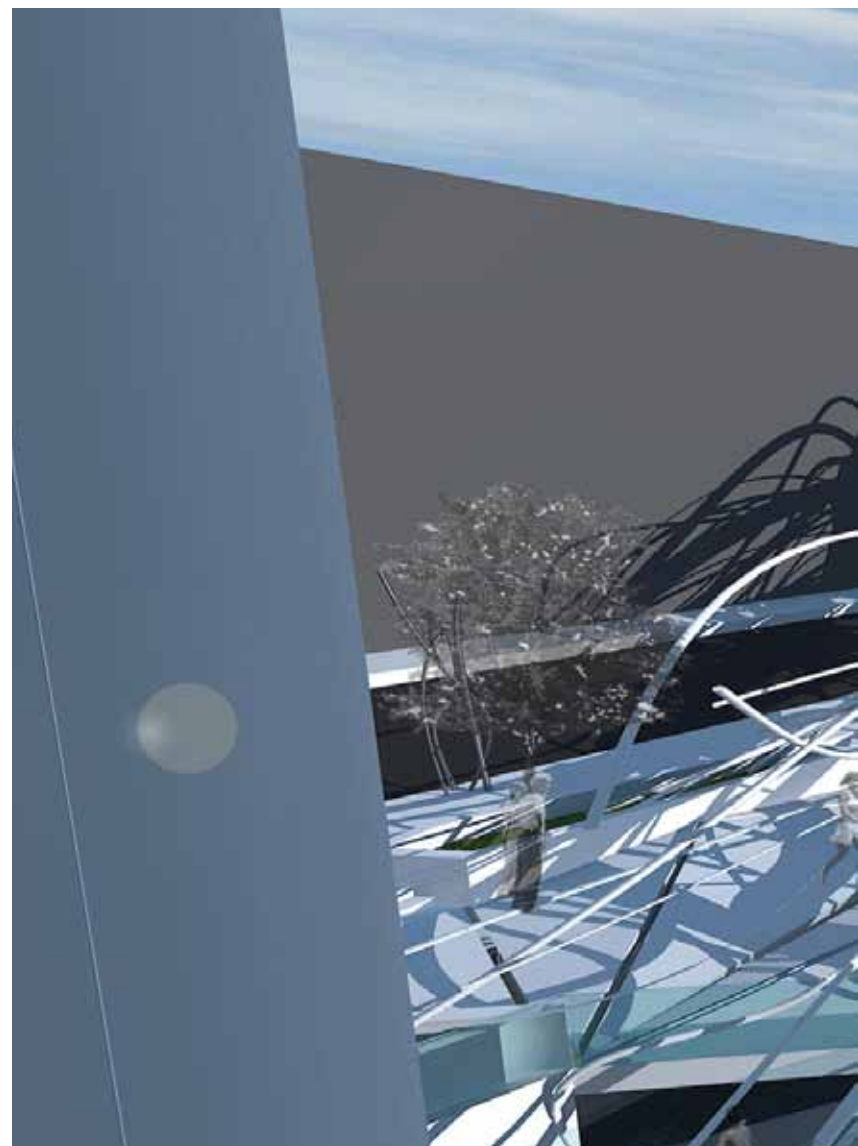
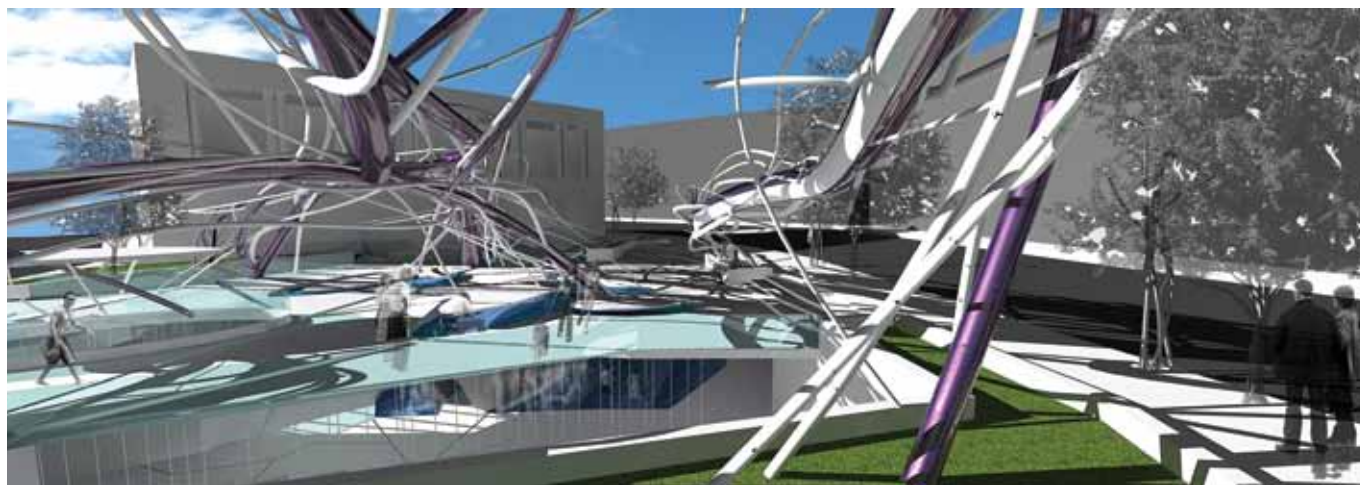


## lo n y ro hy

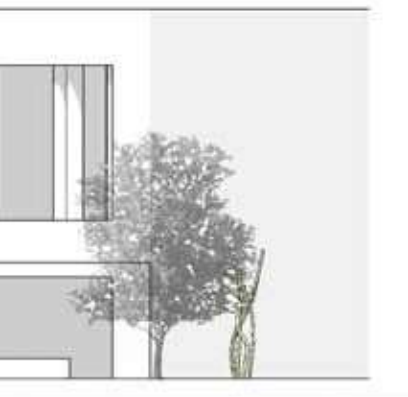
N r z ee al o oha a

The artefact is developed through the application of the conceptual precept of dystrophy unto an urban space. This excludes the need to create an object such as a building first before applying the concept of dystrophy.

In the absence of any newly made object to undergo dystrophy, the application of dystrophy onto the existing urban fabric continues to be applied to the urban space. The hard-lined rectilinear forms that predominate the surroundings become soft and sinewy forms over all the urban space. Where the existing forms are regular in rigid order or patterns, dystrophy has transformed them into chaotic free flows defining unpredictable spaces around the urban space.

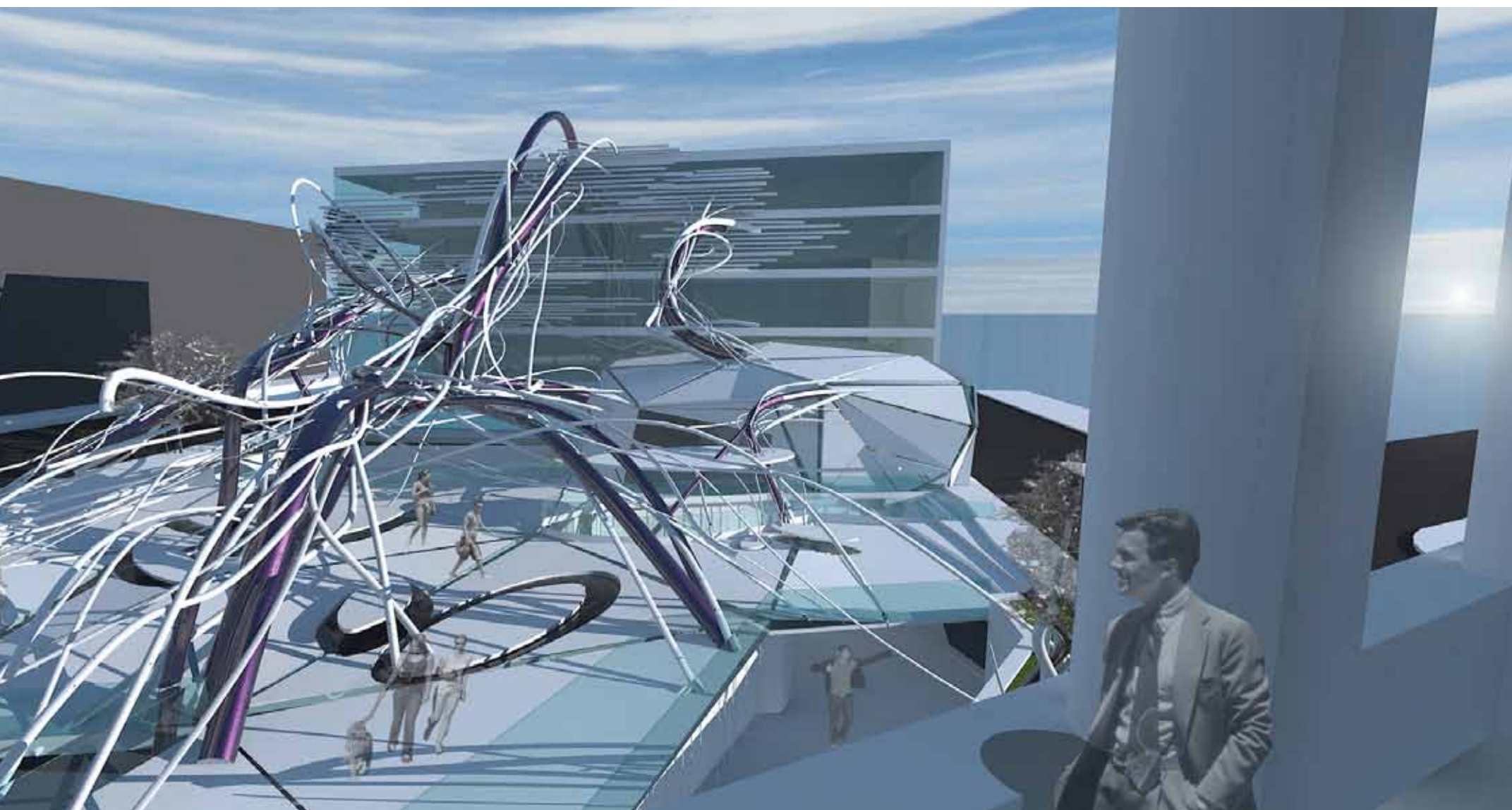
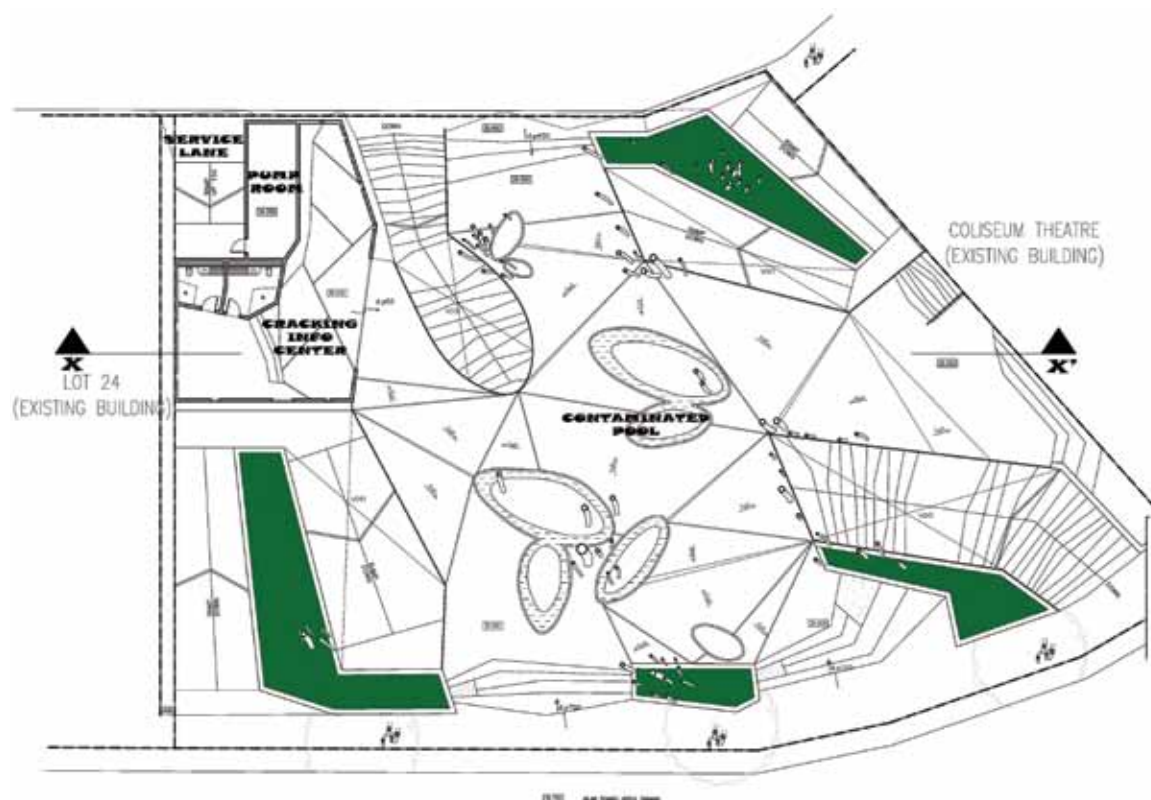






The view of the surrounding environment would also have a vivid change in character when viewed from within the dystrophy. The question then arises as to which is it that is the actual victim of the dystrophy in this design as stated by Edwin Ng Han Hung. As it is the existing urban fabric that has undergone dystrophy and made to appear in a different character when viewed, the existing surrounding seems more likely to be the victim rather than the actual urban space upon which sits the dystrophic artefact.

■ Edwin Ng Han Hung



# Ne

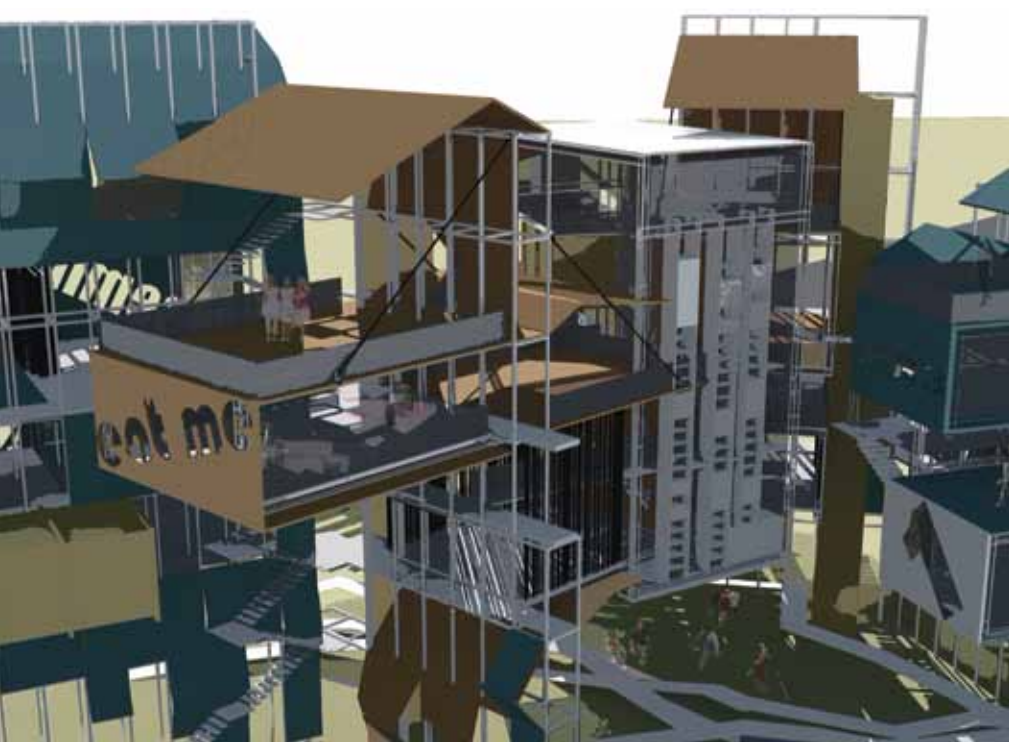
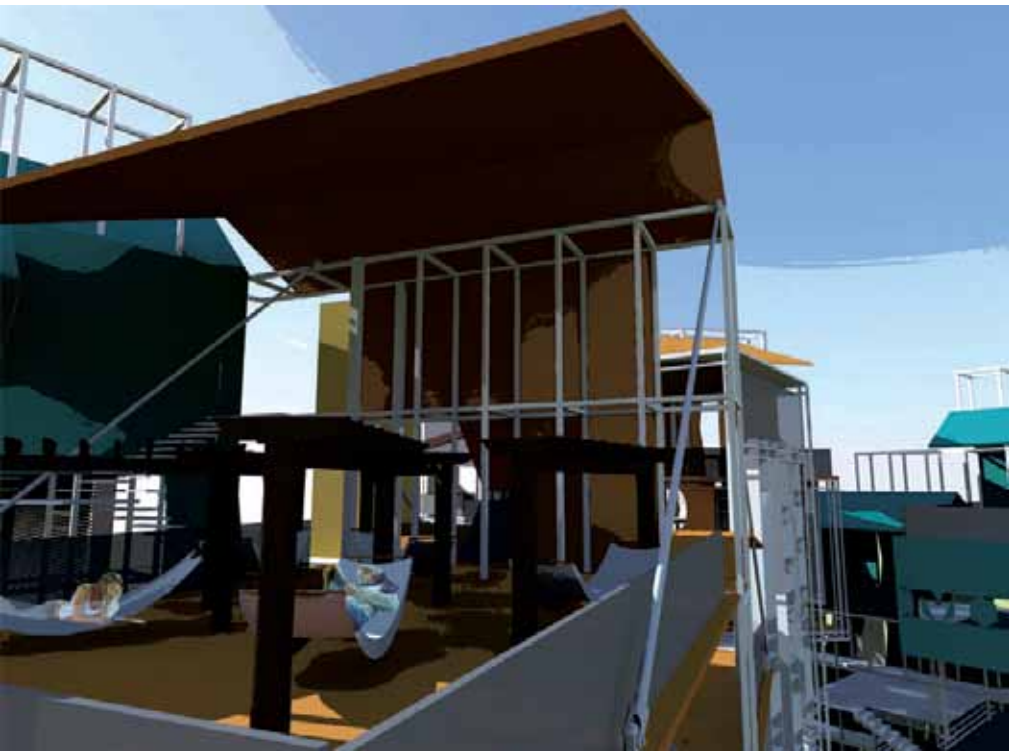
N r z ee an Sr han an oha e

The artefact is an office for Green Building administrators that is set within an urban lung. The office, however, is set to be the lung itself in that it breathes within its urban settings.

A prominent outcome in trying to achieve this is the reassessment of generic office spaces by recognising the familiar habits that have been formed by their conventional forms. Additionally, Low Ee Sheng encourages newer forms to accommodate these habits or allow new habits to be formed. With this approach, a new structure and environment for working within an office develops, while, paving the way for a newer office form simultaneously.



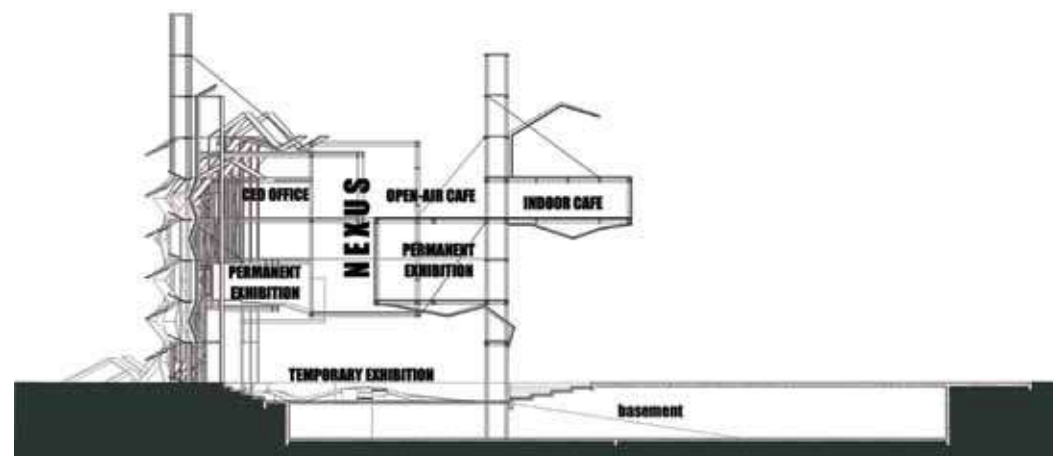




The artefact begins by establishing an actual structural system that will hold office units to be placed at random. Thus, they open the possibilities of a new office configuration. These units would then be allowed to open itself to the environment as much as possible thereby controlling it as individual rather than as a huge singular mass.

The main structural frame would further accommodate various methods and types of skin for shading and viewing dramatic vistas in response to the surrounding environment. As much as the office units have been designed to 'breathe' by themselves, the overall formal composition suggests they pulsate more due to its erratic facade than it does breathe.

■ Low Ee Sheng

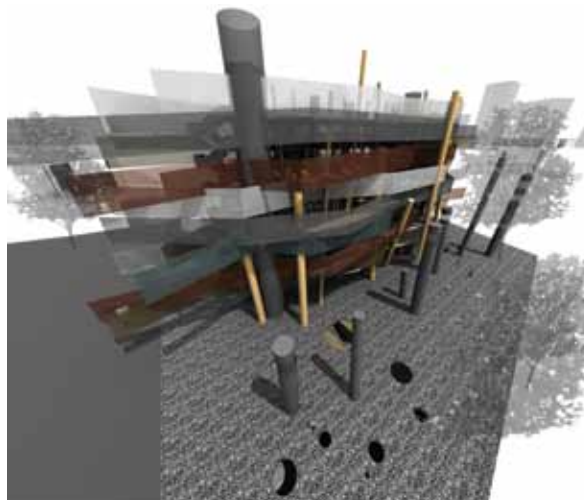


# reach n' layer

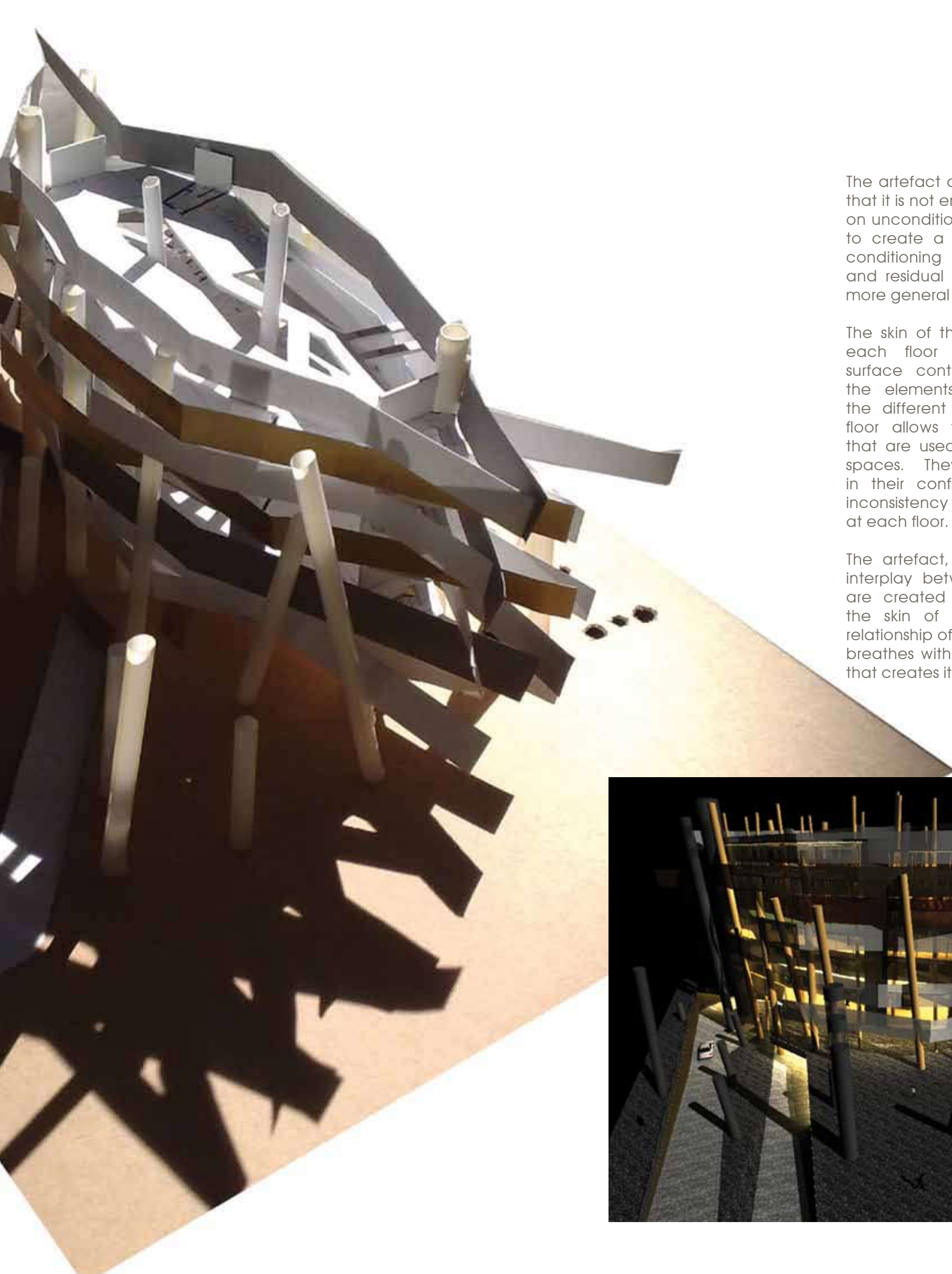
N r z ee al o oha a

The artefact is not so much the placement of a design within an urban lung but more of the design being the urban lung itself. The project is an office unit that is not only placed within an urban breathing space but is more of an office unit that breathes within its urban context.

The most conspicuous step taken to fulfill these objectives is reassessing the generic compartmentalised office unit to allow air flow with minimal vertical planar hindrance. It is not a matter of merely "breaking down the walls" but more of what follows after which is how to replace the functions and necessities of walls without relying on them. These come with a reassessment of the working culture and finding new solutions to old working habits.



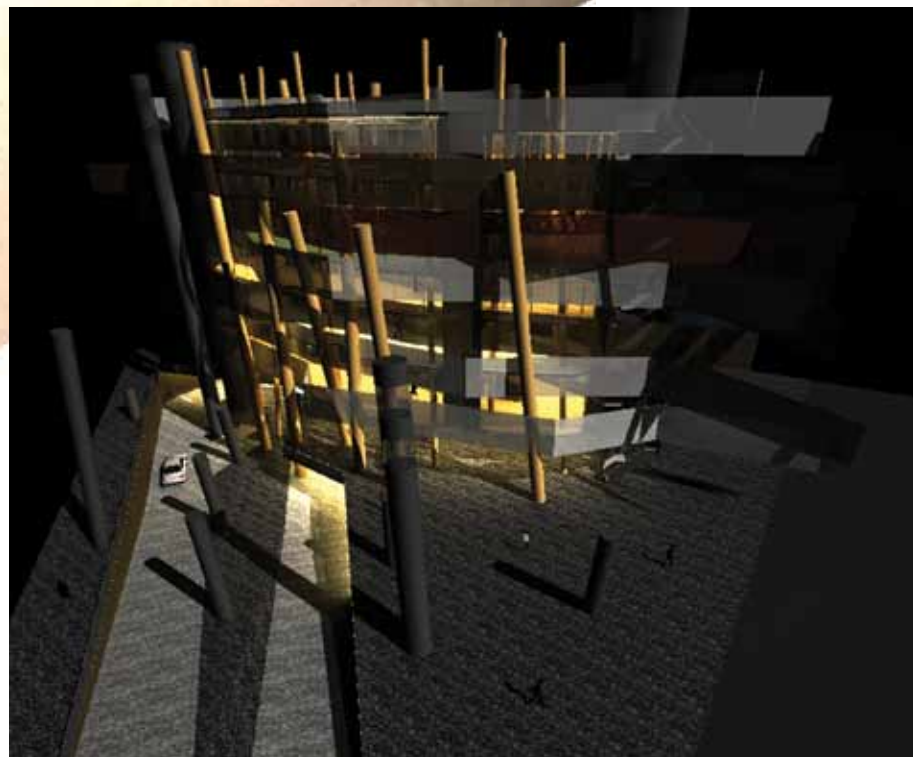




The artefact accepts the stark reality that it is not entirely conducive to rely on unconditioned urban air. It strives to create a balance between air-conditioning for specific task areas and residual air-conditioning for the more general and transitory areas.

The skin of the building is erratic at each floor representing different surface contact and response to the elements. The gaps between the different skin layering of each floor allows for incidental pockets that are used to create ambiguous spaces. They are unpredictable in their configurations due to the inconsistency of where they happen at each floor.

The artefact, therefore, is a design interplay between the spaces that are created within the volume of the skin of the building and the relationship of the spatial volume that breathes within and through the skin that creates it.











7

eyon rary

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## eyon rary

z zah Sal Sye Sal Sar zal an o

The mere thought of designing a library project comparable to three main institutional libraries in the world that is the British Library in London, the Library of Congress in Washington, D.C. and the Bibliotheque Nationale in Paris, is overwhelming.

However, the changes in the electronic technology since the past thirty years have imposed greater challenge in 21st century library design. The library is no longer a repository for printed materials. It now embarks on the revolutionary world of miniaturisation and the day to day running of the library is based upon computer technology.

Prior to the design exercise, students had the opportunity to visit Ken Yeang's National Library in Singapore, Norman Foster's Library at Universiti Petronas in Perak and the two conventional libraries in Kuala Lumpur namely the National Library (Jalan Tun Razak) and Kuala Lumpur City library (Jalan Raja).

The 2.26 acres site for the proposed library project is situated in a dynamic urban enclave between Jalan Tuanku Abdul Rahman (TAR) and Jalan Dang Wangi. Jalan TAR formerly known as Batu Road, is a prominent road in Kuala Lumpur with a colourful history of cultural background. The whole stretch of road is a testament of past, present and future of Kuala Lumpur. It represents the progression of Kuala Lumpur's rapid infrastructure development. A project of this nature is expected to be monumental.

The site has an existing Art Deco building formerly known as the Odeon Cinema. Students are required to retain this building as part of their library complex.

The main objective of the project is to develop a complex architectural design within an urban setting. Students were challenged to interpret issues related to urban design guidelines and integrate them into the project's social and cultural context.

The site should encourage general public to at least visit the library at their own leisure. For the serious library users, the problem of accessibility should be minimal. Furthermore, it is close to pedestrian traffic and public transport. The physical impact of the proposed library and its landscape must be significant as it can be viewed from a distance along Jalan TAR. Students need to consider the impact of the building on its surroundings in terms of size, architectural style and construction approach.



Since Kuala Lumpur already has two conventional libraries, students are encouraged to select a specific topic and consider designing a specialised library or bibliotheque. Eleven students are divided into four groups and worked together as a team during the precedent study and data collection stage. Upon completion of the site analysis, each student then worked on his/her own selected specialised library.

**I I**. The precedent study was conducted by Norlia, Soon H F and Yow C S. This particular library with multi-functional space acts as a learning centre for the public in general and encourages public participation. Their designs allow for flexibility and present the dynamism of Malaysian rich culture. The library is created with a strong cultural presence which is linked to the historical Odeon Cinema building.

**I N N**. The precedent study was conducted by M Khairi and M Nazri. For the media and commerce centre design group, students argued that most library designs in Malaysia focus mainly on the building forms. Their concept proposal is to utilise the entire landscape and the building exterior envelope as a medium in knowledge delivery. Knowledge and learning is no longer being restricted within a building but spread out throughout the landscape and architecture.

**IN S I**. The precedent study was conducted by Hanafi, Phung K S and Siah P L. This group aims to enhance Kuala Lumpur's position as an artistic vibrant city through promotions of contemporary art and arts education for the whole community. The design for the performing arts library not only serves as an extensive research centre but a place of congregation for group engagements where discoveries of creative potentials in dances, music, films and theatre happen. The students strongly believed that a contemporary building setting would certainly stimulate a new method of learning which involves experimentation for inspiration as well as aspiration.

**S I N N I I**. The precedent study was conducted by Nor Izyan, Too Y Y and Yuslizza. Apart from focusing on printed materials (books) and provision of resources, the textile and fashion library is a hub for social interaction that includes indoor and outdoor recreational space. Works of famous fashion designers such as Jimmy Choo, Bernard Chandran, Akmal Hafiz, Zang Toi, etc. will be exhibited here to create awareness and appreciation on artistic merits and the cultural importance of Malaysian textiles and fashion. This will be the centre where users can share ideas, exchange information and further develop the textile and fashion industry professionally.

All the above proposed libraries will serve as the information and reference centre for professional associations, non-governmental bodies, societies and general public at large. Thus/Hence, aspects on safety and security are of prime concern.

In conclusion, the students' approach in designing these four types of libraries is totally different from the conventional library. They strongly believed that a future library should serve not just as a mono-functional library in the classical sense. Their designs allow for maximum flexibility and enable the public to engage in all sorts of activities once inside the main building.

Apart from meeting the library requirements per se, students have successfully looked into the adaptive reuse of the historical Odeon cinema. They not only demonstrated the understanding of complex architectural design within a constrained site but also managed to exhibit technical competency, knowledge and understanding of the sustainable design principles and strategies. The use of daylighting in reading areas, low energy light fittings and avoidance of massive glazing on the western facade are some of the green building issues that are often emphasised in all their library designs.

The diversity of urbanscape and the development of the surrounding areas close to the site are enriched with the insertion of a contemporary building form. This certainly transcends and transforms the architecture especially along Jalan Tuanku Abdul Rahman.



# ry Review

N r z ee

In an age where the advantages and virtues of softcopy are rapidly overshadowing that of the hardcopy, the library as we are familiar with, might just find itself as an anachronism should it choose to ignore rethinking its role and m tier in present times. Rather than merely harping back on the library of days past, the selected proposals for an urban library take on a refreshingly reactionary approach, not just against the forms and workings of the traditional library, but also of its position within the urban context and its role to the community it is to serve.

Gone are the institutional image of a library as the proposals replace 'institution' with 'integration'. Thus, creating a more exoteric environment for the benefit and enjoyment of a wider populace. The criteria for the users are no longer dictated by the pedantic programme for a library but are developed around the dynamics of possibilities on how the spaces in and around the library could be used by choice, without compromising the security and administrative requirements.

As much as the methods and tools for the dissemination of information and knowledge have changed with the crossover from hardcopy to softcopy, the proposals are keen to manifest that the whole culture and environment of a library should also change beyond merely making newer forms for a library of today.

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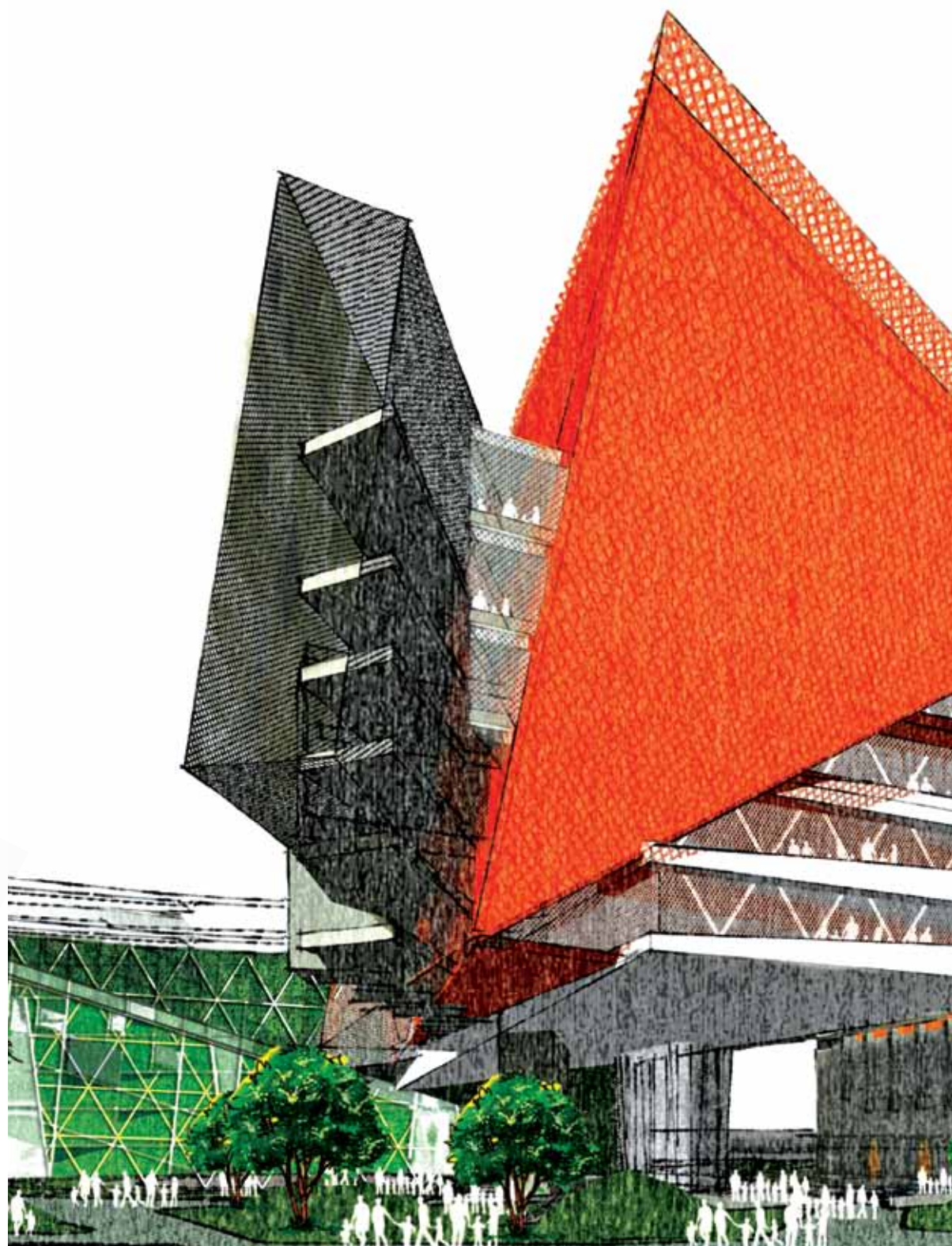
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This innovative approach to the stuffy world of libraries and information centres demonstrates a total re-thinking, not only of the contents, but also the very essence of libraries themselves. Although it is still conceived as an 'institution', the dynamism of the locale, as well as the openness, flow and flexibility in the learning process and notions of fluidity and movement are cleverly captured in a design which encapsulates this new dynamism.

Begun as an act of re-thinking, redefining the institution of the library from a place exclusively for the printed word to an 'Urban Information Mediator', the 'library' is now viewed as a place to provide an immersive experience of knowledge in an exciting world of virtual information. It has become a centre for knowledge with a mixed typology of library, exhibition, education, culture and recreation spaces with their associated infrastructure. It has become a 'Media and Commerce Centre'.



■ Muhammad Khairi Ismail

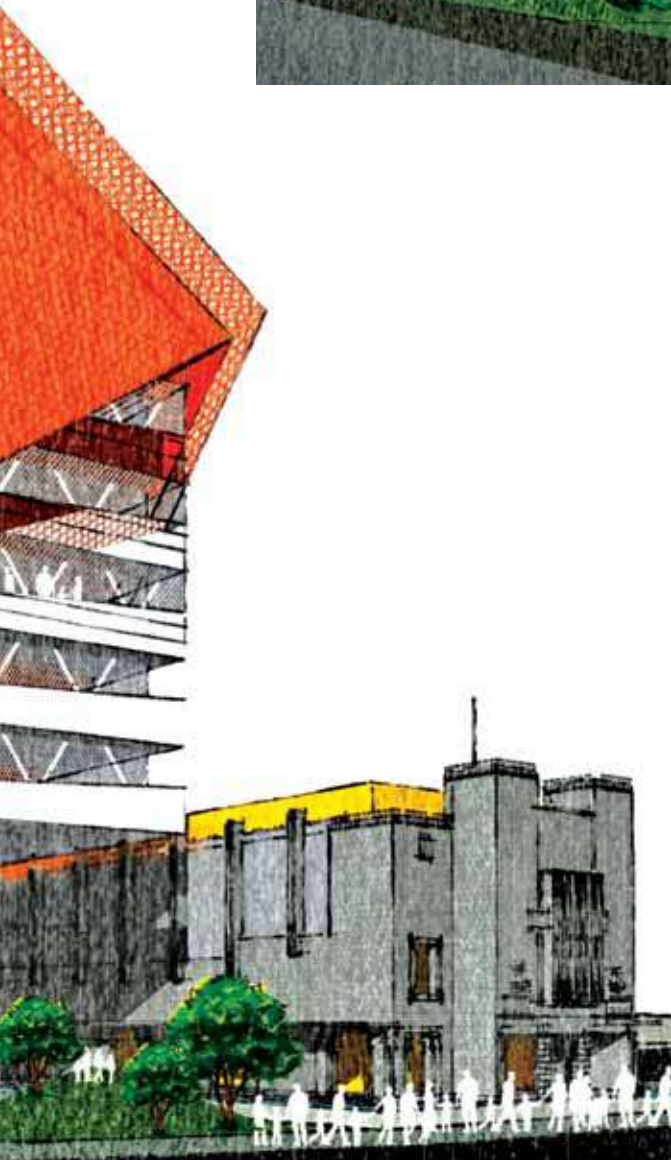






The Media and Commerce Centre addresses ideas of openness, flow and flexibility in the learning process. The notion of fluidity and movement will operate against static spaces with freer movement around and through the centre. Thus, it encourages and develops relationships among its various users in promoting an exchange of knowledge through a variety of experiences at the centre.

The architecture of the centre, in its dynamic urban setting adjacent to the historical Odeon cinema along Jalan TAR, mirrors the fluidity and movement of life along Jalan TAR and the Klang Valley. The design organises a range of movement patterns for its various users and focuses its circulation systems in revealing and expressing its functions while guiding users' experience in spaces created by the movement of visitors. Conceived as an extension of the street level's urban movement that is stretched horizontally into the site and brought vertically into the centre, the radical reorientation of the public surface upwards into the green facades of the centre creates connections between the street and the various programmes offered within the complex.





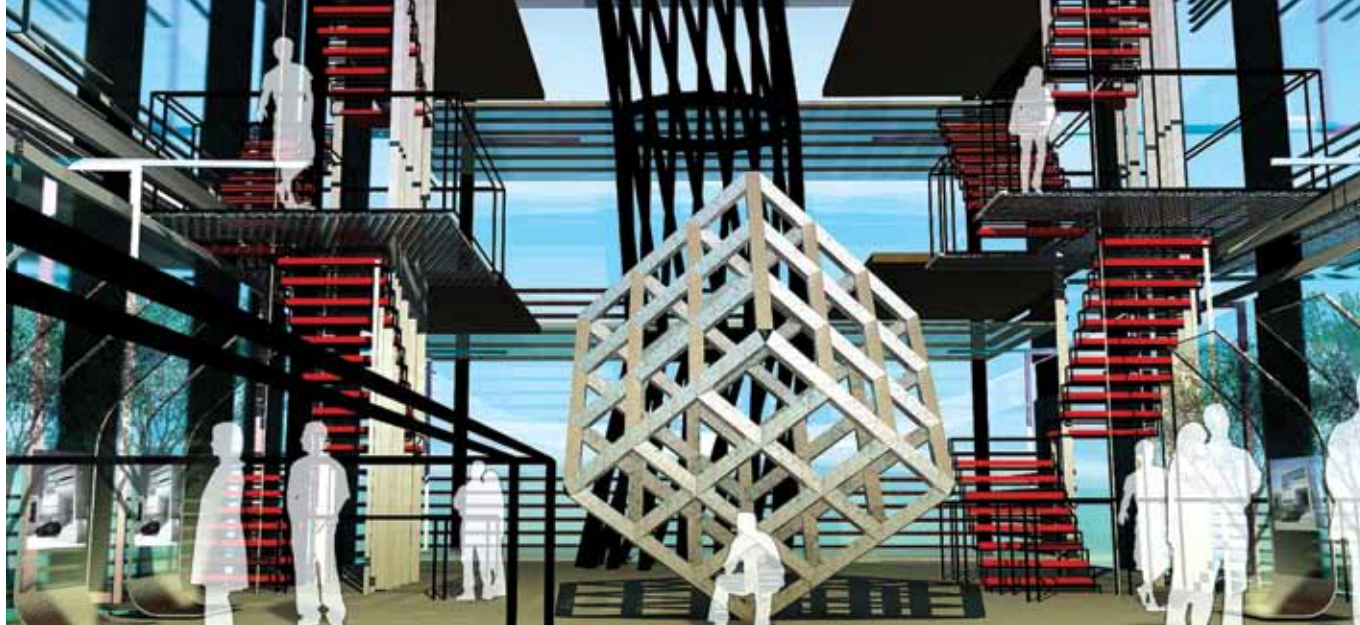
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The proposed textile and fashion library along Jalan Tuanku Abdul Rahman (TAR) in Kuala Lumpur comprises two significant elements: rethinking and upgrading of the existing historical Odeon cinema and the new wing which forms the main library. The proposal creates the necessary dialogue between the new and old within the neighbourhood. The library building will act as a connector between Jalan TAR and Jalan Masjid India which is famous for its textile and fashion production.





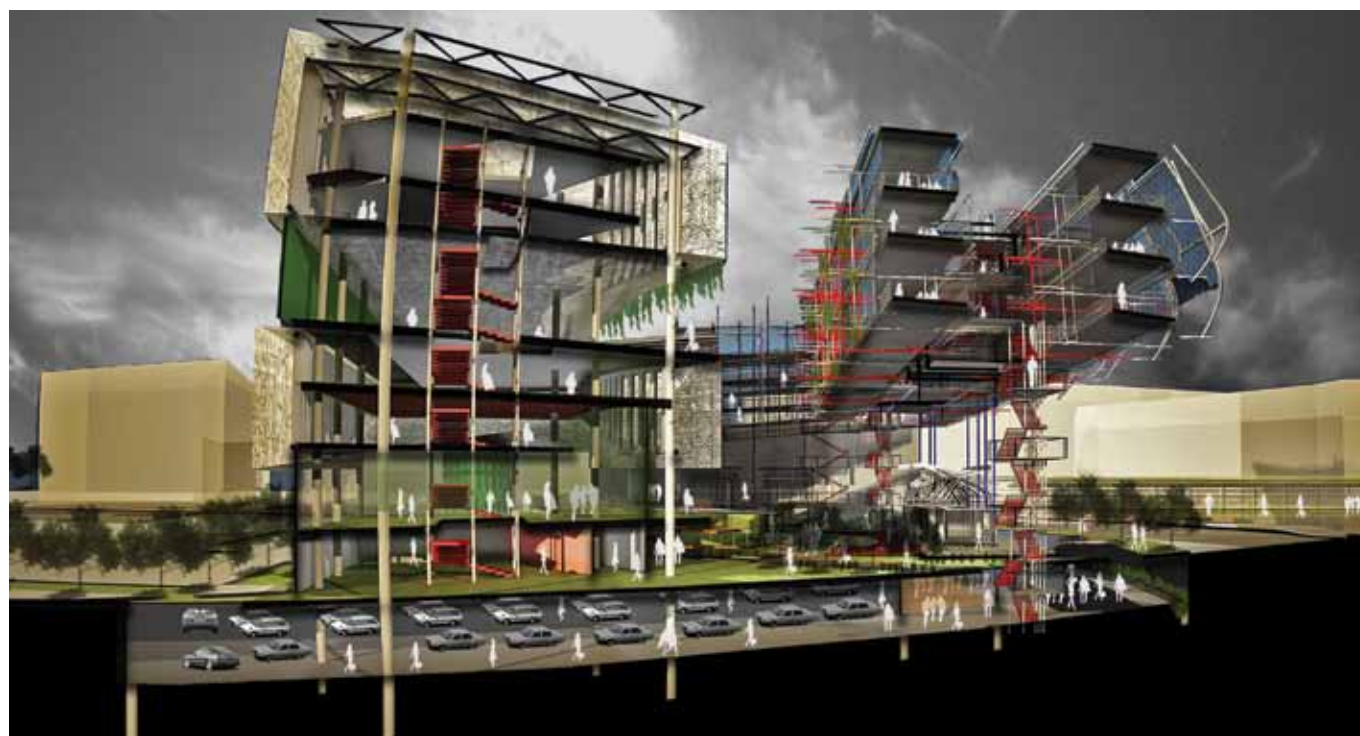


Taking into account the urban design guidelines, the proposed library demonstrates a novel architectural design pertaining to a complex public building within an urban setting.

In terms of urban planning, the main design intention is to fill in the open space by following the pattern of the existing urban structure. This is achieved by locating the new building along the outer perimeter and creating a central courtyard for recreation and a stage for communal events.

The main library is divided into two main elements namely the 'ramp of knowledge' and the educational centre. The foyer acts as an urban passage for the neighbourhood where the public can walk freely through the library complex. The library is distinguished by the innovative design for the exhibition hall located at the highest level which portrays a powerful structure that defies gravity. This results in a strong and dynamic impression for those passing by.

The whole library complex is a dynamic figure of open and enclosed areas and is meant to be the missing link along Jalan TAR. This makes up the significant and attractive educational institution for the community which the neighbourhood so lacks today.



■ Nor Izyan Saleh





Photo by:  
e o r o h a r e



8

# Interpersonal

John Hrahaallah La Salleh

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La La Salleh

# Local Urban Intervention

John Hraha, Allah Idris, Ilia Salleh

Year 5, Semester 1, 2008-2009  
ARC4002 Advanced Architecture Studio 3

Continuing the traditions of UPM's Bachelor of Architecture Programme, the 2008-2009 group of 7 students from the 5th year were required in their 1st semester to study as a group the development of a particular Malaysian urban entity. This is the first part of ARC4002 Advanced Architecture Studio 3. In this case, Kuching. Particularly, the Kuching Waterfront Area was analysed the proposed urban intervention in the selected area within its urban context. As a final part of their study, they were to propose several potential projects within the study area which would address specific problems/issues they had identified. Subsequently, in the latter part of the semester and throughout the second semester under ARC4003 Comprehensive Architecture Studio, each student was required to develop a building design for one of the potential sites and typologies as his or her 'Comprehensive Design Project'. They were required to apply sustainable design approaches and techniques during their design processes.

Research by John Hraha

In January, 2009, the class visited Kuching to gather insights into the study area. Personal observations and analyses were supplemented by briefings and guidance from various city and state agencies as well as selected local architects. The group produced a comprehensive report and made a number of proposals to further improve the waterfront area. The class proposed that the northern riverbank be included in the waterfront area and this could be linked by a pedestrian bridge to supplement the river ferries. They also extended the pedestrian riverside walk right up to the existing Malay *kampung*. They also proposed changes to the traffic circulation to better serve the Waterfront area and the pedestrianisation of additional streets in the Chinatown area to enhance visitors' experience. The final part of the group's study was to also identify 14 individual building typologies as potential design projects on a variety of sites throughout the waterfront area. These would serve as the source of their individual projects.

Each student was required to select two projects for further evaluation.

Subsequently, this was reduced to just one preferred 'Comprehensive Design Project'.



The 'Comprehensive Design Project' under ARC4003 is the final design exercise in the formal education of a student in architecture. It examines his or her accumulated knowledge and skills in handling architectural design problems. It provides a unique opportunity for students to design a building or a complex of buildings from the preparation of the brief to design proposal. These should be accompanied by a full documentation of investigations, findings, alternatives, decisions and conclusions. The chosen project would demonstrate comprehensiveness and sensitivity to the design problem and comprehension of sustainability issues including understanding of the Green Building Index (GBI) and its implementation. It provides a learning programme about the building type and its specialised aspects. The final work demonstrates the students' ability in the whole design process including the capacity for independent decision-making. It also demonstrates understanding of the relevant technology and its appropriate application as well as the ability to communicate the design intentions visually, verbally and in written form. The final solutions should demonstrate appropriateness in terms of human needs, environmental, social and cultural contexts as well as an aesthetic response. An understanding of economic values in design and construction is also expected and appropriate sustainable/environmental aspects of the designs are assessed by the students using the GBI Assessment Criteria.

#### **In al ro e**

The chosen projects included a wide range of typologies and a variety of sites. Five students chose sites with direct river frontages. Two projects were located across the Sarawak River on its northern bank. They are the Sarawak Academy of Arts by Muhammad Helmi bin Noor Rahmat and the other was Kampung Lintang Homestay by Jamilah Halina bt Abdul Halim. On the southern bank in the Waterfront area itself were Munirah@Siti Nur Fatimah bt Muhamad's Kuching Festive Bazaar and Patinggi Ali Mosque Complex by Muhsin bin Abd Aziz.

The remaining three projects were located inland in the Waterfront area but without direct water frontages. These are the Kuching Performing Arts Centre by Asraf bin Jamil; Carpenter Community Centre by Syarulzaini binti Abdual Rahman and; Kuching City Centre Terminal by Azwinda binti Rozali.

The Sarawak Academy of Arts is a very extensive project located on a very challenging site adjacent to the 19th century Fort Margherita. It has a beautiful river frontage facing Kuching City. The site slopes steeply down to the river and Helmi's solution maximises the potential with a layered design stretched along the contours of the hill.

The Kampung Lintang Homestay, on the other hand, is a scheme with a sensitive approach to incorporating an existing riverside kampung into a homestay centre for local and foreign tourists. The interesting aspect of Jamilah's proposal is that this peaceful relaxing setting is very close to the bustling Kuching (waterfront) and just a few meters over the river.

The Kuching Festive Bazaar is proposed for phase 2 of the Kuching Waterfront redevelopment area. It was very controversial when the heritage buildings at the site were all demolished during 2009. It was surprising that Munirah's proposal for a new bazaar at the waterfront included preservation and incorporation of some of these buildings in her proposal.

The Patinggi Ali Mosque Complex is a bold attempt by Muhsin to restore this landmark to its former glory by building on the original historical imagery of its pyramidal roof whilst at the same time, make the mosque a true community building for the adjacent kampung. The proposal even links it to the riverside walk to encourage non Muslims to experience the complex.

The Kuching Performing Arts Centre is located on a site in the central public/cultural/heritage belt of the waterfront where the authorities are planning to build a shopping centre. Asraf thought this intention is totally inappropriate for the site and instead designed a significant public building. His form is inspired by the indigenous dance movements. The building would enable this important location to remain in the public realm.

The Carpenter Community Centre uses adaptive reuse and infill techniques to rejuvenate an important urban block of the old Kuching Waterfront. Sharul Zaini has proposed the community centre to be located at the rundown area at the rear of 4 rows of heritage shophouses in the centre of the scheme. She has also incorporated a budget hotel and other facilities within the existing fabric.

The Kuching City Centre Terminal is located inland from the mosque. The proposal for an integrated transport interchange caters to the Waterfront area and links to the new main Kuching bus terminal located in the south of the city. Azwinda has proposed to incorporate some novel ideas such as a one-stop centre for payments/government departments and has proposed strong linkages to the adjacent mosque, the waterfront and heritage areas.



# ry Review

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The proposal is an exemplary display of the institutional approach for an Academy of Arts by the boldness of its form and by the formality in the language of its components such as the towering columns, stepped terraces, hard waterscapes and corridor-compartment based circulation.

Strict and rigid formalities, however, are very rightly compromised in the overall configuration as the complex modulates the programme into the topography in order to achieve homogeneity with the surroundings. It displays a conscientious approach to surface earth management of the site which would have benefited much more for ground water management as well if there were not as much hard surfaces covering the ground.

Prominent formalities within the design are further offsetted by pockets and layers of relatively whimsical display of geometry and colours around the complex and seemingly based on well-established lexicons of known artists such as Mondrian. The design, therefore, succeeds in being more about the curatorship rather than the creation of arts.

# Sarawak Academy of Arts

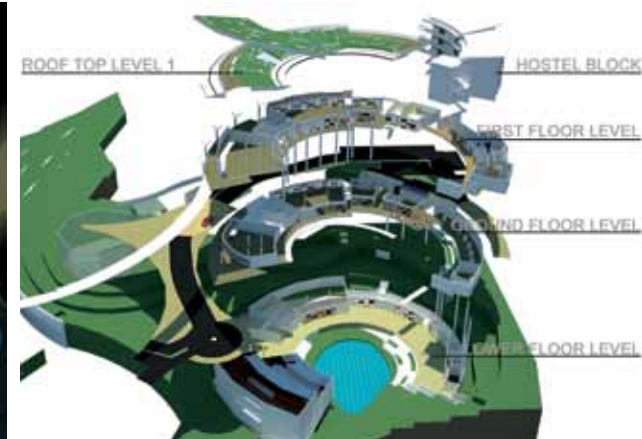
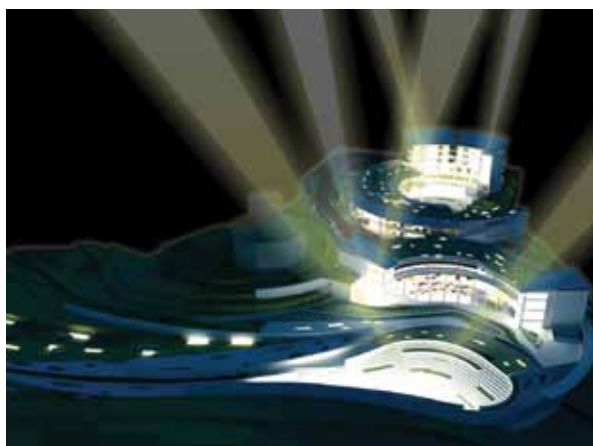
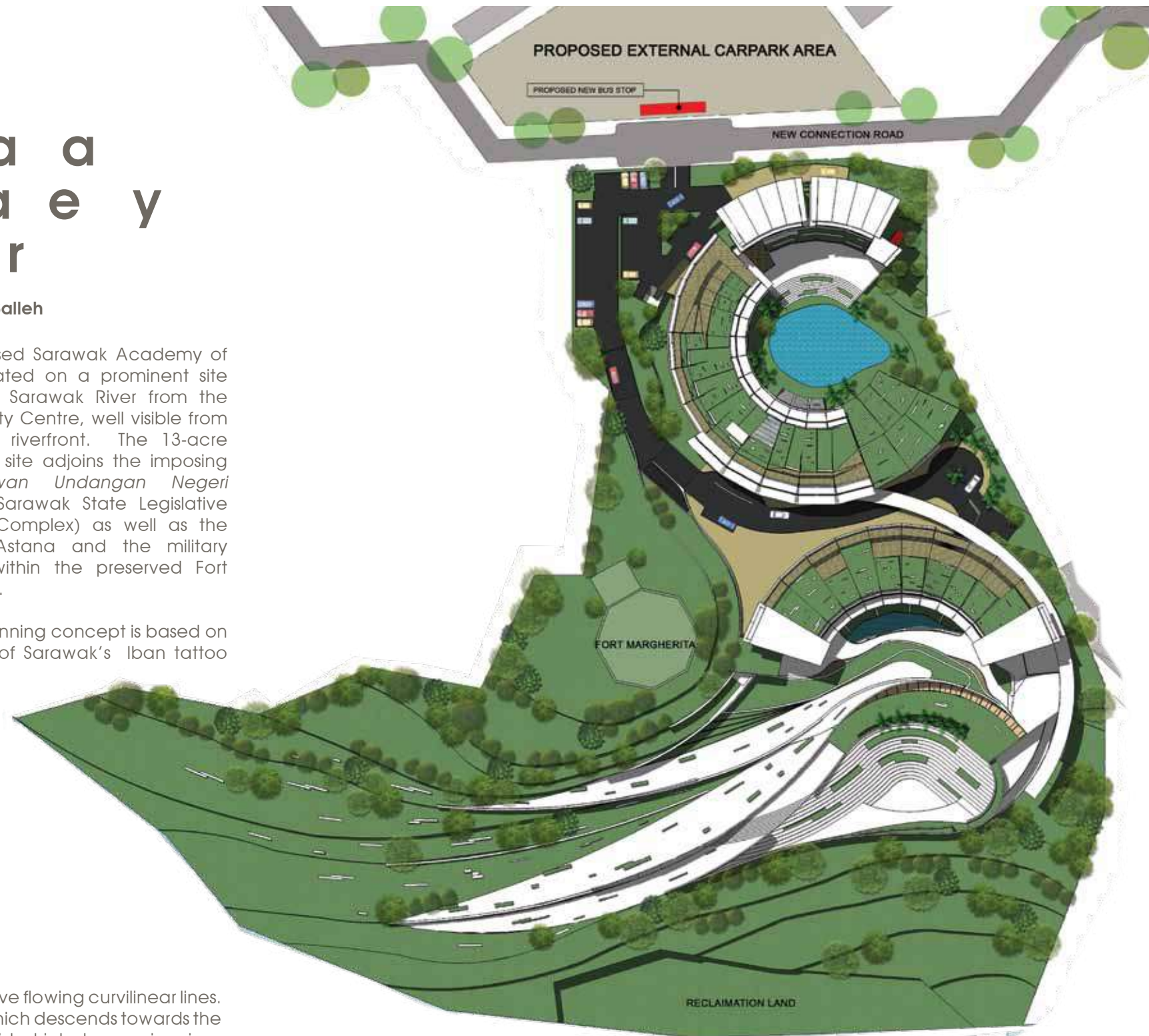
Ia Ila Salleh

The proposed Sarawak Academy of Arts is located on a prominent site across the Sarawak River from the Kuching City Centre, well visible from its famous riverfront. The 13-acre undulating site adjoins the imposing new *Dewan Undangan Negeri Sarawak* (Sarawak State Legislative Assembly Complex) as well as the historical Astana and the military barracks within the preserved Fort Margherita.

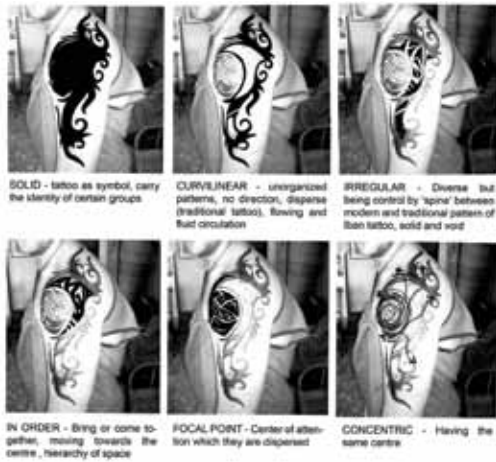
The site planning concept is based on the motifs of Sarawak's Iban tattoo

with its suave flowing curvilinear lines. The site, which descends towards the river, is divided into two zoning rings by the central avenue. It forms the pedestrian circulation spine, linking the two campus entrances - the main one from *Dewan Undangan Negeri Sarawak* and the other from *Kampung Boyan*. The strategy of the campus layout is to limit vehicular access into the site thus creating a safe and healthy environment.

The Academy is intended as an art learning centre for research and experimentation of heritage and cultural activities of Sarawak.



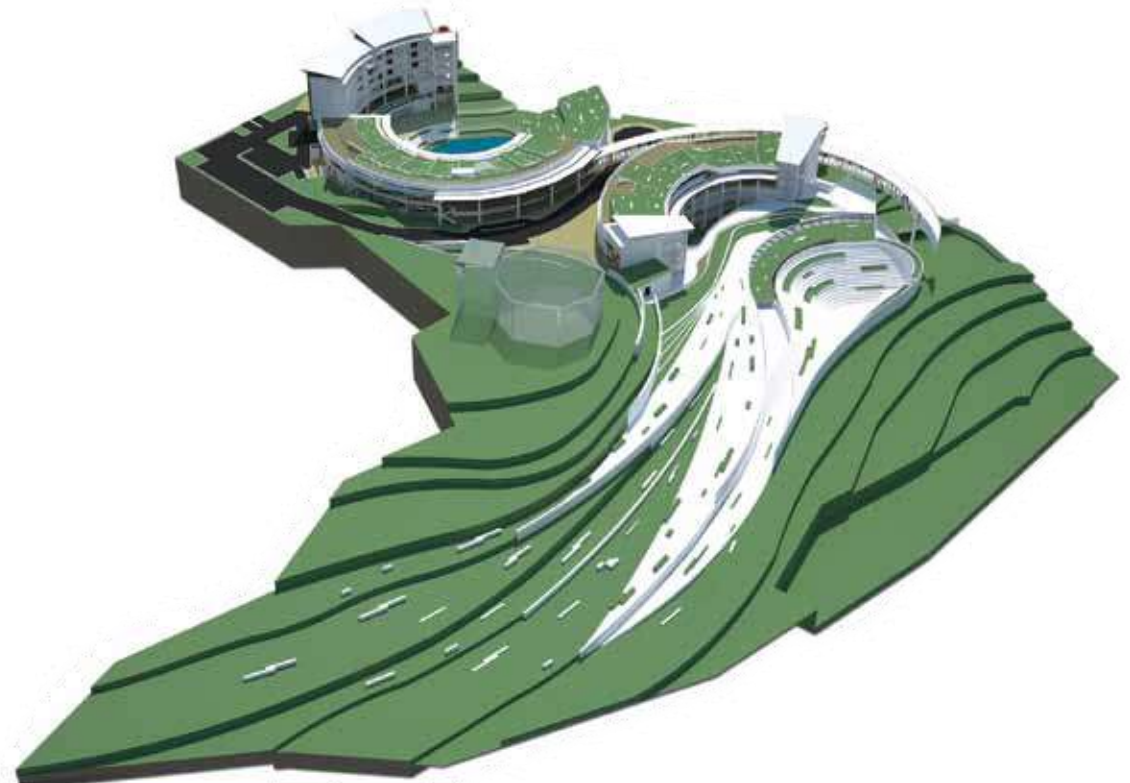
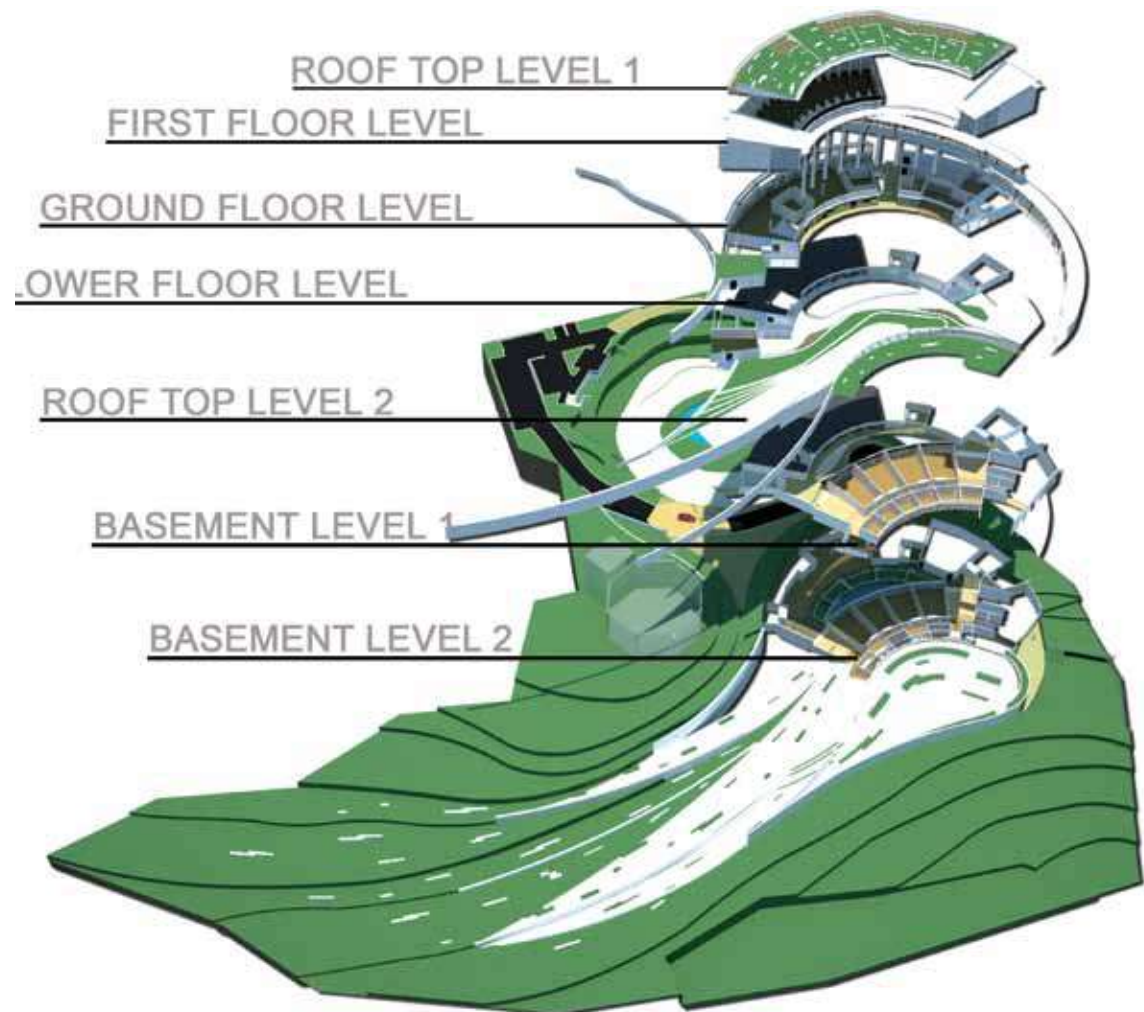




It comprises six components designed by layers where each layer has a different function. The six components are: 1) the Open Art Plaza incorporating administration, public facilities and spaces with large open foyer descending to the open plaza and main gallery; 2) the Multi-purpose Complex consisting mainly of recreation facilities with man-made water body and pedestrian mall; 3) the Living Cluster for students and essential staff; 4) the Library Complex and the Great Hall; 5) the Academic Complex for learning purposes and 6) the Amphitheatre as the culmination space which opens for public events. The layering of functions is created to achieve various experiences of circulation leading to different functional and spatial characteristics in the campus.

Environmental considerations have been addressed by maximising natural ventilation, sun-shading and daylighting applications in the building's layout and design while adopting rainwater harvesting and water element landscaping. Sunken courtyards and pocket gardens interplay between building blocks and descending levels.

The hallmark of this campus design is the articulated exploitation of multi-level opportunities for indoor and outdoor spatial integration while ensuring flexible indoor space utilisation. This is highlighted in the academic complex. The overall design has maintained respect for the heritage sites nearby and successfully augmented the Dewan Undangan Negeri Sarawak riverfront view from the Kuching City Centre across the Sarawak River.



■ Muhammad Helmi Noor Rahmat





Photo by:  
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Abd Aziz Othman

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## national Science and Arts

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The landscape architecture profession has grown rapidly in recent years and has played a major role in present development as the nation moves towards improving sustainability and quality outdoor spaces and environment. The scenario has to be closely tied to the education and training of students as future professional landscape architects. The general purpose of landscape architecture education and training is educating students by enhancing their intellect as well as developing their capabilities in the relevant field.

The department has tailored a curriculum towards developing students' technical knowledge and analytical skills as well as understanding the complexity of outdoor tropical environment to fit human needs and sustainability. As in any design programme, a special concern is on the design studio works. They are systematically organised on the basis of type and scale to describe a comprehensive pattern of courses leading to a degree in landscape architecture. Fourteen works illustrated in the following pages were selected by judges as examples of the landscape architecture studio exercises which relied on the rational taught process.

Beginning with the first year, Space Fragmentation is a work resulted from the Basic Design Studio to gain understanding about creating spaces and space interrelationships. Students explored their ideas about spaces and showed their creativities in creating various conceptual spaces. The bulk of this work is devoted to the 3-D conceptual model of 1M<sup>3</sup> cube.

The second year works focus on landscape site planning for solving the issues and problems of a specific site in a moderate small scale. Complimenting Nature is a project reflecting the pristine greenery of Tasik Raban in Perak. A thorough study was conducted earlier involving nature and ecological principles.



The first and second year studio works deal with basic and fundamental landscape design principles and processes. The following two years continue with landscape planning and design involving comprehensive studies and solutions.

Natural Breathing Spaces highlight the concern for a natural environment and landscape resources. The ecological movement and the importance of nature's conservation nowadays have brought new levels of interest in the approach of ecological design. The adoption of this approach to the work of landscape design has however increased the potential for informal recreation in addition to increasing natural habitats for animals and plants.

Institutional Spatial Interaction emphasises on the institutional landscape design. This perspective refers to the principles of noting design that determines how indoor and outdoor spaces interact between each other.

Finally, Urban Revitalisation represents a conscious arrangement of urban spaces to enhance the quality of urban environment towards sustainability. The works deal with the complex issues of urban environment. They provoked students' thoughts and triggered deeper exploration on design issues and solutions for urban spaces.

In conclusion, all studio works provide indications that outdoor spaces are coming to the fore in design thinking. They are affirmations of good and collaborative designs. It is hoped that students will contribute to introducing new ideas and forming good practices in meeting the challenges and seeking solution for landscape architecture of the 21<sup>st</sup> century.







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Mohd Ariffin & Roziya Ibrahim

# S a e r a e n a o n

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For novice designers in the field of landscape architecture, understanding about space and how it is related with other spaces is very important. Therefore, to ensure that future designers understand these 'spaces', the exercise about space fragmentation was executed. Students were given a box frame measuring 1' x 1' x 1' and asked to create as many spaces as possible within the frame box. They were also asked to think how the created spaces would be linked to each other. However, to ensure that the students execute the project creatively, they must have a design concept that would bind the whole understanding about space and spaces interrelationship. At the end of the exercise, it is hoped that a student would understand the formation of spaces in design, creating linkages between spaces and having hands-on skills in modelling using appropriate materials. Nevertheless, the most important objective of the exercise is to promote the students understanding about the meaning and the importance of spaces when designing their future projects.



# ry Review

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The project is about experimenting with shapes and sizes together with forms to generate conceptual spaces. Design elements were sculpturally manipulated to produce incidental spaces. An overall visual impact made by all these cubes when put together demonstrates the unity and understanding about the project. One of the project's objectives is using colour as a unifying factor. However the individual student's understanding about space modulation is much desired. It is a good design exercise combining two-dimensional and three-dimensional in one project. The students' ability in extending and developing design ideas from paintings into three-dimensional objects is commendable. The bonding factor between the two artworks is the concept developed during the inception of the project. Design elements which students used for the projects indicated which students satisfactory understanding of fundamental design principles.

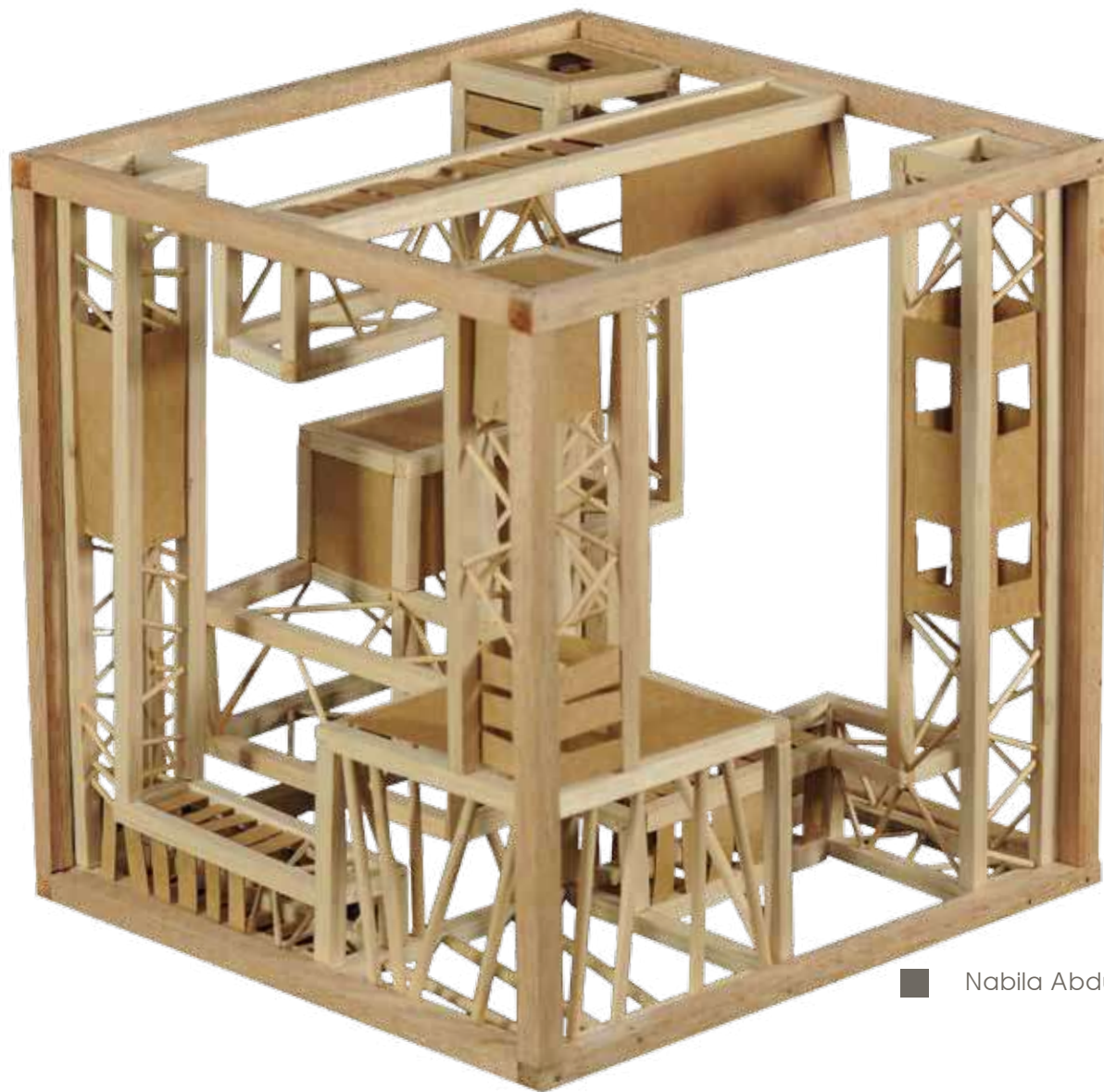
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The assignment is about an exploration of spaces in the context of moulding three dimensional framework through experimenting with various shapes and forms to generate structural beauty and sculptural value of their abstract spaces. Many of the examples shown in the following pages display delightful composition, structure and pattern. The choreography of these spaces suggested what appear to be experiential and sense-evoking spaces. The exploration of various spaces was conducted with the aid of a white only mock-up model from which various spaces or different qualities were composed or choreographed. However, some works are rather too complex which indicate poor control of the design process and often resulting in a non-singular or lacking the coherence. Design principles were clearly evident in some while others were vaguely noticeable. It was a pleasure to behold to observe the overall complexity and sophistication of their designs.

# ra n S a e

Mohd Yazid Mohd Yunos, Suhardi Maulan, Noor Fazamimah Mohd Ariffin &  
oz ya I rah

Shaft and bridges - Nabila Abdul Latif chose to explore the creation and relationship of spaces using a 'bridge and shaft' concept. The concept is rather common in the engineering field but not in landscape architecture. Nabilah is able to produce various sizes of spaces within the limited size of the given box. The spaces created links with each other with a 'bridge and shaft' either horizontally or vertically. It gives a dramatic form for the spaces to interconnect and creates the feeling of structural strength. Nabilah is also able to emphasise visual balance by constructing bridges and shafts at certain corners and leaving void spaces in the middle. Therefore, in addition to various spaces created by these shafts and bridges, Nabilah is also able to enhance the quality of balance through their careful organisation.



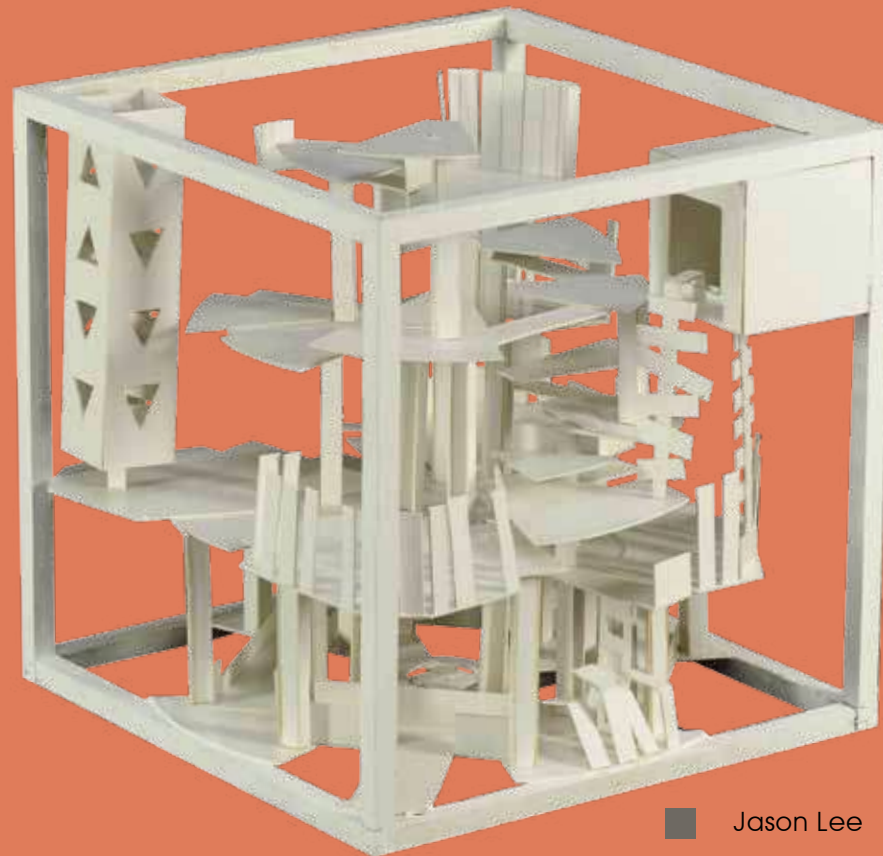
■ Nabila Abdul Latif



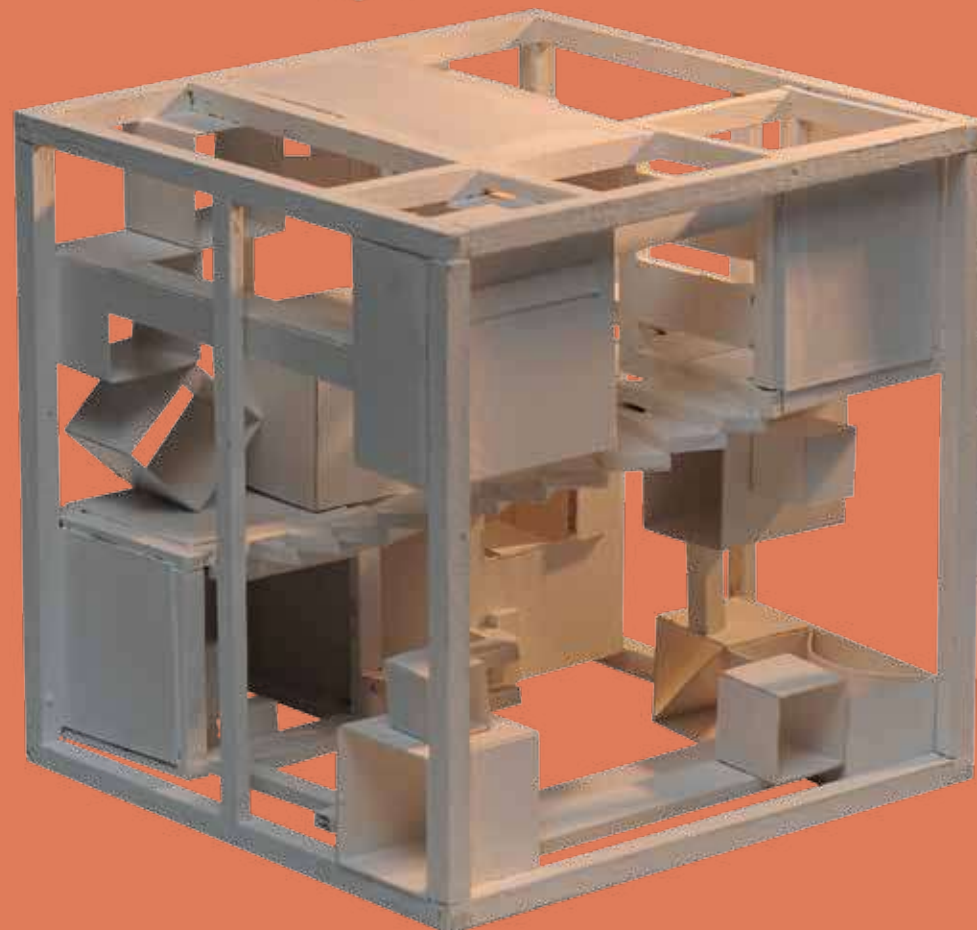
Spiral – In contrast to the bridge and shaft, Jason Lee used spiral as a concept to represent his space within space. Through the spiral forms and shapes, various spaces are created and all these spaces are linked to the middle with the spiral stair that gradually climbed from the lowest point up to the highest peak. In addition, Jason managed to provide an excellent variation of spaces within his structure by opening and closing certain planes using the principle of design for repetition and rhythm.

For Your Eyes Only - Norshahida Zakaria's space fragmentation boxes, if real, could only be seen from outside and nobody could enter the space because she seemed to block all the possible access points. Norshahida wanted people to experience the spaces visually. She cleverly placed a half-spiral stair in the middle of the box and the stair become the only object or space that was not rectangular or square. As a result, the spiral stairs became a focal point because the curvilinear form of the steps created a contrast look to the overall form and shape of the box.

Students learnt that spaces could be created and each type of space could bear selected meanings. However, to make a space notice able, it was apparent that designers need to ideate a concept that would later frame his or her whole idea. All three examples shown here illustrate how a simple concept such as bridge, spiral and connection could be manipulated to bring meaning to design. This exercise is for beginners to appreciate the importance of concept, process and workmanship to create a space.



■ Jason Lee



■ Norshahida Zakaria





Photo by:  
ra l ah an





# 11

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# o l en n Na re

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Studio LAN 3002 Site Planning Studio Year 2 of Bachelor of Landscape Architecture conducted a course work in the district of Lenggong, Perak. The place is known by its own pre-historic values and made famous by the discovery of ‘Perakman’ as well as the historical caves. In addition, it is set in a serene natural setting which is well-preserved until now. Tasik Raban is recognised as one major pulling factor for natural landscape enthusiasts. Basically, the site is categorised as a sensitive landscape area. The site is located in-between the Highway that connects the East and the West coasts of Peninsula Malaysia. It is 15 kilometers from Kuala Kangsar and 20 kilometers from the town, Grik. Nevertheless, the site could never be a real attraction to visitors if it is only a place to pass by. The course work required groups of students to analyse the site to identify its potentials for future development.

Based on their analyses, three potential landscape design proposals with sustainable landscape approach were put forward. The designers are Chen Fei Wen, Kong Kok How and Raymond Ling Guang Kowng. These four landscape design proposals bring about concepts that are relevant to current condition and the future of Lenggong district especially in the vicinity of the unique Tasik Raban.

In the individual approach by Raymond Ling Guang Kowng, he had used a more down-to-earth concept but fulfils the objectives. The concept “Chambered Shell” with organic shapes succeeded in making the spaces and activities to blend in naturally without affecting the ecological values of the site thus yet adding values to the natural environment.

On the other hand, Kong Kok How—in a contemporary—approach used repeated geometrical shapes with the concept ‘Ripple’ to create different types and characters of spaces. Spaces were designed to suit all age groups for them to enjoy. The geometrical spaces influenced the flow of activities to be more coordinated and systematic. The beauty of the visual qualities was also a concern. ‘Ripple’, in overall, has enlivened the chosen site.

Chen Fei Wen’s ‘Stream of Life’ concept depicts what is supposed to happen in a water sport complex that is located in a sensitive area. The designer succeeded in conserving the original topography by blending in multiple levels of organic spaces with the existing unique environment. Practical spaces are to give comfort and at the same time to be functional to users. The objective to have water-based recreational spaces is successfully achieved.

Overall, the course work has given the opportunity for students to be more explorative and to understand landscape site planning especially in moderately-scaled sensitive areas. Emphasis has been given to attain more sustainable and competitive design, appreciating and respecting physical characteristics as well as conserving and improving the culture and visual of the surrounding.



# ry Review

a a n n a h a r n a e h a r n

This review covers three design projects proposed in the vicinity of Tasik Raban. They are the Chambered Shell, the Ripple and the Stream of Life.

One author attempted to plan the site with a central core and all other elements and spaces based on a 'Chambered Shell' concept. However, the central core appeared to indicate a level of intervention which was quite minimalist. The design of the other areas were deliberately controlled without over designing. This was further emphasised by the use of hierarchical footpaths which controlled users' movement around the site. The planning and siting of water-based element seem to be less imaginative as it linearly hugged the edge of the water while excluding the variety of experiences for users. Tropical indentify is reflected by using structural plantings in abundance. The overall planning also acknowledges the presence of water body.

Good free flowing structural layout adresses the water body well in the Ripple project. Overall work is quite expressive with a good balance between structural shaded plantings and open spaces. The design's diverse spaces that replicate the uniqueness of the site's topography offer the opportunity for visitors to explore and gain knowledge about natural system on land and water. The design responds to the natural characteristics of the site by using existing topography, trees and plant materials that encourage exploration. There is also a commendable effort in the use of graphics to express idea and spirit of the place. Notable character in the structural layout is a nice balance between hard and soft spaces. The peripheral location of most man-made elements indicates sensitivity by the designer to the level of intervention on the site with the middle portion being left untouched. The literal adaptation of the 'Ripple' concept, however, is quite disappointing. What is also evident is the sense of tropicity in the use of planting species especially the abundance of structural and shaded trees and palms.

The design idea and interpretation is commendable with continuous flow and articulation of spaces based on the "Stream of Life" concept. However, the use of the light blue colour to express design is misleading and non-justifiable in this. Footpaths and many points of intersections with the surrounding landscape have made possible for wildlife and people to access the designed spaces. The concentration of structure- and shade-giving trees in the south side and anecdotal suggestions along and on the spaces on the north indicate a deliberate and thoughtful design in addressing quality and variety in a place-making endeavour. A poetic but literal concept and the lack of profoundness in interpretation leave some aspects of the design much to be desired.



# here Shell

ra l ah an oh Nazr  
Sa on lna r an a

Tasik Raban is situated strategically along the East-West highway which connects the east coast and east west coast of Peninsula Malaysia. It has been identified as having high potential to be developed. Tasik Raban in Lenggong is blessed with an archaeological site famous for the 'Perakman'. The site is specifically located in a natural area surrounded by the lake, river and mountain range that are still preserved with their own unique characteristics. They provide the ambience of peacefulness, serenity and inspiration to nature lovers. In fact, the visual quality of the area is simply breathtaking.

In proposing a landscape development, Raymond Ling has chosen the small island of Pulau Raban as the site. The island is found to be the most suitable and relevant to be developed based on this analysis. There is a need to have a development to attract more visitors to Pulau Raban that could help improve the an economy of the local community via tourism industry.

Hence, the designer proposed to develop a small-scaled non-exclusive island resort that can integrate well with the natural environment as the best option forward in the future. This type of development is expected to minimise the impacts to the natural environment once development takes place. Moreover, it can be appreciated by tourists and visitors.







For development purposes, the designer has chosen the concept 'Chambered Shell', a fossil that is synonymous to the daily life of the ancient community in the Lenggong district. The spaces in the form of chambered shells depict the functional spaces and connect each other naturally. The concept suits the character of Pulau Taban which exists as a piece of land and then simulated as chambered shells. This concept succeeds in connecting the spaces in each island where most are located at the fringes of Pulau Taban. The concept 'Chambered Shell' also portrays how the greenery in Pulau Taban can be integrated with water elements that surrounds the island and make it look more natural.

Raymond Ling has proposed landscape elements such as fishing platforms, swimming pool, spa centre, restaurant, jetty, management office and also chalets for visitors. The vehicle-free concept forces the pedestrian spaces to become the spine that connects every practical spaces created on the island.

Overall, the design concept is relevant with the naturally sensitive physical character. While organic shapes give a more subtle touch, nevertheless, it will be more effective if the designer would consider the development of the surrounding context where the circulation network could give continuous support for future development.



# he le

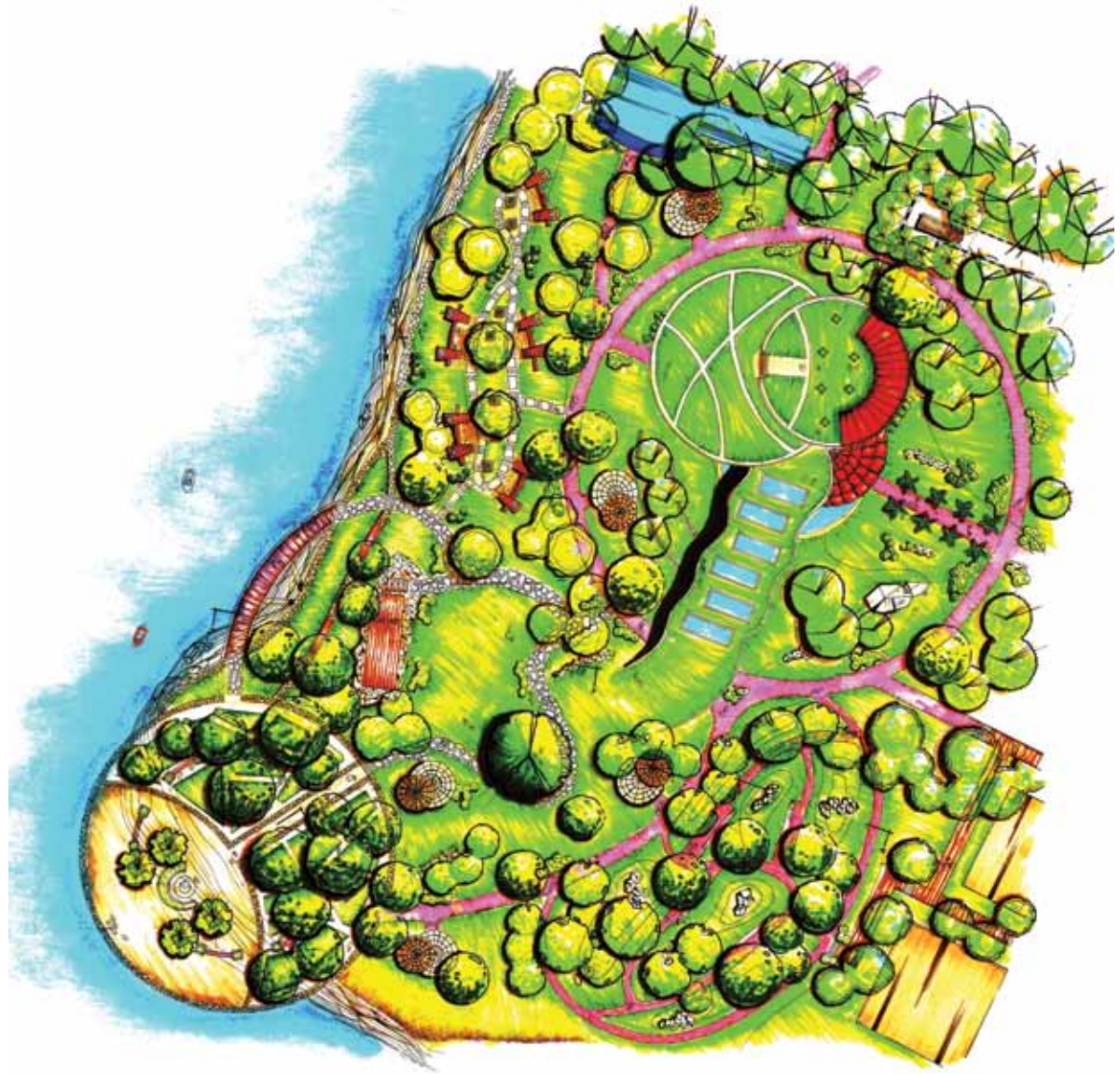
oh Nazr Sa on ra l  
ah an lna r an a

This project is about designing a space extension of Tasik Raban Resort called 'the Ripple'. It aims to be highly attractive to visitors to experience the beautiful views towards Tasik Raban. This area has been identified is currently an attractive location for eco-tourism in the Lenggong District, Perak.

The ripple design proposed by Kong Kok How has two main objectives: adding the quality interaction of space between human and nature, and enhancing and connecting the existing space with the proposed site. These aims are intended to improve the surrounding, landscaping and identity of the space. The ripple design is derived from an analogy of wavelike motion on the water surface. This analogy intends to replicate the power of waves to add energy to the surrounding area and becoming more happening and interesting.







■ Kong Kok How

Kong Kok How focus the planning in uniting two areas, the proposed caf and plaza, with well-connected pedestrian paths. A series of air walk, avenues and silent paths connect as the main path to tie all the landscape areas. These paths allow a series of experiencing nature such as flora and fauna, landforms and water elements. Overall, the smooth movement provides visitors with both man-made and natural environmental experiences.

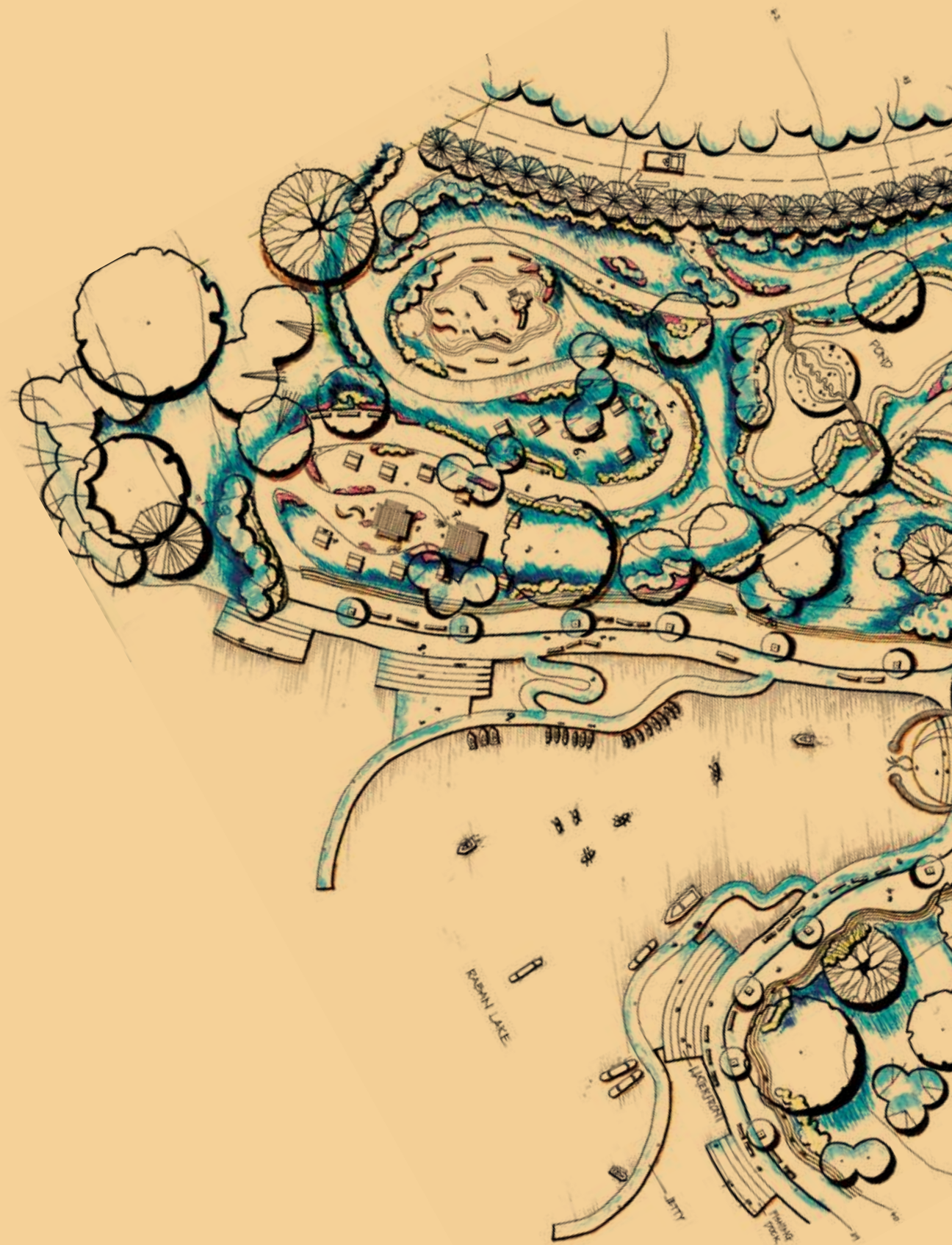


## Stream of Life

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oh Nazr Sa on

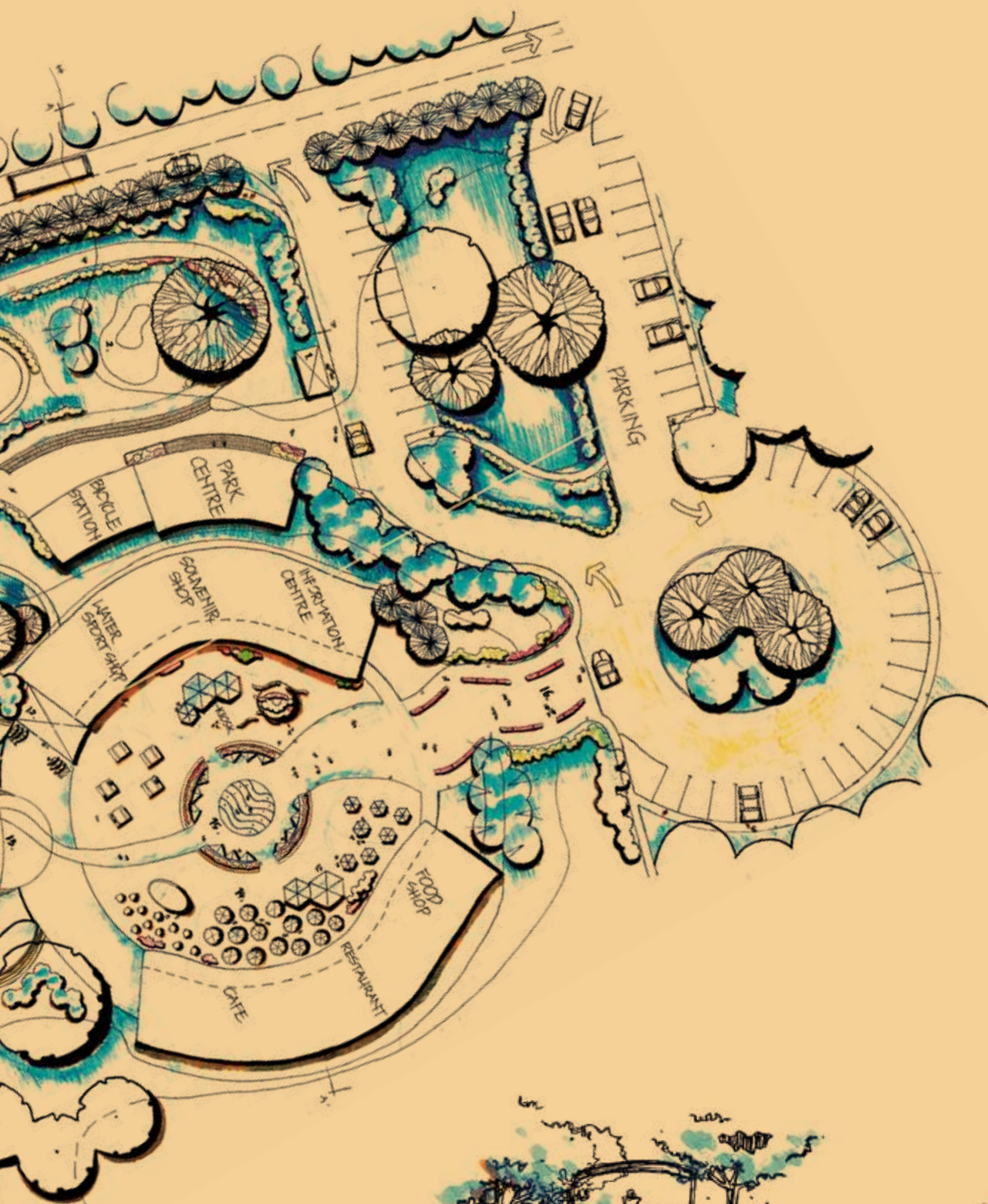
This project is located in a sensitive area of Tasik Raban, Lenggong, Perak. The site is surrounded by oil palm and rubber plantations. The current site has potential sceneries but lacks activities and connectivity. Hence, it is not fully utilised.

Chen Fei Wen has proposed several public recreational activities to enhance the environment. The designer has proposed a unique concept called "The Stream of Life" as a design metaphor. The stream concept is implemented in the flow of circulation and life was implemented in the greenery environment to increase the quality of life. This concept is further translated into an organic form in the master plan.



■ Chen Fei Wen





With this concept, Chen Fei Wen proposes a flow of circulation in every interesting spot to create interesting connectivity throughout the water sport center and park. In the central park, she has proposed a link made of pedestrian pathways and jogging tracks to connect all the spaces with the parking area .

In addition, she also proposes a green environment in the recreational area to increase the quality of life. The design accommodates passive recreational activities for adults and children in a series of small park spaces for picnics, walking and jogging. These new activities are proposed to enliven this area.

As a conclusion, the design attempts to embrace the Stream of Life concept which includes the flows of circulation and greenery environment. With the design metaphor derived from a stream, the life concept has been clearly illustrated in the proposed master plan.

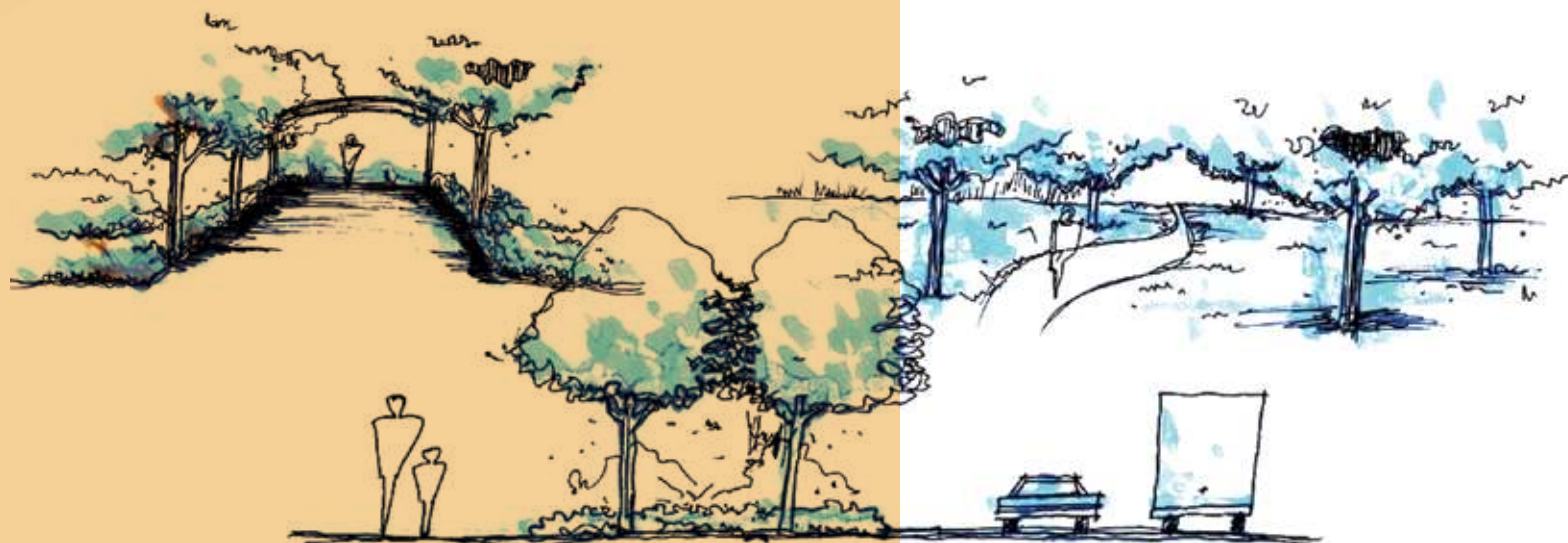






Photo by:  
N r Sya I aza





12

# Na ral rea h n S a e

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e lan or eo le  
S har a lan

# Natural Reshaping

Dr. Zahra N. Agha Ali Shah

The assigned projects are profoundly about an environmental design discipline which vigorously shapes the human environment. Students mapped, interpreted, imagined, drewed, built, conceptualised and synthesised ideas that would transform landscapes. They were also taught and exposed to understanding issues about the environment, ecosystems, cultural frameworks, functional systems, social relevance and creative expressions in the design process. Students in the programme learnt to change the world around them by re-imagining and re-shaping a space and its environment to enhance its aesthetic and functional dimensions, ecological system, cultural significance and social relevance. The students' comprehensive project addresses broad range areas of landscape in urban, suburban, rural and wilderness settings. The students are challenged to undertake a study, preferably of their interests and they are tasked to complete their whole landscape planning and design process. They would draw upon scientific, historical and cultural knowledge besides minor research findings in applying their creative and technical skills in planning and designing an environment serving useful, aesthetic, safe and enjoyable purposes. Overall, the students would be able to communicate well and work effectively with others on complex land design and planning problems. They would have learnt to appreciate the ethical, social, environmental and ecological dimensions of issues involving changes in the landscape.



# ry Review

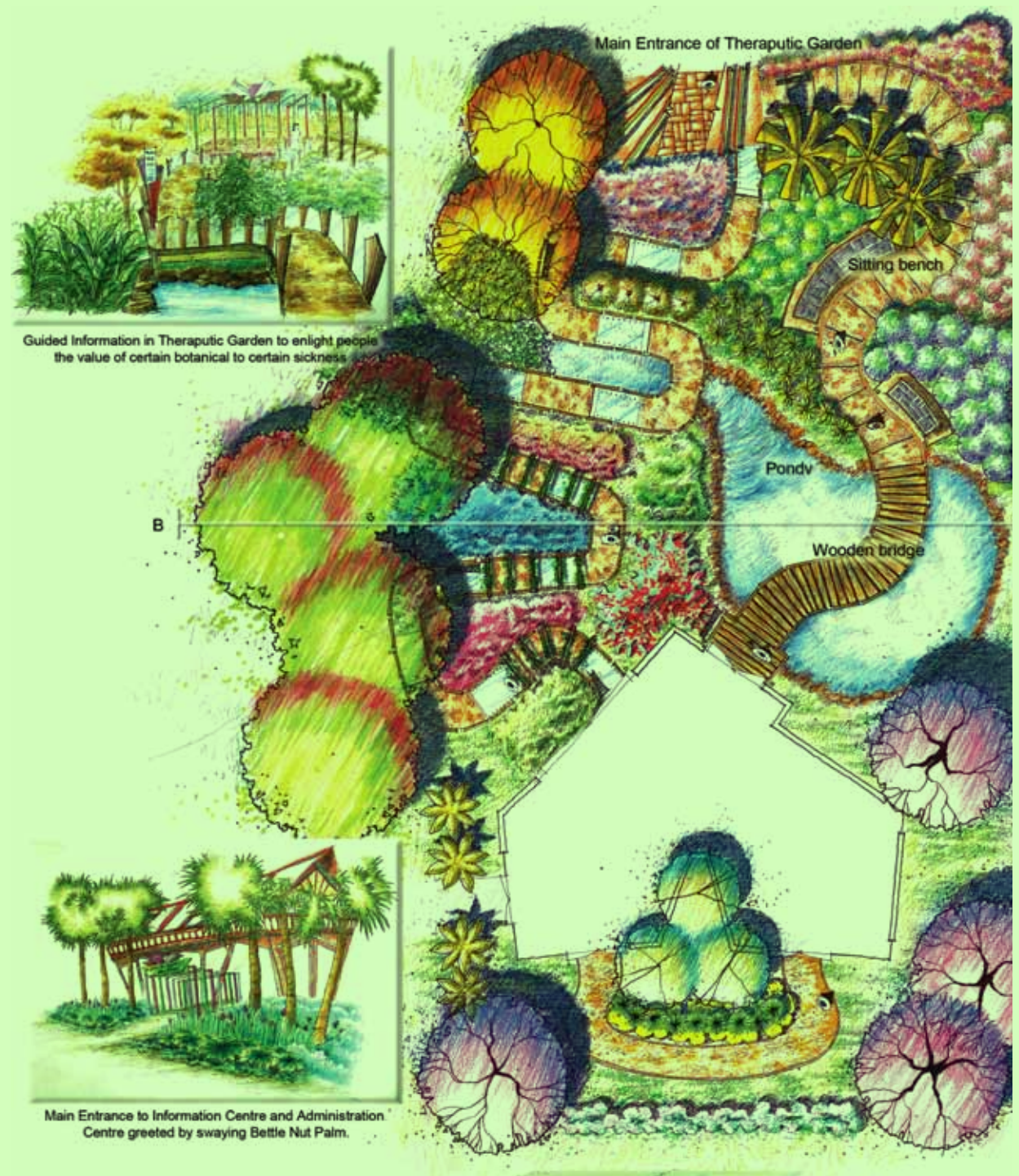
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It was pleasing to see that all the works have displayed great and intellectual design process. Their mature standings and initial training are reflected in many of the works that manifest the process. However, what is wanting is the carry through or interpretation of this preliminary commendable work into actual design. All, but one, has shown a credible attempt to creatively and intelligently translate an idea into design. Others were rather too complex which might indicate a poor control of the design process thus resulting in an output that is non-singular and lacks coherence. Design principles are clearly evident in some projects while others are vaguely noticeable. The overall complexity and sophistication of design are pleasures to behold.

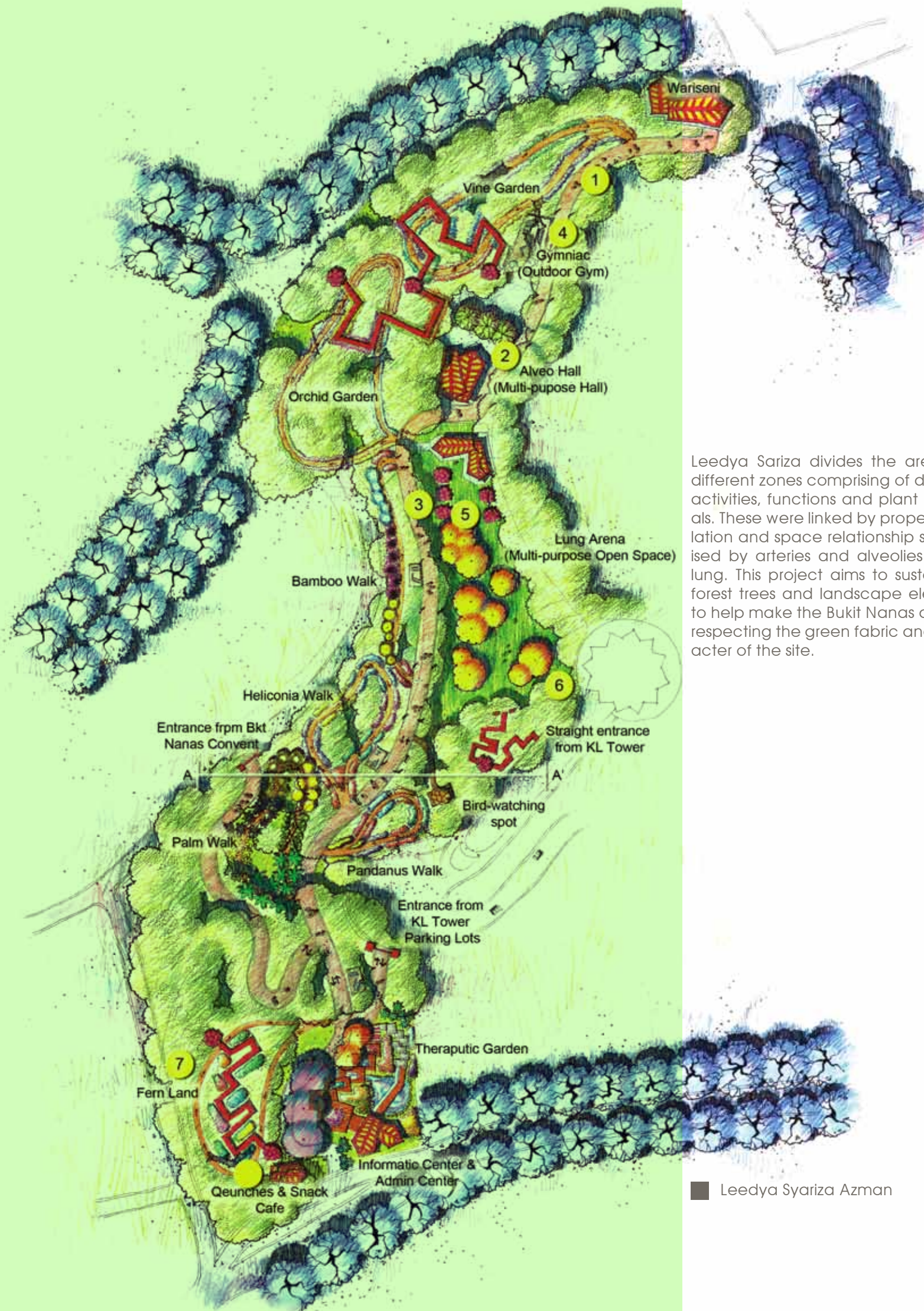
## reaching space

Shah Nazri Saion Noorzan Shah  
Rahman Inarana

This project intends to enhance and promote the preservation of Bukit Nanas Forest Reserve which covers approximately 11 hectares. This area is the only virgin tropical forest left in the city of Kuala Lumpur. The concept is derived from the significance of lung as an essential respiration organ in all breathing animals and a crucial system in continuing life. The "green lung" concept is inspired by green plants acting as filters to improve the microclimate within the urban boundary.







Leedya Syariza Azman



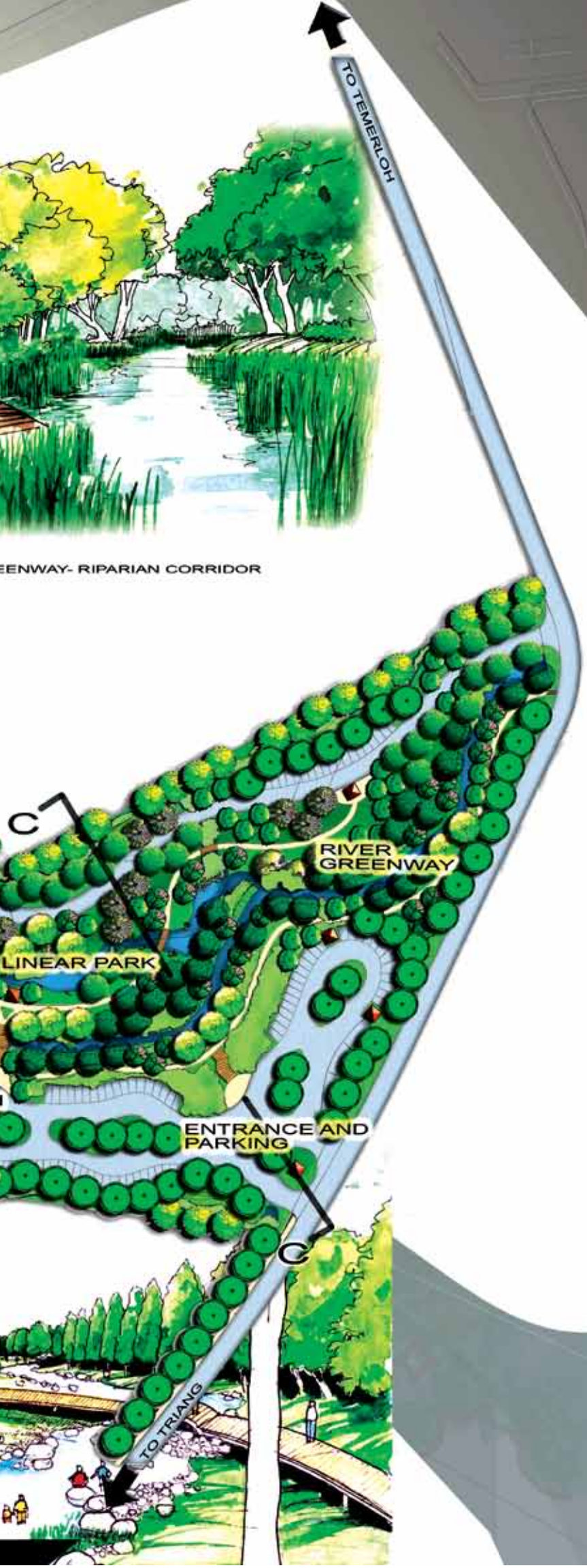


MARSHLAND HABITAT ISLAND

ELEVATED BOARDWALK

LINEAR PARK





# e lan or eo le

S har a lan

Wetlands have long been neglected as wastelands and as a result, the wetlands have been converted into a more "meaningful" uses such as agricultural and housing. However, for the last few years, especially after the infamous tsunami tragedy that struck Indonesia and Thailand in 2005, wetlands' values and benefits to the mankind have been explored, if not revisited. Studies found wetlands having a long list of values and benefits that people were not aware of even though scientists have long discovered them and warned of the consequences of losing wetlands quite a long time ago (Mitsch and Gosselink, 2007).

However, wetlands, especially those in the urban areas cannot be left without any uses attached to them because studies have found that people have less preference to wetlands because of their appearances that often look messy and untidy (Kaplan, R. & Kaplan, S., 1989). Nevertheless, Che Rashid, in his design, tries to bring wetlands closer to people. Using wetlands associated with the Sungai Paya Pagar at Bera, Pahang, Malaysia, he first surveyed people's visual preferences for wetlands as well as the site's potential uses. His study concluded that the wetlands at Sungai Paya Pagar have potential to be conserved and the uses should be limited to eco-recreational activities (Che Rashid, 2009).

Che Rashid has taken a very utilitarian approach in planning and designing the Sungai Paya Pagar wetlands. To a certain extent, his design is recommended to the public and town municipality because it relies heavily on sustainability and centered on recreation, sight-seeing and educational activities. He proposes the construction of the site to be based on industrialised building systems. However, the development of the landscape seeks economic viability of the project as well. It is worrisome that the development would flourish only for a number of years but later be abandoned partly due to the lack of public funding. To overcome this problem, Che Rashid proposed a limited number of exclusive chalets. In addition, the wetlands educational center, would require visitors to pay to enter. It is crucial because the amount generated from these two activities could be used to sustain the wetlands. People may argue that public goods should be free. On contrary, this is also a time to test how much would people be willing to pay in exchange of environmental benefits and values.

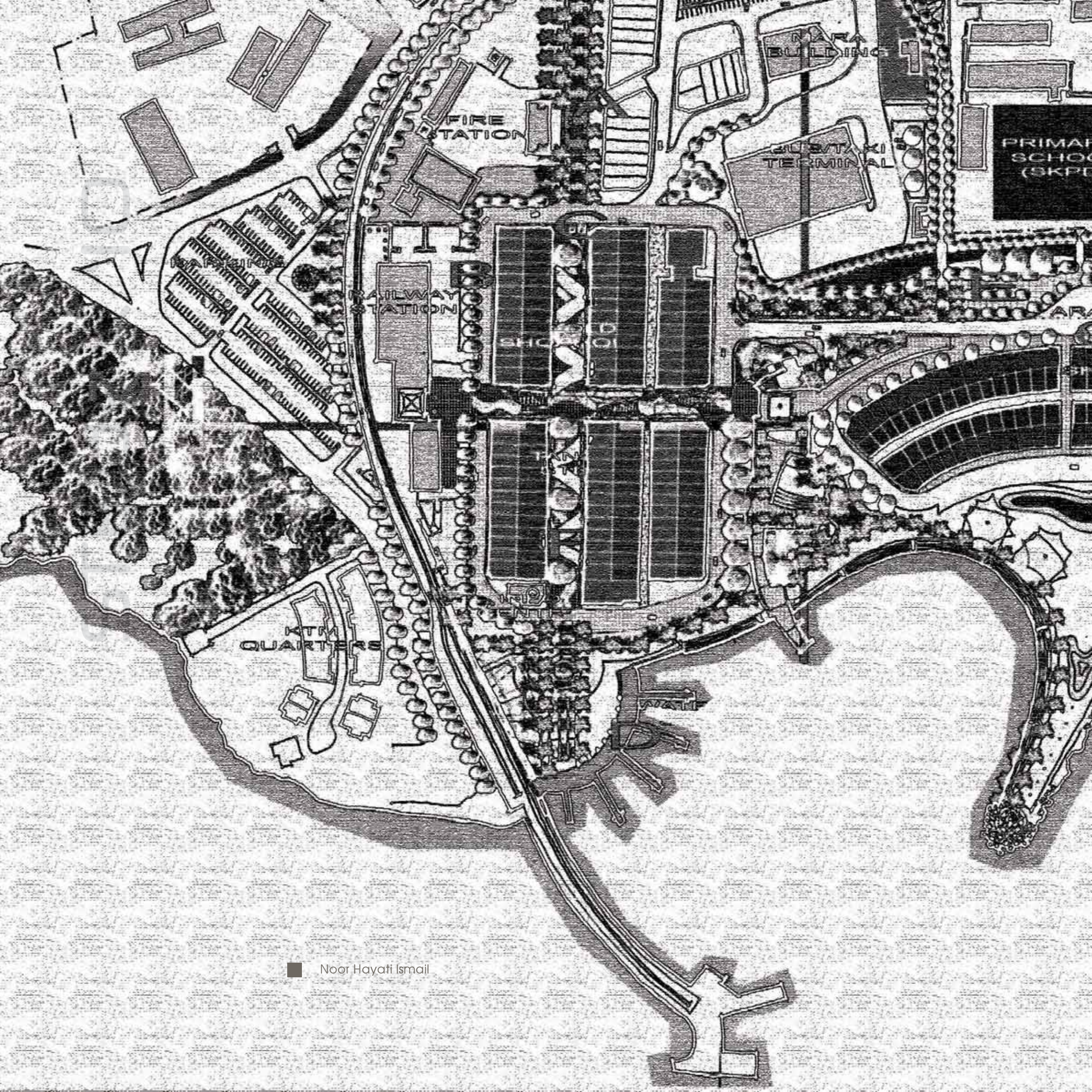
This project, indeed, neither looked very complicated nor full with design philosophy. Instead, wetlands have sensitive ecology where architects need to make a choice whether to make a design statement within this ecology or to be humble with nature. For this project, Che Rashid has shown his ability to read the sensitive landscape at a very fundamental level and chose to be humble with nature rather than going against it.

## References:

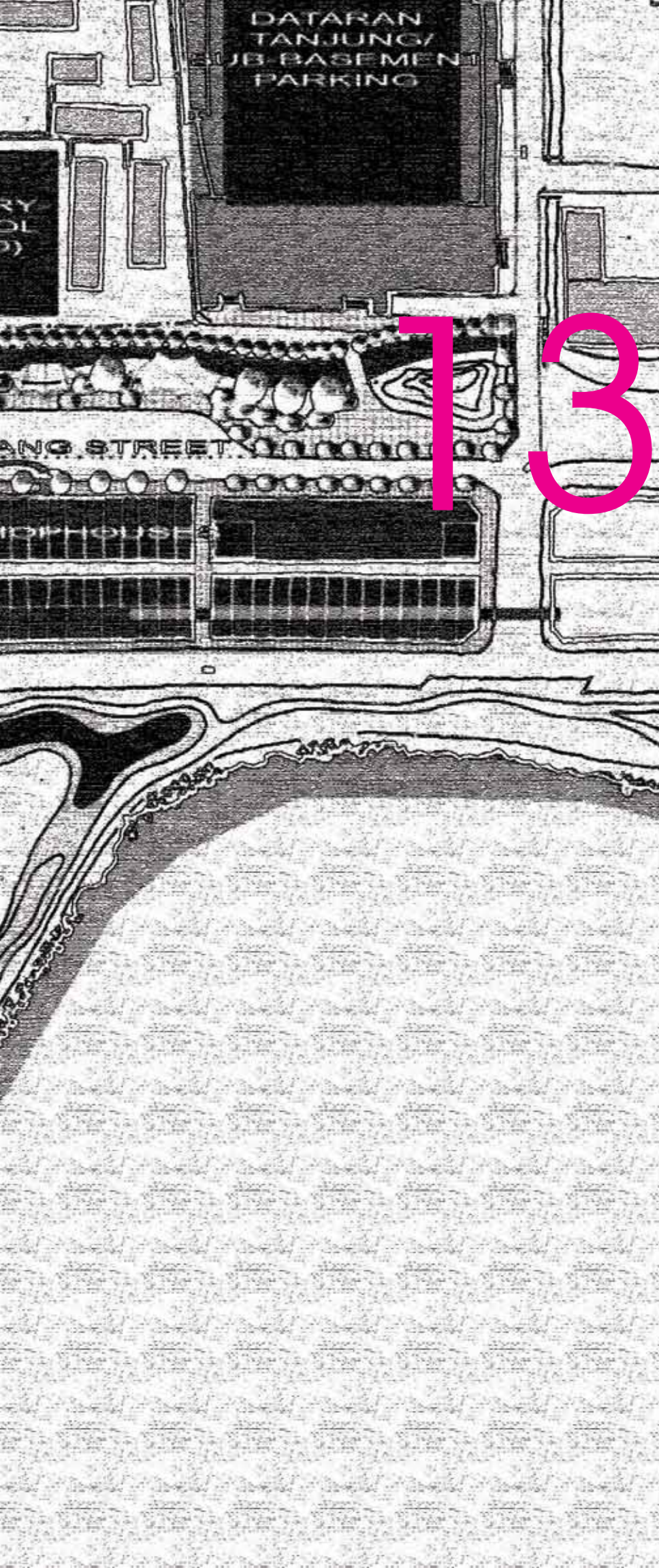
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2. Kaplan, R. and Kaplan, S. (1989). *The Experience of Nature: A Psychological Perspective*. Cambridge University Press, New York.
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■ Che Rasid Che Seman









# 13

## In onal S a al In era on

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## Institutional Social In era on

As man looks for better quality of life, issues relating to the outdoor spaces have always been included in his discussions. Landscape design has become synonym with the issue because it is fundamental in the field to maximise the potential of outdoor spaces. In recognising this, a group of our final year students proposed several landscape design works for institutional projects. We believe that landscape architects could be key players in ensuring the quality of outdoor environment.

Among the works are the Cultural and Performing Arts Centre, Community College and Elderly Home. All are challenging projects to experiment. The task is to undertake a comprehensive study, individually, in order to demonstrate the student's understanding about the design process. One of the key aspects that they should address is how to realise the full potential of institutional landscapes and create an attractive yet functional outdoor environment to compliment the existing or proposed buildings.

Muhamad Huzaimi Nor Rashid worked on the Cultural Art and Performing Centre in Kuala Lumpur. He presents an interesting approach by looking specifically at the current and emerging outdoor spaces. His cultural inspiration provides a positive and creative influence on contemporary design, and moreover, enhances local distinctiveness of the surrounding environment.

Rohaniah Mohd Nor worked towards enriching the landscape and integrating a community in symbiosis. She tried to provide a comprehensive model of community college in order to maximise its educational use. The landscape provides a variety of functional, attractive and integrated indoor and outdoor spaces for learning environment.

Azryt Aznan is committed to designing an elderly home. This project illustrates sensitivity to the community. He had identified a different concept and employed a technique in some common design while looking at present trends and directions. The quality of spaces in his project is a product of the physical element itself and the community interacting with it.

These three works show that landscape architecture is about the way people live. They provide all the ingredients, from the scene we look at, the space we experience, and to the art we aspire to.



# ry Review

aar l zz S a ah oha e a an n a harna e har n

There are three outstanding works that we have considered to be categorised under the 'Space Interaction' or Institutional Landscape. Special qualities of the selected works for this theme are reviewed below.

First, the Vortex Exodus of the Cultural and Performing Arts Centre in Kuala Lumpur has successfully showed the idea of extroverting from the originality and vibrant expression. This visionary master piece expresses significant relationships between the outdoor spaces and the building and the main desired line. The work was an experiment in landscape architectural presentation techniques. We found it refreshing to see some good examples of landscape architecture by a student taking it one step further in terms of dealing with architectural issues. However, the design has been strongly deliberated to the architectural components while lacking in addressing the importance of landscape elements.

Second, Enriching Communal Integration of Selandar Community College in Melaka has exhibited a credible attempt to creatively and intelligently translate idea and process into design. The work is informative and stimulating while the impressive presentation is achieved by the inclusion of sketches and perspectives. The strength of this work lies in the way in which it emphasises local characteristics and issues; communicating these in a clear and simple manner besides integrating functional outdoor spaces with administration and academic buildings that are planned symmetrically over the landscape. The symmetrical form and mood of spaces, however, contrast with the calming surrounding rural areas which are dominated by agricultural land.

Third, Eudemonia of an elderly home in Perak, has applied a comprehensive approach in landscape design. The innovative concept and presentation are combined to create an inspirational design. It is well supported by a thorough site analysis and synthesis. Although the integration and relationship between the site and surrounding limestone hill have not been well expressed, the design deals well with the sensitive community.

Finally, it is pleasing to see that all the works have shown great and intellectual design process. In general, the standard of works is competent and can be considered innovative or outstanding. The students or designers managed to integrate all attempts of other disciplines to strengthen the landscape design philosophy. These could be exciting projects if built.

## or e

Noor zz oh l an oh ahr a a a al oh Shar

This project by Muhamad Huzaimi is about reinterpreting the notion and perception of culture as the symbol of a national identity. The meaning of 'national identity' in relevance to a culture is given a new perspective and dimension not by altering or changing the roots but by re-understanding the roots itself. In doing so, it will alter the physical as well as the spiritual experiences in giving a new but genuine and authentic interpretation and reinterpretation of the character and images of culture and national identity.

The design objective aims to fill the niche, vacuum and gap of what is interpreted or misinterpreted as a national image. Instead of looking into what is Malaysian and not-Malaysian—in literal and physical manners—Muhamad Huzaimi gives us an alternative dimension in re-interpreting the meaning of national identity for both landscape and architecture. Culture, being a structural component of design, is given new but not pastiche nor ersatz meaning.

Though the physical form of the buildings seems to be prejudiced to the 'cultural form', the semiotic of it is taken to the fullest advantage in portraying a dynamic and energetic 'culture' as opposed to suppressed and static cultural symbol. It became a vehicle to express meaning beyond the form. The landscape is designed in such a way that it portrays not only the energetic form of the culture but most importantly, the meaning behind its very existence. The chosen plants are of native origin resembling the authenticity besides representing the 'cultural value'. Both landscape and architecture are given equal role and importance as both are vital components in the portraiture of identity. The national theatre or *Panggung Negara* is designed sympathetically to its immediate surroundings. The shape of the building represents the core of energy that is preserved in the 'vortex'. This energy is kept and preserved but also is a catalyst and impetus to the roots and culture. The national art gallery is created to resemble the movement of vortex in which arts and design are always moving and developing in parallel with the zeitgeist.

Vortex, the metaphor for this design project, is derived from the movement and formation of its turbulent flow. Vortex is a spinning and often turbulent flow of fluid. The speed and rate of rotation of the fluid are greatest at the centre but decrease progressively with distance from the centre. As with its architecture, the synaptic in definite form allows change, alteration and even restoration (a static value). It can also absorb additions, subtractions and modifications without disturbing its essential order and authentic value.



Our own epoch is deteriorating, day by day, its own style. Our eyes, unhappily, are unable yet to discern it.

Le Corbusier





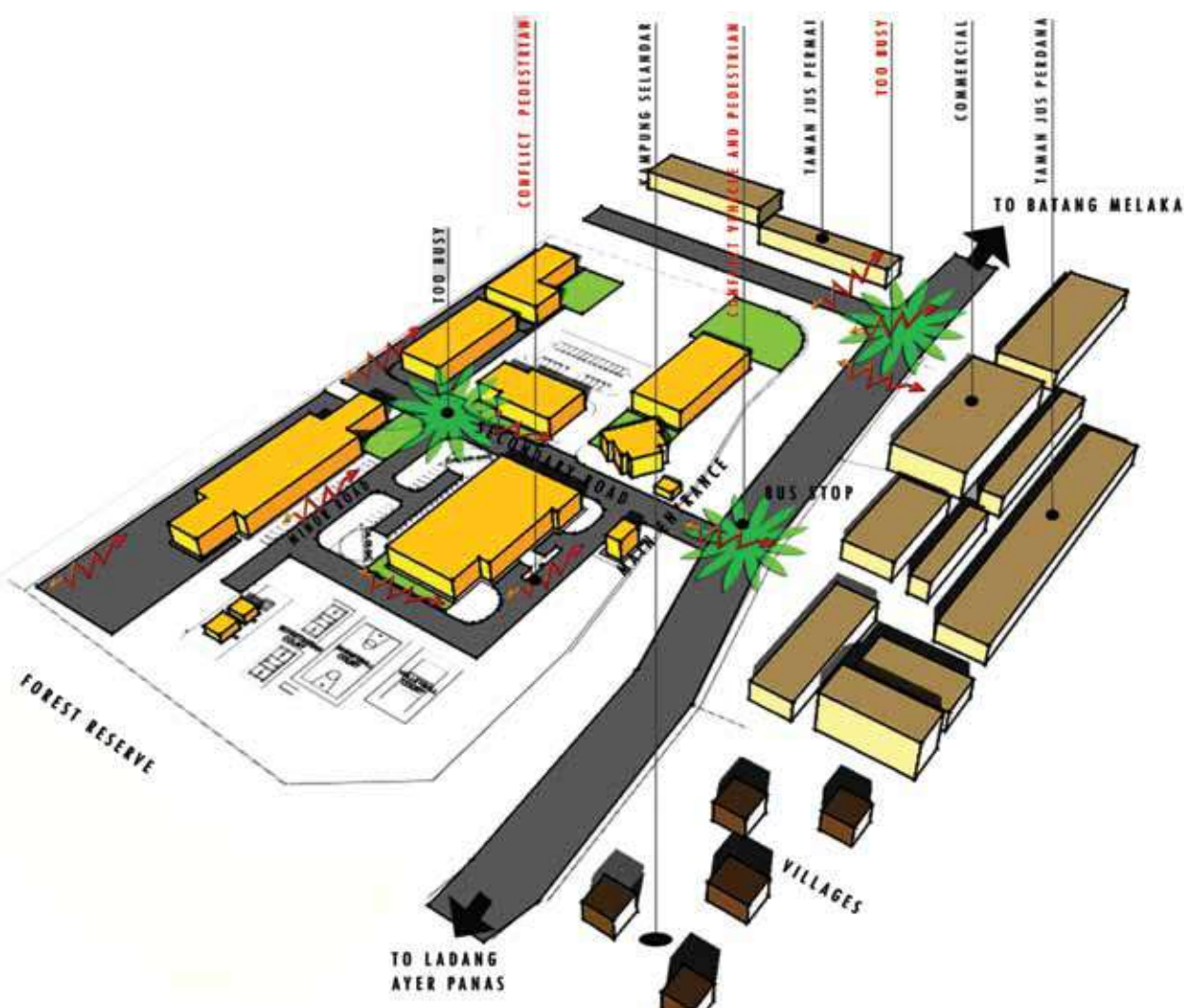


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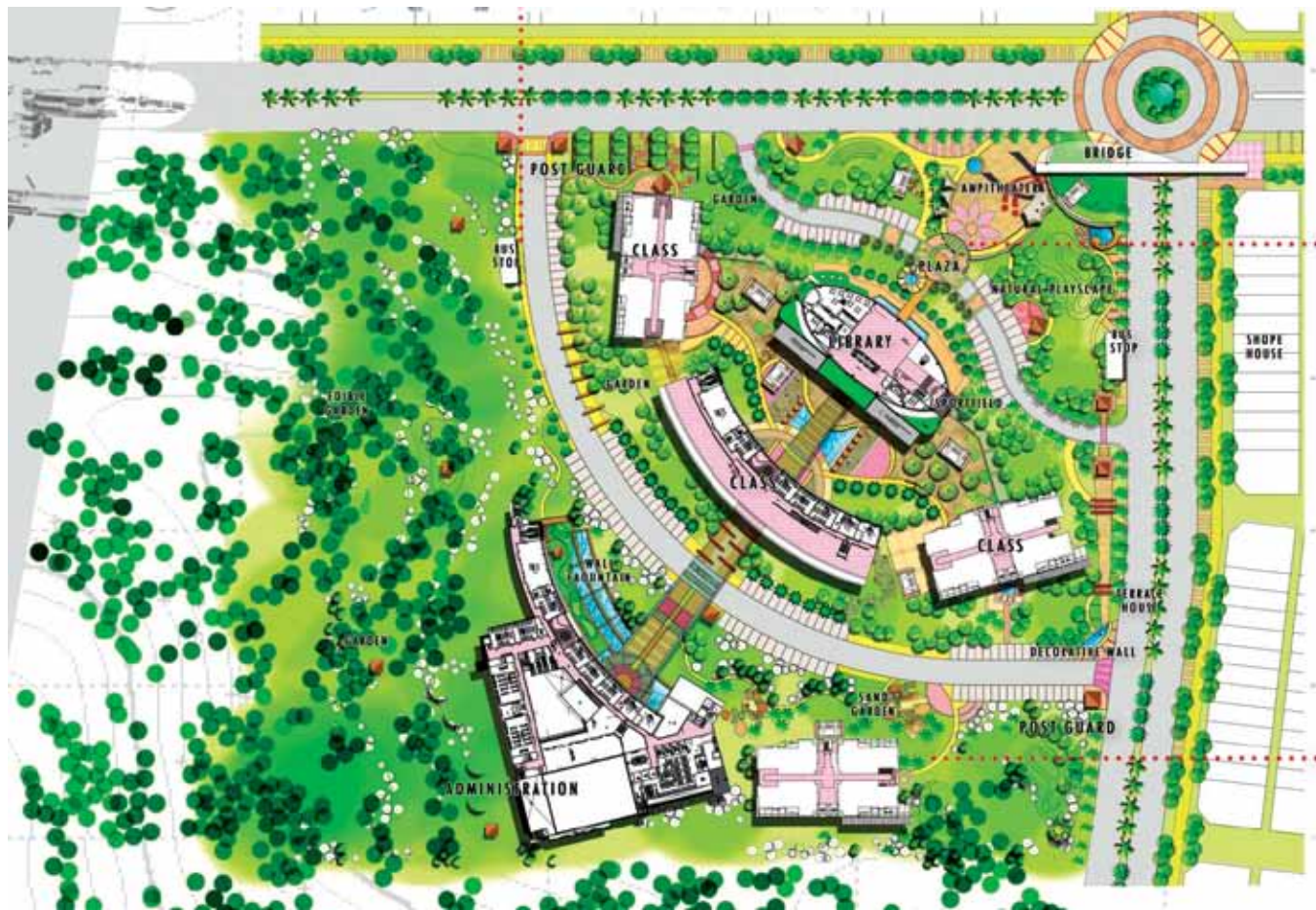
Nor ah an

The proposed community college sited in Selandar, Melaka redefines the true meaning of a community college through spatial integration, identifiable accesses and effective connectivity. Reacted against the standard and ill-fitted to college planning and architectural design, it embraces the idea of sequential functional spaces providing continuity of spaces for community participation in the educational and social activities. Rooted in the sustainable concept of campus planning and design, the scheme exemplifies the manipulation of landscape elements, spaces and buildings using the concept of 'layering' of spaces from public to private with careful integration of soft and hardscape elements. These spaces support integrated activities for the existing college inhabitants and the surrounding community.

Based on the interpretation of spatial concept of Melaka traditional dwelling, emphasis is given to the spatial organisation of spaces generated by understanding their uses, activities and interrelationships. People from the surrounding communities are generously welcomed by an open public recreational space to encourage communal interaction. It is strongly directed to the main central building functioning as an administrative and information centre and library on the upper floor.







Buildings are organised to form a series of courtyards, gardens and water elements forming a sequence of spaces with a strong visual axis. The academic core is located in the inner layer while the residential units for staff form the innermost layer of the scheme. The meaning of integrated community college is reflected in the absence of hard edges of the site. Instead, physical and visual connectivities, integrated human interaction within the spaces and sense of harmony between interior and exterior spaces are made abundant.

The proposed model for community college synthesises a sustainable campus environment through shared activities and serves as a cultural centre, a long life learning centre and commercial centre. It forms a sense of place to which community and public can come to supplement its aesthetics as well as intellectual and cultural experiences. An integrated college environment could sustainably widen the presence of aesthetically pleasing public spaces and strengthen the campus as a community's design asset.

■ Rohaniah Mohd Nor





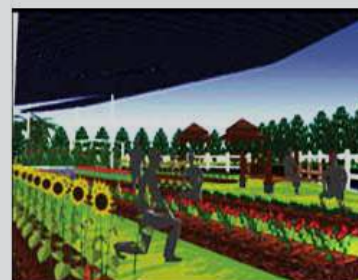


## e on a

an oh ahr a a a al oh Shar Noor zz oh l

Aging and aging gracefully has attracted the country's attention in recent years. This landscape design project is an attempt to change traditional attitudes towards aging by redesigning the outdoor spaces at a publicly funded home for the elderly in Jelapang, Ipoh in Perak.

The goal of the design is to create happiness and joy among the elderly residents. This is achieved through the integration of outdoor and indoor spaces that encourages the participation of outside communities with the elderly residents as well as fulfilling residents' basic needs.







The concept of “Eudemonia” was aptly chosen by Azryt to be the basis for the landscape design. Eudemonia describes the state of happiness, well-being, completeness and self sufficiency. It conjures images of satisfaction, pleasure, peace, respect and mutual understanding between residents, their next-of-kin as well as the concerned members of the community.

As the site is located in the midst of other residential neighbourhoods, Azryt takes great care to blend the proposed design, facilities and activities with its surrounding context. Azryt also introduces spaces and facilities that would attract outside communities to be involved with the residents and at the same time encourage residents to be more socially and physically active. A variety of appropriate facilities to cater for the needs and preferences of the elderly residents are sensitively combined with those that cater for visitors. Residents’ comfort and safety are not compromised with the provision of proper structures such as a guardhouse and covered walkway.

The proposal appears to fulfil its goal of changing the traditional view of homes for the elderly Malaysians that are synonymous with being neglected, hopeless, sad and depressed. It becomes one that will bring satisfaction, pleasure, love, joy, and independence to the elderly residents. It is recommended that many more homes for the elderlies in Malaysia are designed in such way which would foster respect and dignity for our elderly population.









# 14

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## Urban Design

Urban Design is a branch of architecture that deals with the design of the urban environment.

Urban Landscape design is about landscape design in an urban context. This project emphasises designing landscape as a space that exists in the urban area. The objective is to create analytical thinking in solving problems through proposed landscape plans in selected town area. A town is chosen based on issues such as site uniqueness and environmental richness that would stimulate the thinking process to find design solutions. In addition, this exercise also aims to achieve the learning outcome of this course which includes the capability to evaluate planning issue, to design landscape plan and to present work in a professional manner.

Since the site is in an urban environment, this exercise gives students an understanding on how to plan landscape design for an urban district through exposure with real problems. Through this exercise, students would develop a design process consisting of understanding the urban vocabulary, identifying the design philosophy, determining design goals and objectives, developing programmes, etc. Furthermore, they would propose a comprehensive landscape plan for urban space revitalisation.

The exercise in landscape planning is achieved through several steps carried out by the students. For example, at the initial stage, an inventory was carried out for three days at a proposed area. Students explored and investigated the site with proper inventories' forms and tools. They used their experiences and felt the existing situation of the urban lifestyle and context. Furthermore, they analysed a site by interpreting 'elements' with suitable references and research. Finally, they would propose a landscape master plan. This master plan was created with selected specific aim according to the site offerings and studies that were carried out. A student had the opportunity to apply sciences and design knowledge into the design scheme after a series of discussions. Finally, four landscape urban master plans were produced with different approaches and concepts.

Furthermore, the students had an opportunity to choose a suitable space for designing its landscape details. The size of the space is approximately 100m width x 250m length. The scale of the detailed design is at 1:200 until 1:500 where they have to design landscape details through their understanding of specific site and design requirements. Sense of respect over existing condition and environment are among the criteria used by students in their attempts to develop and express their ideas.

In conclusion, the landscape urban design project was able to expand the students' thinking on how to solve existing landscape architecture problems in an urban context.



# ry Review

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Foremost, we would like to congratulate all these idiosyncratic projects for their outstanding ideas and expressions of work for the sake of human and environmental benefits.

The projects imply that a landscape space can be proposed to integrate well with the path and space principles with appropriate contextual connection and linkages. More interestingly, the creation of a few urban spaces for multi-purpose usage was expressed as a dynamic and active theme of human activities.

Overall, the students have shown satisfactory intellectual design process as shown in the number of drawings. The objective in developing analytical thinking in solving the problems through proposed landscape planning in selected town area is achieved.

The next step is to carry through this commendable preliminary works into actual designs. Most have shown credible attempts to creatively and intelligently translate an idea through a process into a designed product.

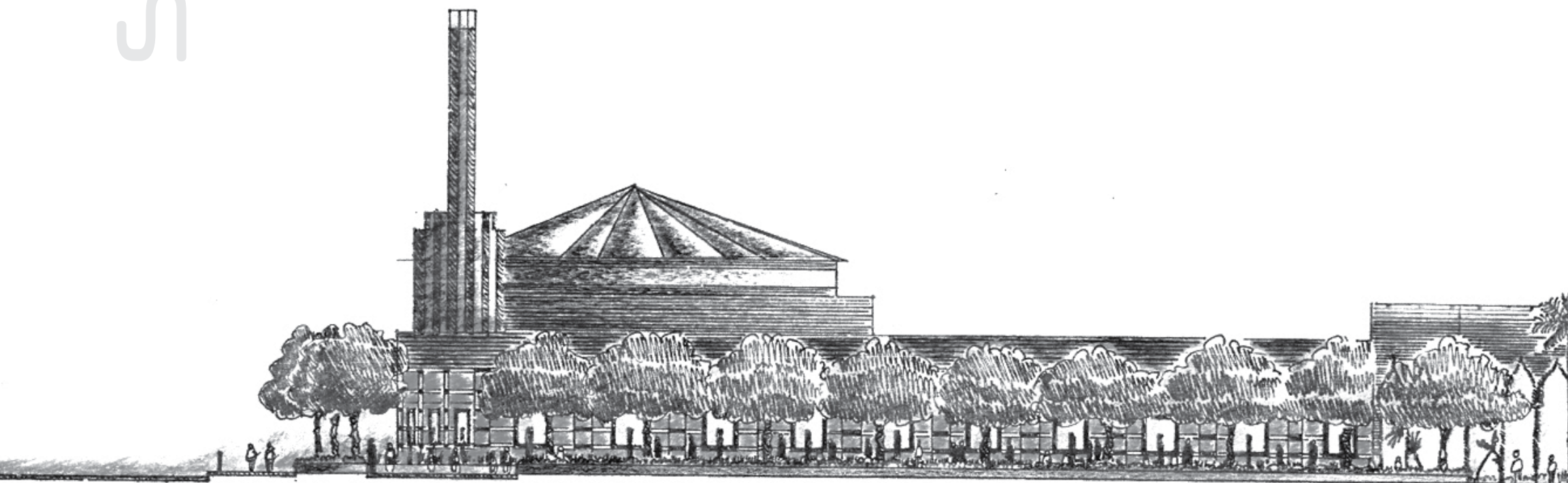
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oh Nazr Sa on Noorzan oha e  
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This project explores spatial relationships and how to achieve spatial legibility to make sense of a place in Kota Bahru, Kelantan. The aims are to build an identity and an image of the space by modifying the existing microclimates that would reflect Kota Bahru as an Islamic City.

The ibla is inspired from the Islamic geometry pattern from the tiles of Ben Yusof Madrasa in Morocco. According to Muhammad Akbar, the idea is how a landscape design can characterise the concept of paradise in the Islamic world through art culture. This project comes with creative and dynamic new green meeting place which promotes spaces with recreational, social and cultural values. It will improve the cultural lifestyle and the quality of life that correspond to people's preference.

There are four interesting spatial relationships that are applied in this project; the Minaret Tower as a landmark, the Centre Court square as a node, pedestrian walkways as medium for space intersections and landscaping as a medium to answer microclimate comfort. The creative use of water elements accompanied by aromatic plants encourage attention as well as harmonious feeling that are responsive to existing microclimate issues.





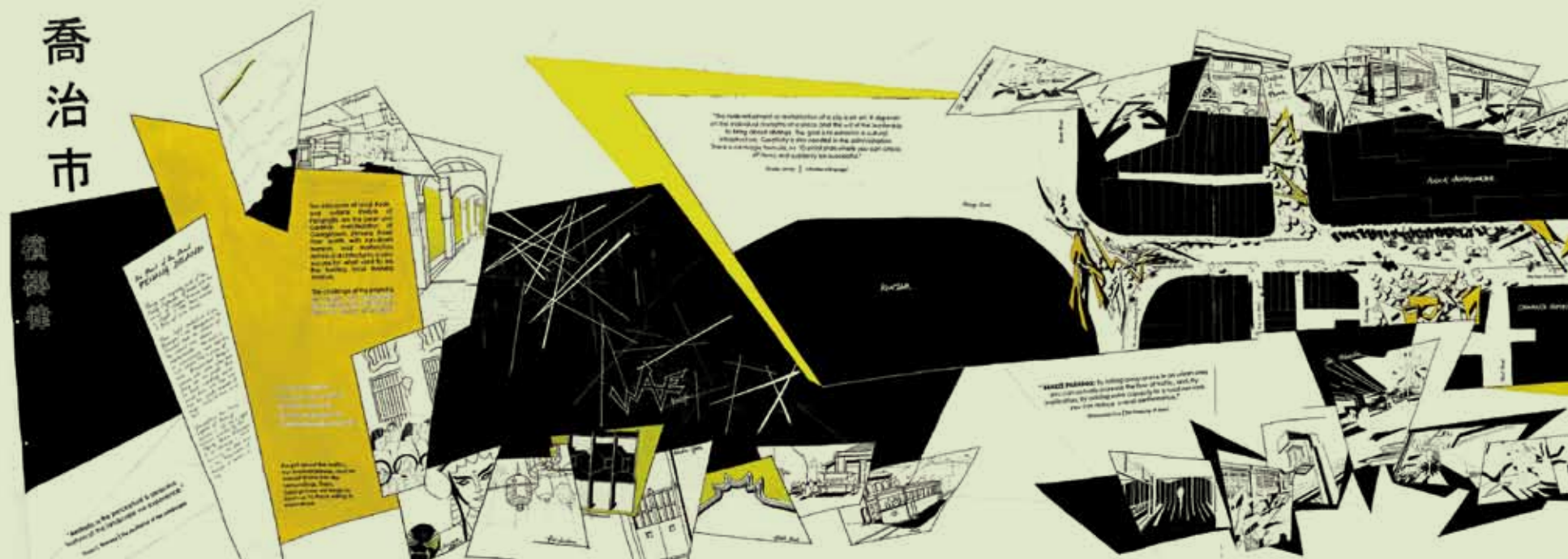


■ Muhammad Akbar Kamaruddin



# aralla

Noor zz n oh l an oh ahr aa a al oh Shar



This project is about revitalising the vivacity and regenerating a new image of a cardinal street involving the reinterpretation and expression of the local culture in the form of art. The project urges users to reconnect the spirit and soul of Georgetown to the new interpretation of urbanism in a contemporary setting. Hence, the 'parallax', an approach that exudes the exuberance and dynamism of the site, is implemented to give energy and dynamicity to the site.

The design objective is to re-interpret and re-establish the image and character of the Penang Road as the cardinal road in Georgetown. 'Parallax' is an approach that alters and changes the physical landscape but keeps the spirit and soul of the road. With this, the cardinal road of Georgetown was reinterpreted and re-established through mimesis and antagonistic physical intervention and enhancement. This is achieved through several approaches namely 'unfold the obscurity', 'paroxysm transmutation', 'spaced out to space in' and 'environmental deterioration reversal'.





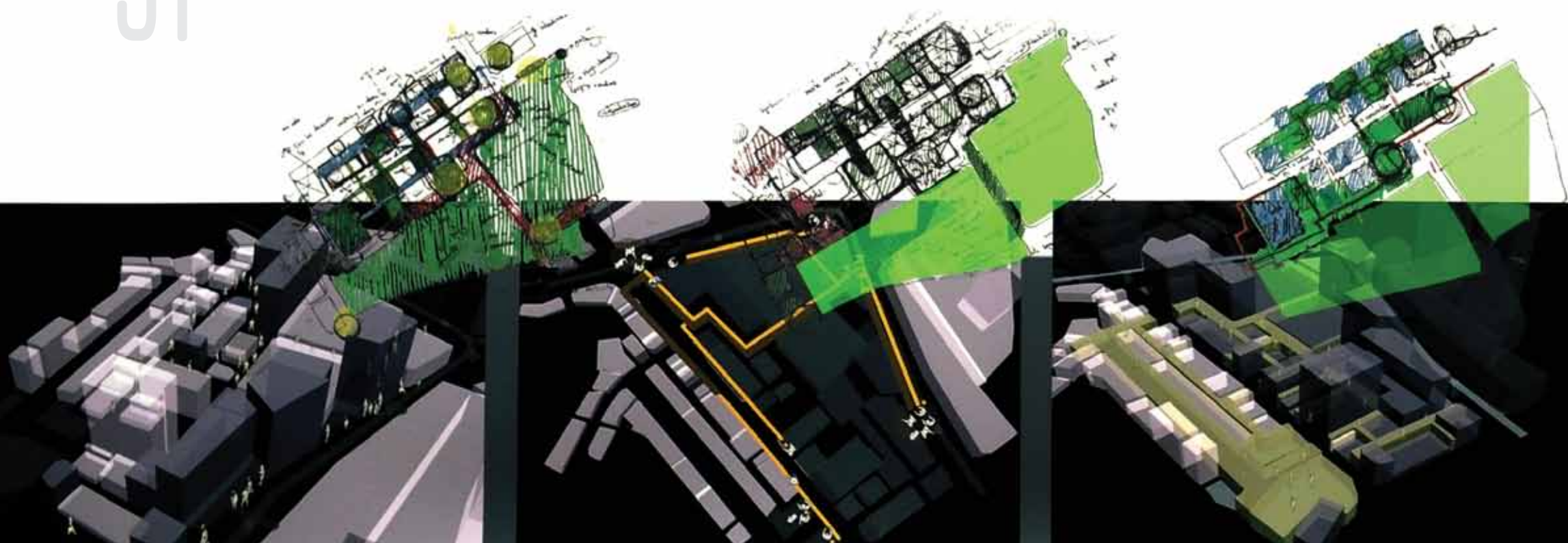
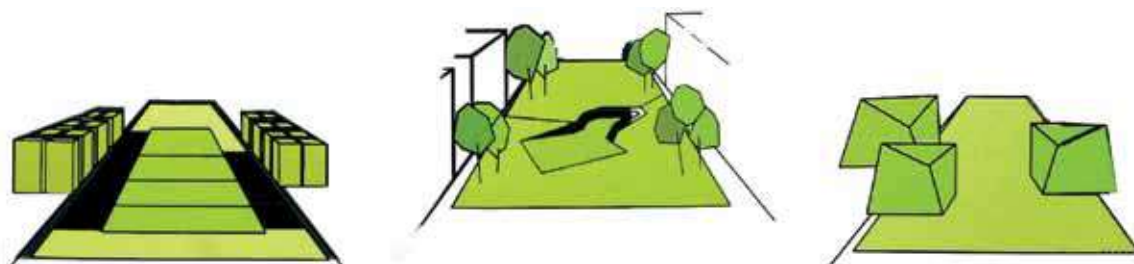
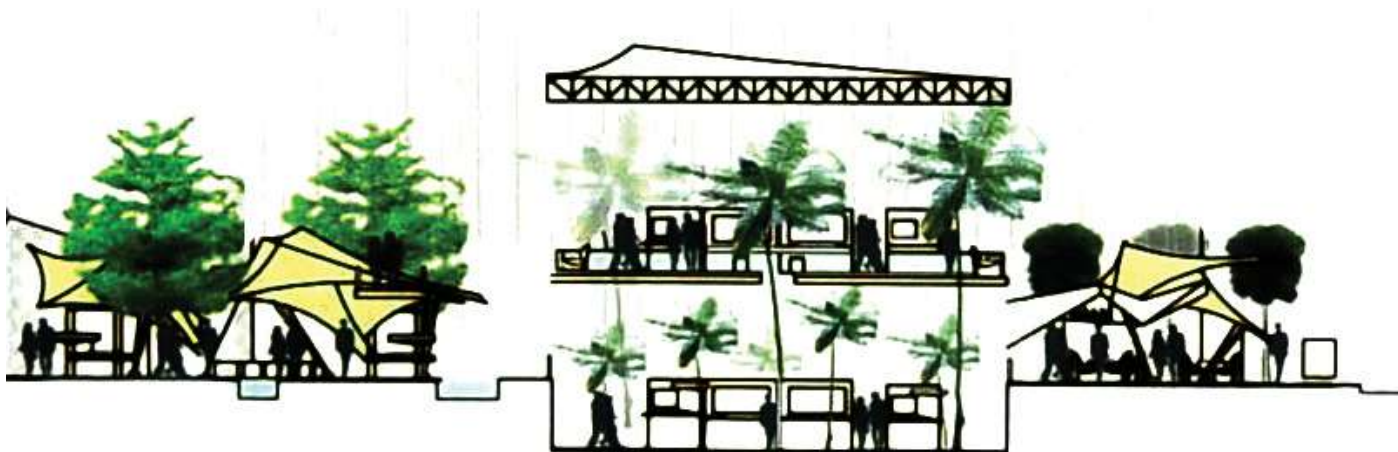
■ Ryan Lionel Loh Fu Men

In unfolding the obscurity, Ryan Loh reveals and interprets the history and culture through an artful repose to generate the philosophical and metaphorical experiences. In 'paroxysm transmutation', the stretch of the building facade is given a treatment to establish the zeitgeist with respect to the past, present and future. Spatial and activity extensions from the interior space of the building to the exterior space provides more opportunity for social interactions. Furthermore, visual and experiential connections between the landscape and architectural spaces are established through 'spaced out to spaced in'. In 'environmental deterioration reversal', the designer has substituted the heavy traffic road onto a liveable pedestrian space. This is not only done by changing the physical use of the road but by altering its physical treatments and experiences.

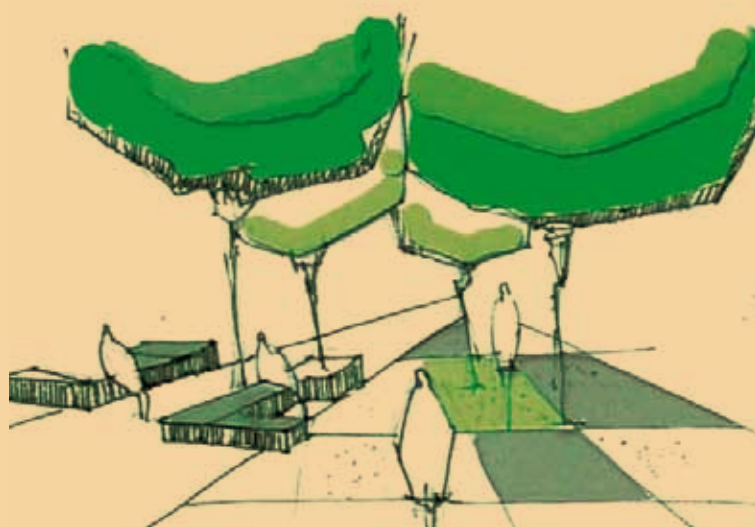
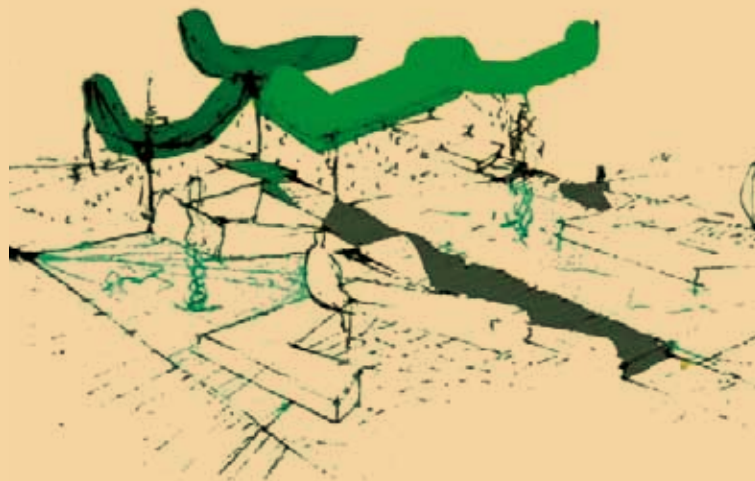
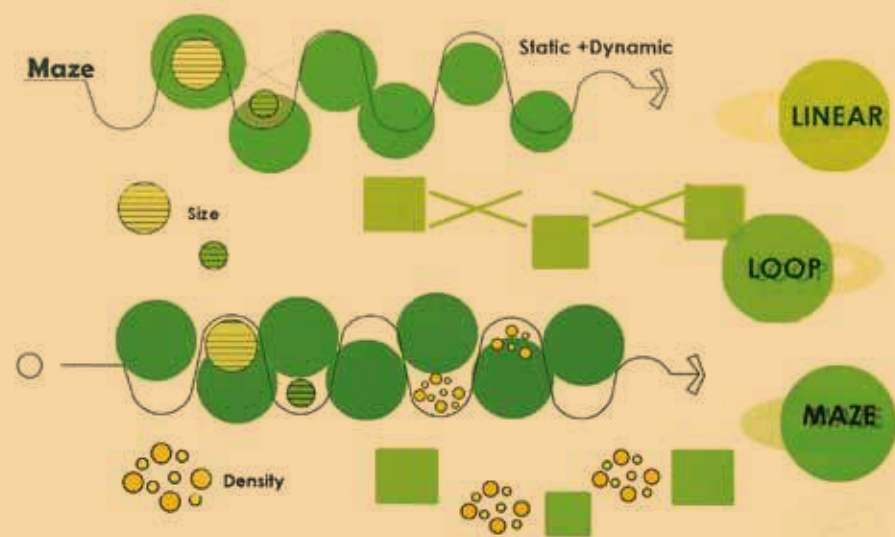
# he n an r an oo

an oh ahr

Jalan Bukit Bintang which is situated in the heart of the capital city of Malaysia, Kuala Lumpur, has been transformed as one of the busiest shopping heaven over the past few years. It offers tourists as well as locals a variety of merchandise that suit every taste and budget. The famous Bintang Walk is located along this road which has been filled up with various shopping complexes including cafes, restaurants, clubs, shops and malls.







■ Maryam Sadeghi

However, through rigorous survey and analysis done by Maryam Sadeghi, it is noticed that the site needs to have a system, a hierarchy and connectors between spaces for pedestrian purposes. Therefore, the aim of this project is to improve and upgrade the pedestrian movement of Jalan Bukit Bintang through the concept of kinetic landscape which blends the urban area with mall and green to turn it into a Bintang Urban Loop. The design objective is to provide a conducive and favourable walking environment to attract tourists and locals which will eventually offer better business to the area. At the same time, it aims at reducing the amount of traffic especially private vehicles, reducing crime and creating more interaction between the indoor spaces and the outdoor surrounding environment.

Civic spaces are the key features of the overall urban design of this area and are being integrated into the comprehensive landscape pedestrian network. Maryam Sadeghi initiates the idea of bringing green to the urban area. She demonstrates the idea by blending the green with the urban context. This is done by introducing green walls, turf pavement, hanging green bridge and green cooling benches at different levels of the site. The fragmentation of the solid and void areas creates movement which simultaneously static and dynamic. The introduced maze creates spaces along the path. At the same time, the void spaces with different hierarchy and sizes are turned into green vertical wall. The loop cycle created between these spaces would eventually encourage pedestrian movements. Since crime is an important issue of concern, the design stresses and promotes the feeling of safety which will motivate pedestrian use of these spaces. Planting concept in this project emphasises on safety issues by selecting plants which are layered, penetrable with clear trunk and loose foliage which could provide visual connection along the way. This overall design idea supports the concept of sustainability in the tropical urban context.

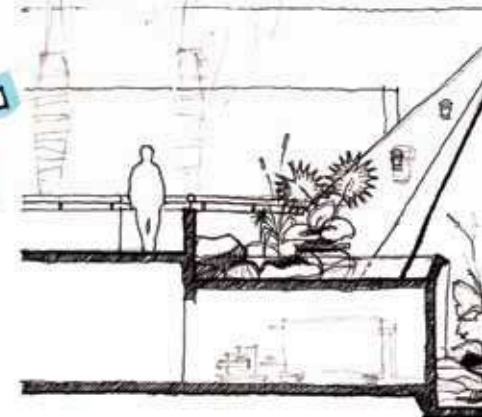


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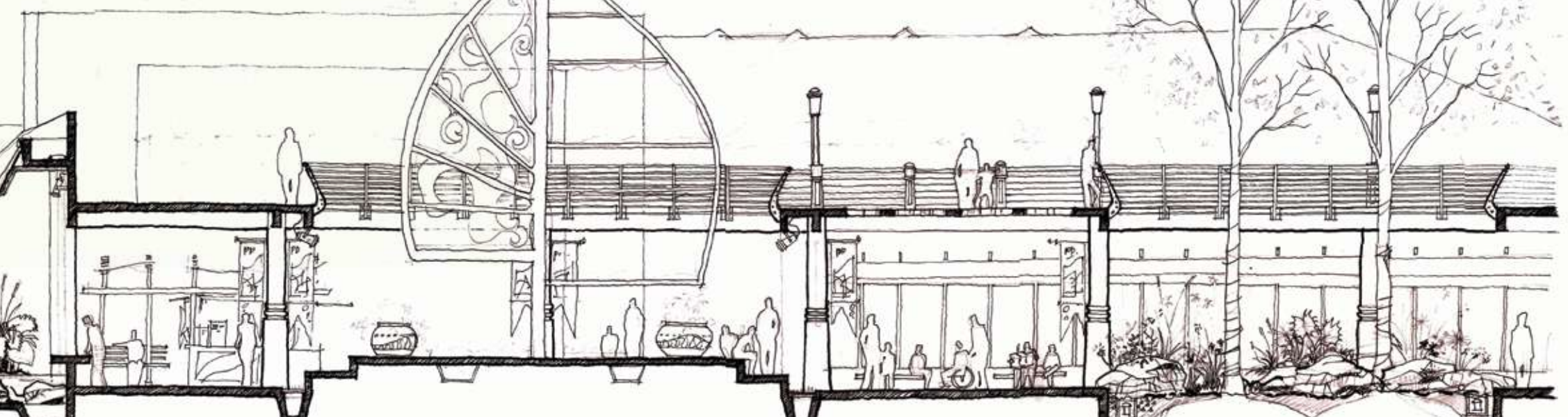
an oh ah r

Port Dickson, also known previously as 'Tanjung' or 'Cape', used to produce charcoal, for Negeri Sembilan. Known for her beautiful beaches, the town also has significant British architectural influence during the colonial period. It has valuable historical places such as the railway track, railway station and old shop houses with a great potential to be developed as a Warisan Town for tourist attraction.

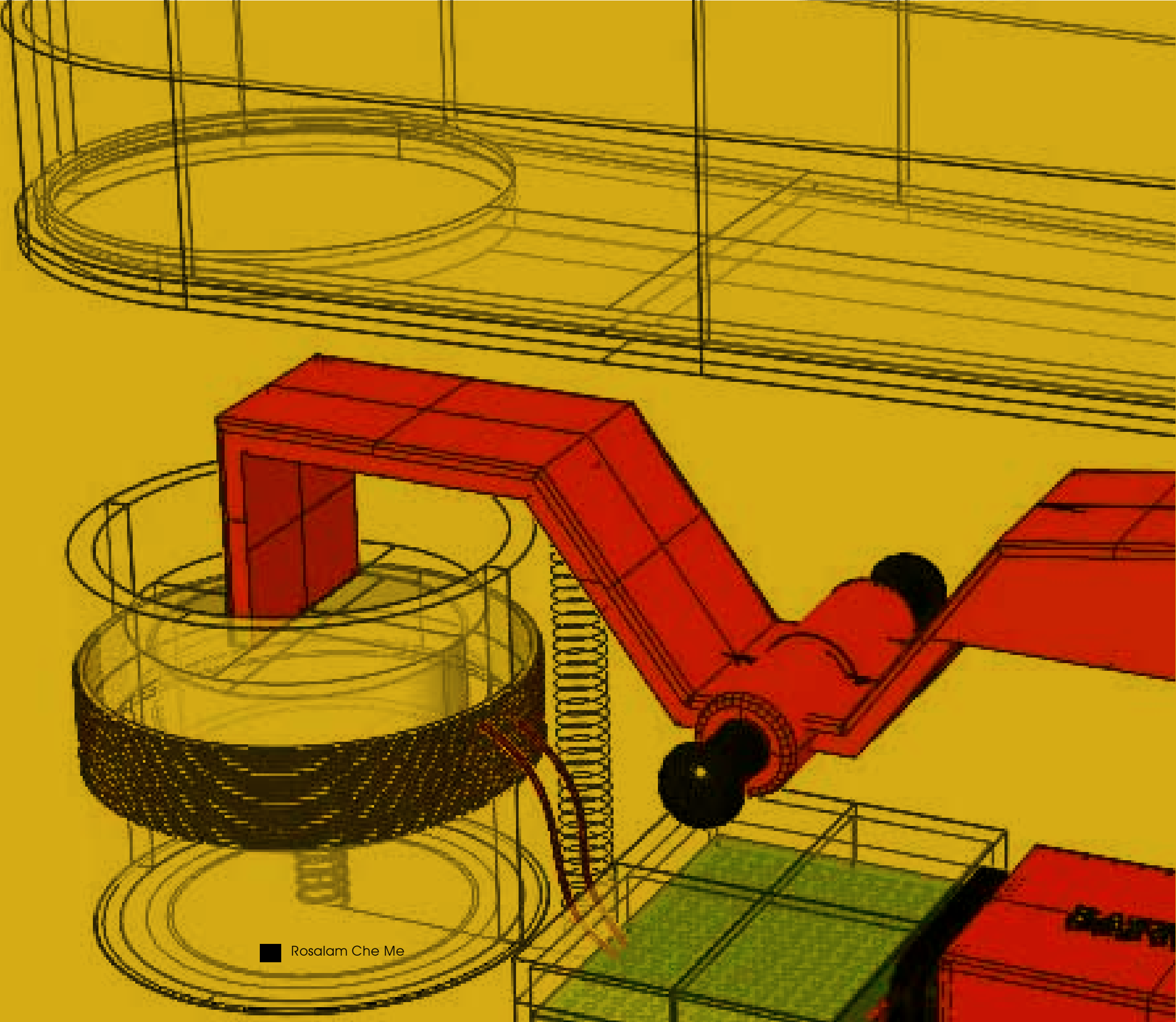
Hence, this project focuses on the redevelopment of the Port Dickson town into what is known as 'The Tanjung' by integrating past historical elements with the present new development. Employing the design concept 'Connectors', Noor Hayati has set a few objectives which include creating connections among the diverse neighbourhood and surrounding development with nature and existing human resources. A vibrant space for pedestrian is being introduced and the character of the town is being revealed in sustaining and linking the town history with the present development. At the same time, in creating this connection, the designer endeavour to create a hierarchy of access points based on their relative physical, cultural and historical importance.







The success of the overall redevelopment depends on the achievement of the connectors that are developed by the designer through its function, quality and urban character. Linkages that are being established will provide greater choices for public movement which will further accomplish the integration between the old and the new developments. These will eventually sustain Port Dickson as a living city and a meeting place, with the reflection of her rich heritage, diversity and character while at the same time, be enlivened by the everyday activities and cultural events.







In

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Bakri Bakar

STEdex'10

# ro e n or an Nee

a r a ar

The Department of Industrial Design at the Faculty of Design and Architecture, Universiti Putra Malaysia (UPM) was officially formed in year 2002. The department's main task is developing multi-disciplinary industrial designers with good knowledge in design and necessary skills. The Bachelor of Design (Industrial Design) took in the first batch of students in May 2002/2003. It received its MQA certification in 2005.

The Bachelor of Design (Industrial Design) comprises of a three-year programme addressing the basic industrial design process and focussing on the understanding of design and technical requirements within various products' typologies. The studio- and workshop-based teaching and learning emphasise the integration of industrial design practices and knowledge in product development through explorations of different design techniques. In addition, this programme is also supplemented by CAD, digital medium communication and basic manufacturing/machining skills. The results can be observed in the high quality design artefacts generated by students in the following pages.



This is the first time the department participates in STEdex'10. The artefacts are products created by industrial design students in their respective studios. Many conceptual designs produced by the students have been granted Industrial Design Certificates by the Intellectual Property Corporation of Malaysia (MyIPO). The certification proves that products designed by these students are at par with other good quality products available in Malaysia and can be competitive in the market.

For this debut, the products are grouped into three clusters: Ergonomic Fundamentals, Industrial Ideation, and Exploration and Agriculture-based Product Design. In the first, several artefacts are shown depicting concepts from nature. Others such as the Pineapple Peeler and E-co Guava Peeler had integrated human ergonomics successfully to support human activities.

The second cluster of products showcase sensitive responses towards situations such as in emergencies. Finally, the third cluster responds to the university's role as the Centre of Excellence for Tropical Agriculture by designing products for consumers to support agricultural activities.



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# 16

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# rono n a en al

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A series of related projects were assigned to students in a learning process and exposure involving ergonomics and human emotions. The project titled 'Ergonomotion' requires students to express their senses and feelings by producing 2-and 3-dimensional objects. Through this project, the students were involved in understanding the human emotion and attempted to relate this human feeling through the process of producing design artefacts which optimised the design fundamentals. The outcomes of this project allowed students to gain experience and knowledge about design principles; the relation between the influence of human emotion and the design process; and the integration of ergonomics, creative thinking and styling process.

This project required students to use nature as their source of reference. The elements of nature such as colours, shapes, forms, textures or even functions were the students' main emphasis. Based on their analyses, students would select a specific product to be developed using a proper design process. It included form ideation, form evolution, idea generation, idea development and the final idea selection. During this process, students were free of any constraint and limitation.



# ry Review

zal I ah

It is imperative to indulge into an innovative interpretation to what appears as the quotidian or to what is seemingly widely practiced in order to lead and in tangent with the new economic evolution. The year one 'Ergonomotion' is impressive since ergonomomy is no longer being perceived as the static equation of man-machine relationship but rather an expanding relation into the horizon of 'expressive-emotion' between man and machine.

Products, due to global market penetration, are flooding consumers with abundance of choices. Manufacturing technology has allowed products to achieve equal quality and standards thus subjecting them to equal competitiveness. Capitalising on this equal footing, a product with an 'expressive-emotion' will stand out to be picked from amongst the mass.

The 'Ergonomotion' brings closer to what D.H. Pink (2005) implied that high technology alone is insufficient hence requires coupling with a high concept. High concept involves the ability to create artistic and emotional beauty. Therefore, a student's early exposure in translating the subjective design elements into a tangible object would in time develop future industrial designers who have strong philosophical stand and personality.

Finally, the humble cry of 'Back to Basic' is fundamentally important. Experimenting with the basic design elements anew whilst adhering to the evolving economic base will enhance design relevancies. It is important to know that practice has evolved from agricultural to industrial to information and now to knowledge economy. However, the 21st century brings yet another economic phenomenon which Pink addresses as the 'conceptual age'. It means bringing new interpretation of basic elements not limited to line, colour, form and texture but also the senses of movement, smell and sound to become additional essential to industrial design knowledge.

# Nature as a source of inspiration

hazara ahar

A new form of products requires novel idea which would influence the product market segmentation. Nevertheless, in order to produce an extraordinary idea, designers must have substantial references. Nature has proven to be abundant with them. Velcro, shark suit (swimming suit) and even VW beetles are some of the finest examples of nature-inspired products.

Symbolically, during the second semester, the first year students in IND 3101 Creative Design Studio 1 course were given the 'Nature to Products' theme in order to execute their final project. The main objective of this project is to use nature as an inspiration for their design processes. Students are required to produce an artefact that is categorised as a portable home appliance device. The project emphasises understanding the most reliable natural element which can be adapted in a design development process. Elements such as colours, textures, shapes, forms or event functions are some useful references from nature studies.

The ability to creatively transform natural element to become a product is one of the important criteria to be assessed in this project. Here, students are free to choose and express their ideas without any constraints on productions. In summary, the fusion of creativity with technology has helped students to improve their awareness about a product's function and practicality.





yno ryer  
Nik Azlan Nik Abdul Aziz

n her ar ryer  
Masnee Sabari



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Masnee Sabari

# neapple Slicer

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Human engineering, design simplicity and practicality are among key factors for a successful product design. The theme for this artefact was developed based on localised culture for peeling a pineapple. Wan Nadiya Syuhada has successfully develop a product that is functionally working and practical for the end users.

This pineapple slicer employs a boring technique where turning and cutting are required. A downward vertical force and turning torque from the hand will cause the blade to slice through the pineapple flesh downwards. The concepts' simplicity has eliminated about twenty percent knife usage during the peeling process. The slicer does not require any special skill or previous experience to operate the device hence reducing the operation time.







Wan Nadiya Syuhada Wan Ngah

Award: Gold PRPI 2008

Co-inventors: Arnis Aziz, Nik Aizan Nik Abdullah, Muhammad Faizal Che Leh & Hassan Alli

## o a a eeler

az an a l zal ah an

Imagination and logical thinking during the design exercise inspired Aziera to develop improvements on existing tools and propose an innovative product design solution.

E-co Guava Peeler is a multi-tool that combines two different kitchen tools: knife and skin peeler. The common method of peeling a guava skin with a knife is replaced by this novel design idea. The cutting blade is stored inside the handle of the knife through a pivot point mechanism. The peeler also doubles up as a scoop for the rounded seed in the fruit. A touch of apple green hue to the ergonomically designed handle adds attractiveness to the design.



Aziera Barni

Award: Silver PRPI 2008

Co-inventors: Arnis Aziz, Nik Aizan Nik Abdullah, Muhammad Faizal Che Leh & Hassan Alli





# Mobile Cell

az an a l zal ah an a r a ar ah nah l rah

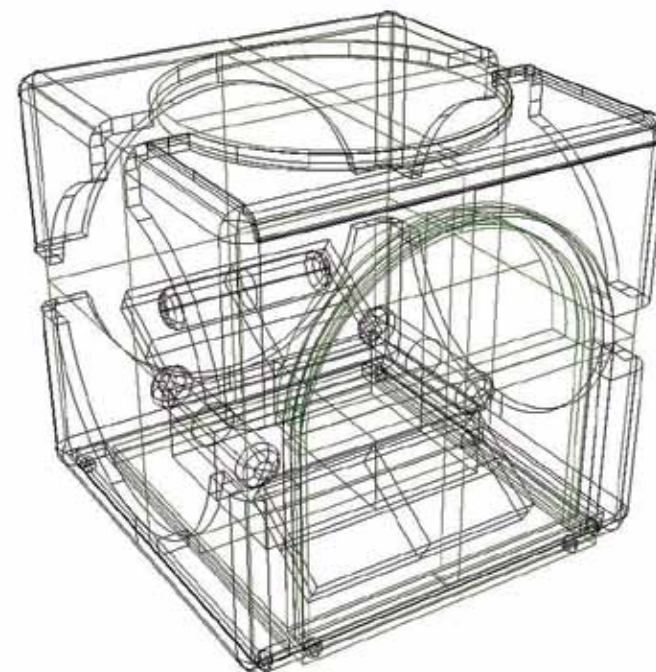
The design is a response to provide urban users an appropriate space for taking a short nap or resting in public spaces. The design of the Mobile Cubicle Cell (MC<sup>2</sup>) was proposed which idea for its design concept originated from Japan's famous capsule hotel. It is uniquely mobile and simple to operate.

Basically, MC<sup>2</sup> aims to provide a convenient instant sleeping space. It is designed for people who need instant rest or short nap before continuing their chores. The design research had focused on places often visited by people during festive seasons. For example, in waiting areas (airport, train or bus station) or in shopping malls. It is a cost effective design solution for various public spaces and are easy to store.

Ergonomic elements are also incorporated into this design concept to provide comfort and safety for the users. A rounded boxy shape design optimises space usage. Ample flat sections also provide multitude ways for advertising. The correlated integration between form and function has been utilised throughout the design development process for the MC<sup>2</sup>.







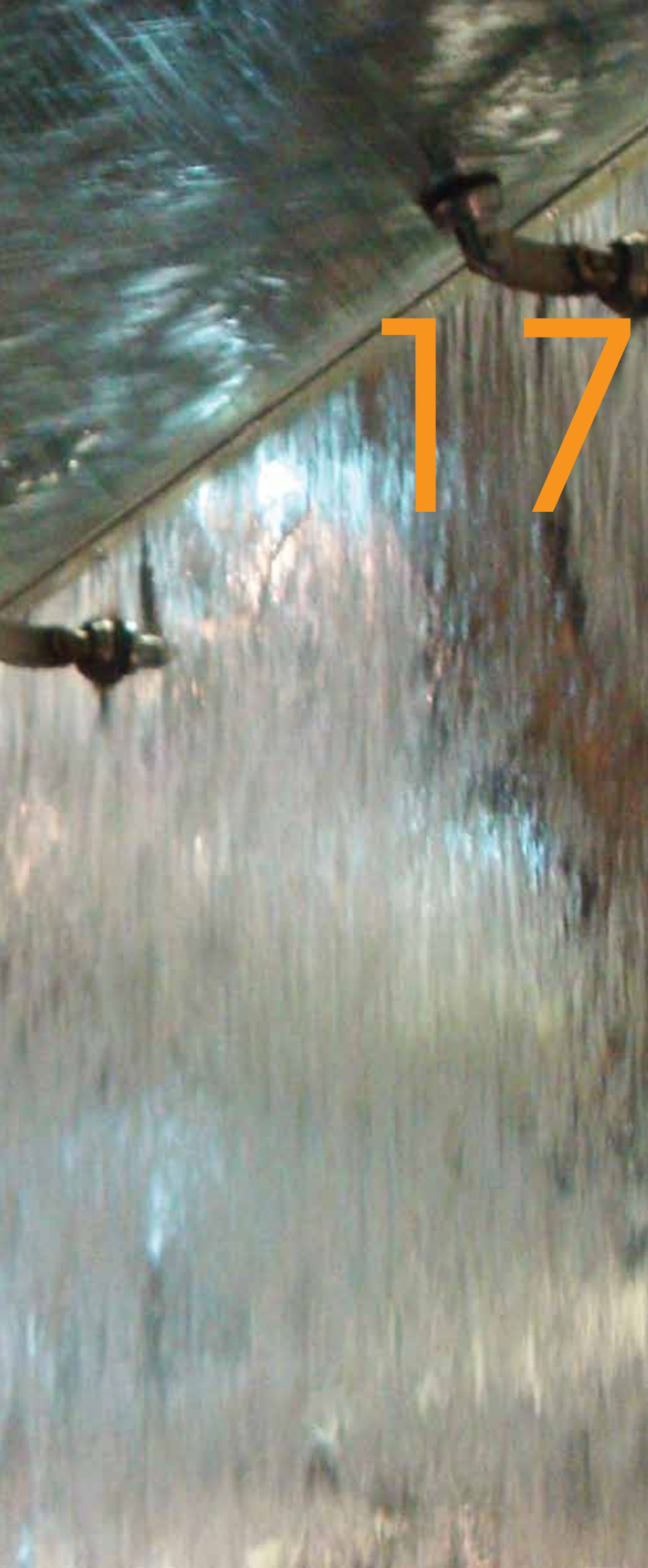
Rosalam Che Me  
 ID registration: MY 09-01151-0101  
 Award: Silver PRPI 2010  
 Co-inventors: Bakri Bakar, Mohd Shahrizal Dolah, Shahrul Azman Shahbudin,  
 Mohd Faiz Yahaya, Sazrinee Zainal Abidin, Nik Aizan Nik Abdullah,  
 Muhammad Faizal Che Leh & Rahinah Ibrahim





Photo by:  
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The industrial design studio practice in the second year is mainly focused on aesthetics, creativity and styling while the design laboratory emphasises on designing for manufacturing. The second year study further provides ample opportunities for students to develop their design thinking and awareness.

The Industrial design studio practice exposes students to learning a structured design process that involves problem solving method based on ergonomics, technological applications and awareness of contemporary design trends. Students would demonstrate their abilities to communicate their most relevant solutions in refining product designs that optimise users' expectations and requirements. The outcomes of their design solutions should incorporate the use of appropriate technological application and how it could be embedded in producing an innovative design.

On the other hand, the industrial design and manufacturing laboratory practice develops students' skills in exploring problems, selecting appropriate industrial materials, identifying relevant manufacturing process and acknowledging technological issues on existing similar products.



Exploratory design is about utilising design process and method to explore a product's design without limitation. The course provides students with an opportunity to explore new design inspirations and solutions towards proposing novel innovative product design ideas.

The course covers structural construction and physical form of design with the aim to facilitate fabrication as well as to utilise current mechanism or new technology. The process also embeds the available current technology in the market. Its main purpose is to expose students to the importance of technology required in any new product development. In addition, this course also unravels a product's structure while experimenting with its appropriate physical form relevant for reducing fabrication difficulties and technical constraints.

The Natural Disaster Aid is one project focused on developing a design for people with special needs. The project had enabled students to develop a new design idea to the form of a semi-working prototype. The prototype demonstrates the designer's sensitivity towards providing a potential solution in developing a product that could assist people need. On the other hand, the Modular Toilet System and the Greenio Mini Grass Trimmer are two utilitarian products for everyday use. The first is to be located in a busy urban space while the second is for household usage.

# ry Review

har l l zln l ah an

Based on the selected works, I found the students successful in displaying functional ideas in simple forms. The issue of today's design education is discerning between conceptual versus practical products. Both types of exercises are important to expose students to various current and future problems. In order to avoid duplication, IP search was conducted to ensure design novelty. In one case, the student is recommended to validate his product with the targeted disabled community for better understanding and design improvement. The functional prototype and packaging of a finished product illustrates a student's maturity about the design process and its related commercialisation aspects.

Through my short observation of the exhibition, I found the students showing a satisfactory level of understanding about the industrial design process from conceptualisation of an idea to its design development. With product styling being the bread and butter for an industrial designer, personal touch and characteristic of the designer should always be embedded in the design thus creating a designer's identity in product styling. Some of these ideas have potential to be further developed to the next level of commercialisation phase. Their basic skills in the second year such as styling, computer-aided design and visual representation of each design proposal are satisfactory and can be improved by enhancing both theoretical and practical aspects of creativity. Graduates with such high value of creativity and innovation are expectedly marketable.



Overall, the selected schemes portray good ideation processes. Exploration of futuristic design is recommended to be backed with strong design needs and specifications. I believe all designers understand how important consumers or user needs. Today's consumers are power purchasers. However, consumer or user behaviour and lifestyle are two difficult and complex subjects to study. There should be various scientific research methodologies, user analyses, product validations and thorough experimental approaches that could be exposed to students. I would like to suggest this additional vital skill for designers to master.

The selection of projects justified current existing problems. Today, service innovation design is a vacuum in our local industrial design scene. How can design contribute to enhance services? In any service, reducing waiting time is crucial. The students were able to propose practical solution such as interactive information system or waiting in a comfortable environment. Basic needs are also available such as vending machine and are user friendly. Both designs create excitement and functional space with variation of geometric forms. However, I am concerned about the actual physical and human dimensions of things. Students are recommended to further integrate economical production method, material application and ease of assembly method during product development processes.

# Natural Disaster

has a azal he eh

Natural disaster is unpredictable and government authorities must be prepared to face it when it happened. Disasters such as earthquake, typhoon and landslide are natural catastrophe to mankind. Even man-made marvels such as buildings, tunnels, mega constructions could collapse unintentionally. During such disasters, the main target for rescuers is to locate and save as many lives the soonest possible. Rescuers must ensure that they do it properly and with the use of right equipments. The idea to create this composite survival pod device was derived from the Kashmir's earthquake which occurred in October 2005 with a magnitude of 7.6. Richter scale. This natural disaster affected an area covering 80 km from the epicentre and caused over 80,000 deaths with 70,000 more injured.

Mohd Faiz's design could support the search and rescue team to identify, locate and perform rescue operation. Inspired by the movement and form of the centipede and the worm, this device is meant to slip deep inside a building's wreckage and foundation which would have been destroyed or collapsed in an earthquake. Its functions are controlled by remote-control via a split external monitor. The device can manoeuvre deep inside the rubbles through pockets of air safely without causing more damage to the already weakened structures. The worm-like movement would enable the device to be directed to a victim's position.



Mohd Faiz Abdul Khair  
Co-inventors: Hasri Yunardi Hassan, Nik Aizan Nik Abdullah & Shahrul Azman Shahbudin







Picture Source:  
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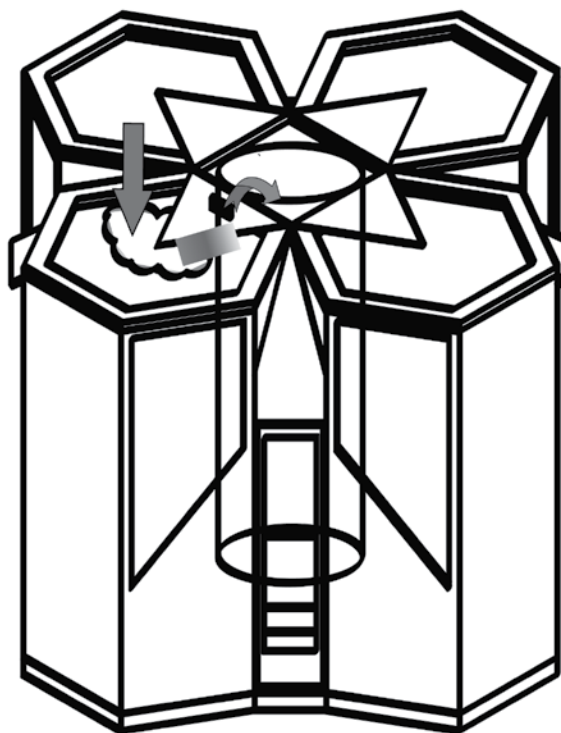
The front consists of a drilling part and can drill a hole for allowing the device to slip through. The rotating ball-bearing system allows the device to manoeuvre around a collapsed area. The body is made up of several compartments that could function as water containers or storage for emergency supplies to the victims trapped underneath the wreckage. The natural disaster aid compodium has its own build-in microphone which enables the search and rescue team to communicate with a victim. In summary, the device is designed with a form follows function concept where the centipede and worm design concept become metaphors to move and live within tiny spaces in developing the design and its functionality.



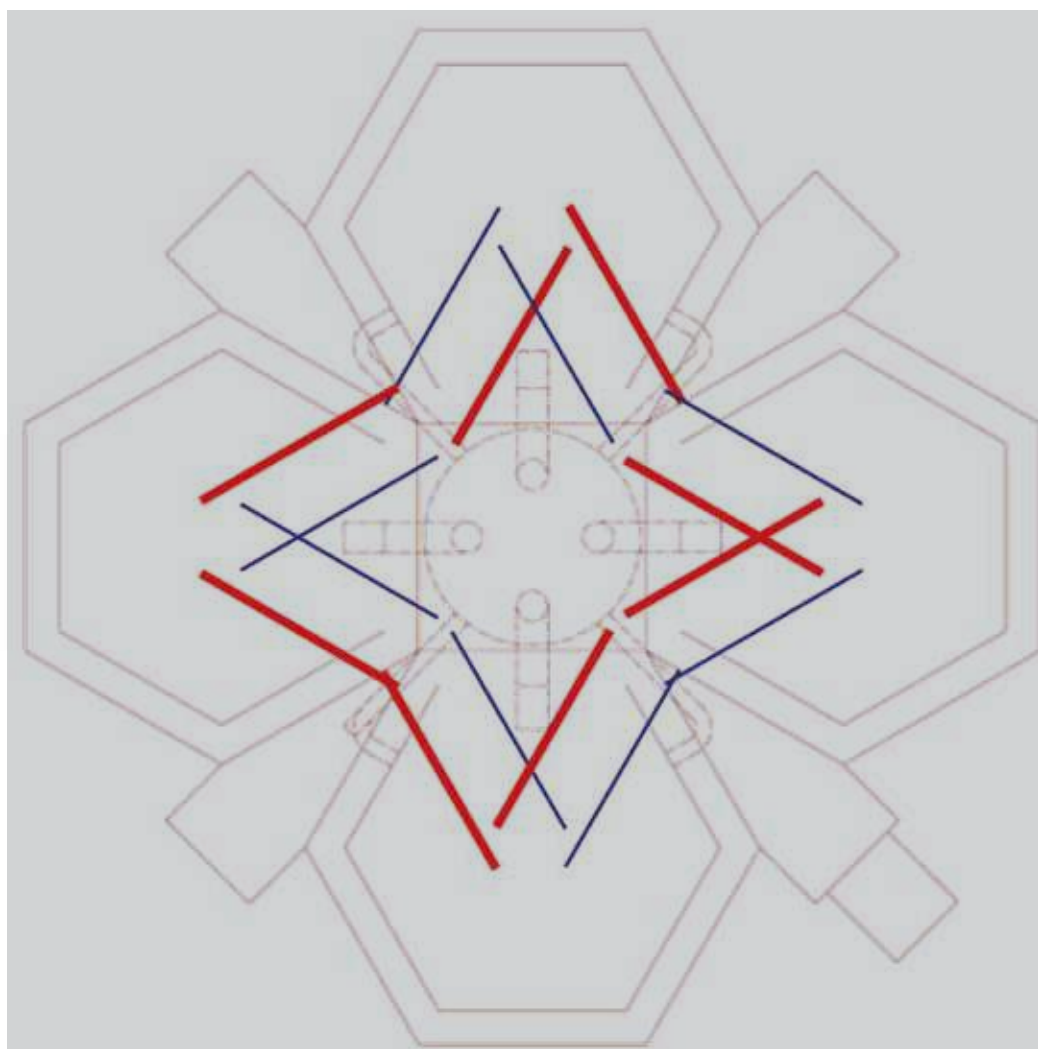
# Public Toilet

at Jalan Tuanku Abdul Rahman

There are always a large number of visitors going shopping at Jalan Tuanku Abdul Rahman everyday and the number of visitors usually increases during weekends and major festive seasons. Due to this large turnouts, the use of public facilities such as toilets always become a major concern to the authorities.







The design consists of both male and female toilet sections. It includes a proposed platform for mothers to change their babies' diapers. In order to facilitate users of both genders and all ages, this modular toilet system has a user-friendly vending machine that sells basic needs such as tissue packs, sanitary napkins, tampons and baby diapers. Furthermore, the designers have also successfully addressed the hygienic aspect by featuring its own green features for easy maintenance and having natural ventilation for releasing bad odours.

Hoo Jun Hui, Sarah Rusmin, Nabil Fikri Ithnin  
& Mohd Borhan Mat Din  
Co-inventors: Nik Aizan Nik Abdullah, Bakri Bakar,  
Shahrul Azman Shahbudin &  
Ahmad Rizal Rahman



# Green n ra r er

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This design project was developed based on a continuous idea development process aimed to encourage new product improvement. Design considerations include usability, user requirements and environment. The mechanical parts, product functions and basic technology are based on a study about existing grass trimmer where improvements were focused on its ergonomically aspects. On the environmental aspects, this product has been designed with low vibration for minimal sound output during its operation. There is potential to incorporate alternative power source in future development.



■ Shabudin Md. Sattar  
ID registration: MY 09-01170-0101  
Award: Bronze PRPI 2010  
Co-inventors: Nik Aizan Nik Abdullah, Sazrinee Zainal Abidin, Mohd Azali Abd Rahim, Zulkifli Muslim  
Mohamizzam Mohammad, Noorizan Mohamed & Ina Krisantia









Photo by:  
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# role re a e ro e n

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‘Global’ thinking may overlook the diversity between people in different communities (Kim et al 2006). According to Leinbach (2002:3), design should no longer be seen as a styling shape or just an art object but products should be designed and produced with appropriate features. They include cultural aspects and elements of localisation which could provide a more competitive edge in the market. Rodriguez et al. (2006) have suggested that in creating products for current emerging markets, designers should develop deeper understanding about the needs and context of the people using them.

Product manufacturers and designers have to understand elements from local environment. They also need to know how products respond and are being used in a local context in order to meet their product’s goals.

Additionally, form would combine with colour, texture, shape, style, layout and ideation forming the “formal properties” of a design. Products are not only required to be technically functioning but also are well integrated with other affective elements in design. They include touch, feel and taste which are linked to human life, memories, social and culture. These elements of design form the main thrusts in implementing design practice and thinking in the final year of these industrial design students’ projects.



The following design exercise was designed to stress on experimenting with practical design forms that are relevant with current technology while accommodating agriculture-related consumer needs. By experiencing a systematic approach in developing good design quality products, students were exposed to methods for exploring their design ideas and enhancing their skills and thinking in this exercise.

The initial study began with students exploring potential areas or issues that required design improvements and opportunities for new agricultural product development. This basic anthropological experience had enabled them to identify new possibilities in developing novel products. Students learnt about systematic research techniques and developing relevant analytical skills. They would then propose a relevant technology and focused on certain target market's needs during their design development stages. These design exercises incorporated basic manufacturing knowledge in terms of materials selection, fabrication process and sustainable values relating to local agricultural contemporary design issues.

# STEPS TO EXPORT

In the Malaysian context of developing product and discussing local design agenda, various problems are encountered in exporting local goods internationally. This is especially in promoting tropical fruits. Local versions of 'Fruit Packaging' and 'Fruit Opener tools' are two examples that emerged from the designers' social engagement experience with the local agriculture developers and their surroundings. The incompatibility of adapting universal tools in assisting local fruit lovers to enjoy delicious tropical fruits have driven the initial study for these two projects.

The use of mock ups to study the forms and shapes has contributed to exciting design development for these projects. It allowed interesting experimental problemsolving that stemmed from the design exercise. The use of inappropriate tools available in the market to open 'the hard and spiky' shelled local fruit *durian* could lead users to other problematic areas such as ergonomics, hygienic and other safety-related issues.



# ry Review

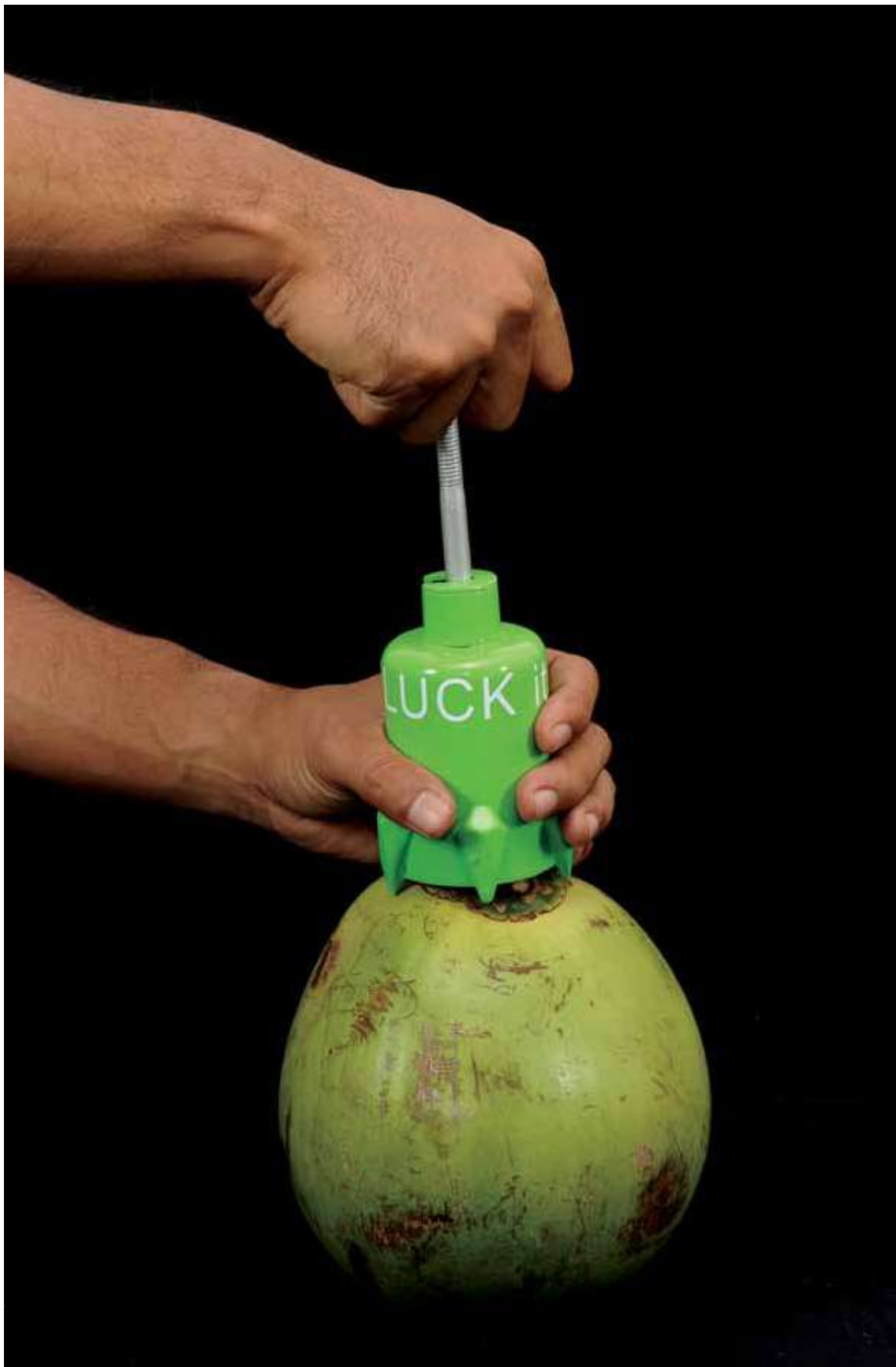
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By examining the quality of 3rd year students' design works and their respective presentations, I am of the opinion that most students have successfully addressed the purpose of their study. These can be observed in the quality outputs of their design works which include sketches, mock-ups, prototypes and panels presentation. However, some aspects could be further refined especially on the development of students' knowledge and logical thinking about where and when a product should be positioned and its relevancy with current market demand. Bridging creativity and students imaginations to match with reality world is not an easy task to achieve. From my assessment, I found about 30% of the design concepts applicable or practical if proposed to the real-world. However, this rate could be improved if students were given more time and proper research guidance in their social inquiry to match their products with current users and environment. Despite the lack of research and inability to connect design outputs to 'real world' situation, the effort of proposing such interesting pieces of design works exhibited good quality design presentation techniques. I believe that these students can be trained and groomed to become successful designers in Malaysia and in the international scene.

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Observations and sensitivity to problems are among methods employed to generate ideas. Based on selected current issue students are required to improve selected mechanism, system design and to focus on the reliability aspect. The young coconut extractor integrates a simple shape that is easy tool to operate and was given an attractive soft pastel colour appearance.







The design is tailored to a housewife or any female user. The culture of women at work assumes them not involving in heavy work particularly with one that exerts force or energy. "Pluck it" is a device developed for a woman to operate easily in a task which is otherwise traditionally performed by a man. The product is a result of a comprehensive study on women at work as they are often burdened by this hardship.

■ Mohammad Haziq Noraizan

ID registration: MY 09-01173-01-01

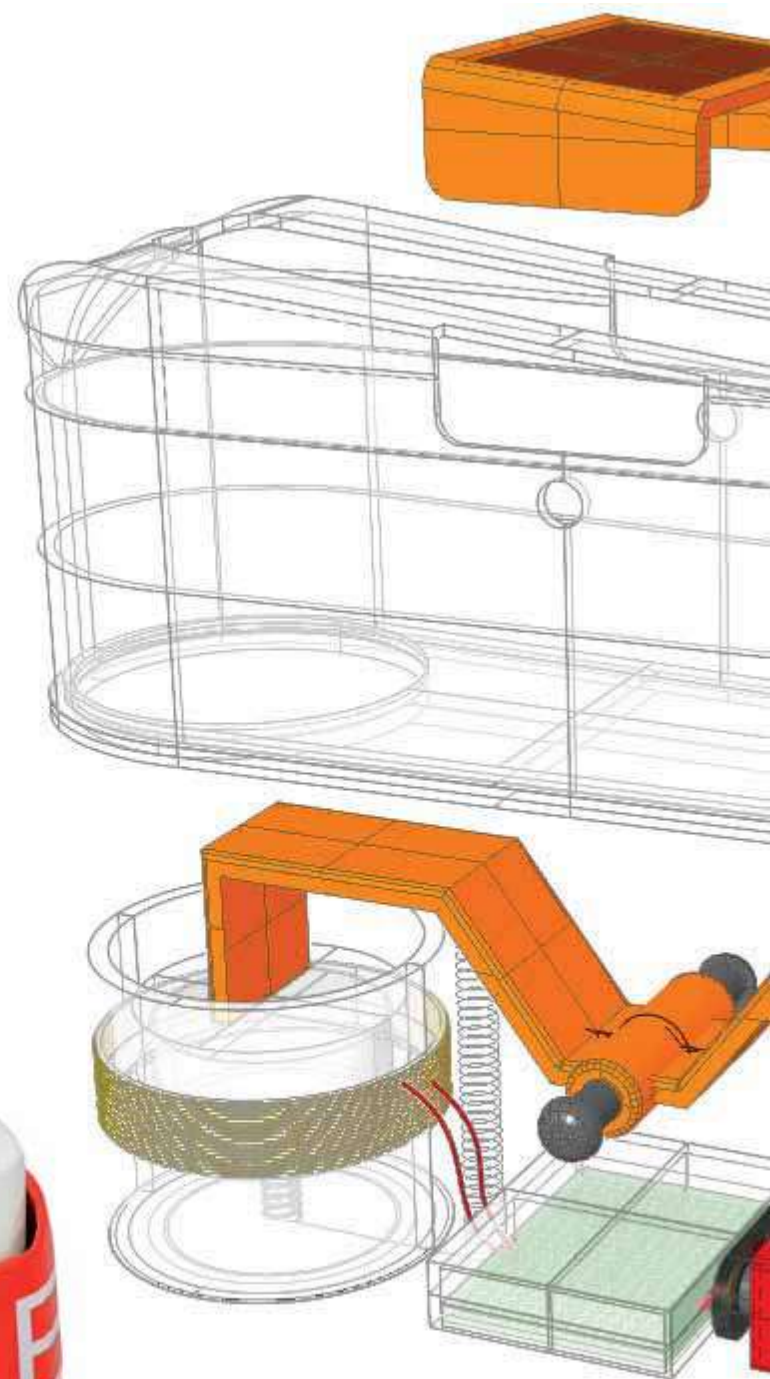
Co-inventors: Muhammad Haziq Noraizan, Sazrinee Zainal Abidin, Hassan Alli, Mohamizzam Mohammad, Mohd Azali Abd. Rahim, Rahinah Ibrahim & Osman Mohd. Tahir

# aer elon a r y

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N zan N llah Sazr nee a nal n zal ah an ah nah l rah

Technology development together with innovative design ideas are among the main factors in generating a phenomenal product design. Technological changes and findings about human factors in studies have inspired new product design by replacing most traditional tools and devices. Rosalam has developed a device to measure the ripeness of watermelon fruits. Traditionally, people measure the ripeness of watermelon by squeezing, shaking, knocking, feeling the textures, smelling, and even by observing the fruit's skin and texture. These traditional techniques are carried out to ensure that the fruits are ripened enough before cutting. The device functions to assist stakeholders in selecting ripened fruits by incorporating the velocity impact measurement scales. Reading from the velocity meter would determine the ripeness of the watermelons.



■ Rosalam Che Me  
ID registration: MY 09-01150-0101  
Co-inventors: Nik Aizan Nik Abdullah, Bakri Bakar, Sazrinee Zainal Abidin, Razman Ramli,  
Mohamizzam Mohammad, Hassan Alli, Mohd Azali Abdul Rahim & Rahinah Ibrahim





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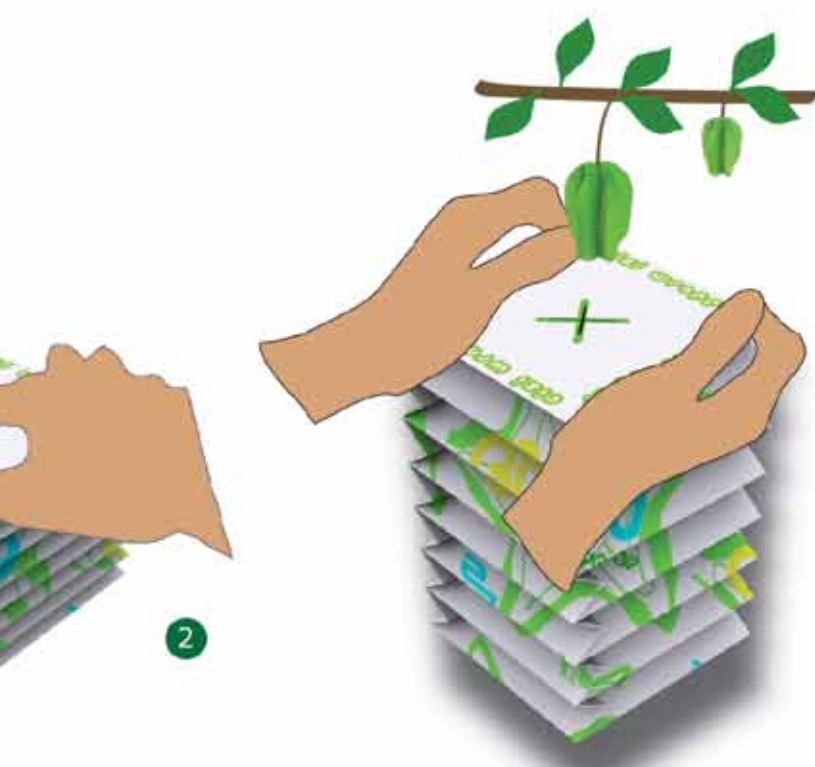
This product is designed to provide a proper 'local' packaging system for the Malaysian star fruit. It is developed based on the designer's observation and practical involvement during his 'stint' in anthropological work in the field of agriculture. Chong Wei Wei had identified several issues from existing packaging system that could be improved. The critical areas are insect infection, hygiene, improper packaging system and use of improper recycled material. In developing a new packaging concept for local fruits, appropriate material and flexibility to expand in size are major considerations since fruits will grow in size during transportation and exporting period. The proposed local packaging design version for star fruit also took in account with farmers' ergonomics and flexibility aspects. This localised packaging design system can be extended to cater to packaging of other local fruits.



■ Zakaria Mohamed Ismail  
Award: Silver PRPI 2008  
Co-inventors: Nik Aizan Nik Abdullah, Muhamad Faizal Che Leh,  
Mohd Shahrizal Dolah & Arnis Aziz



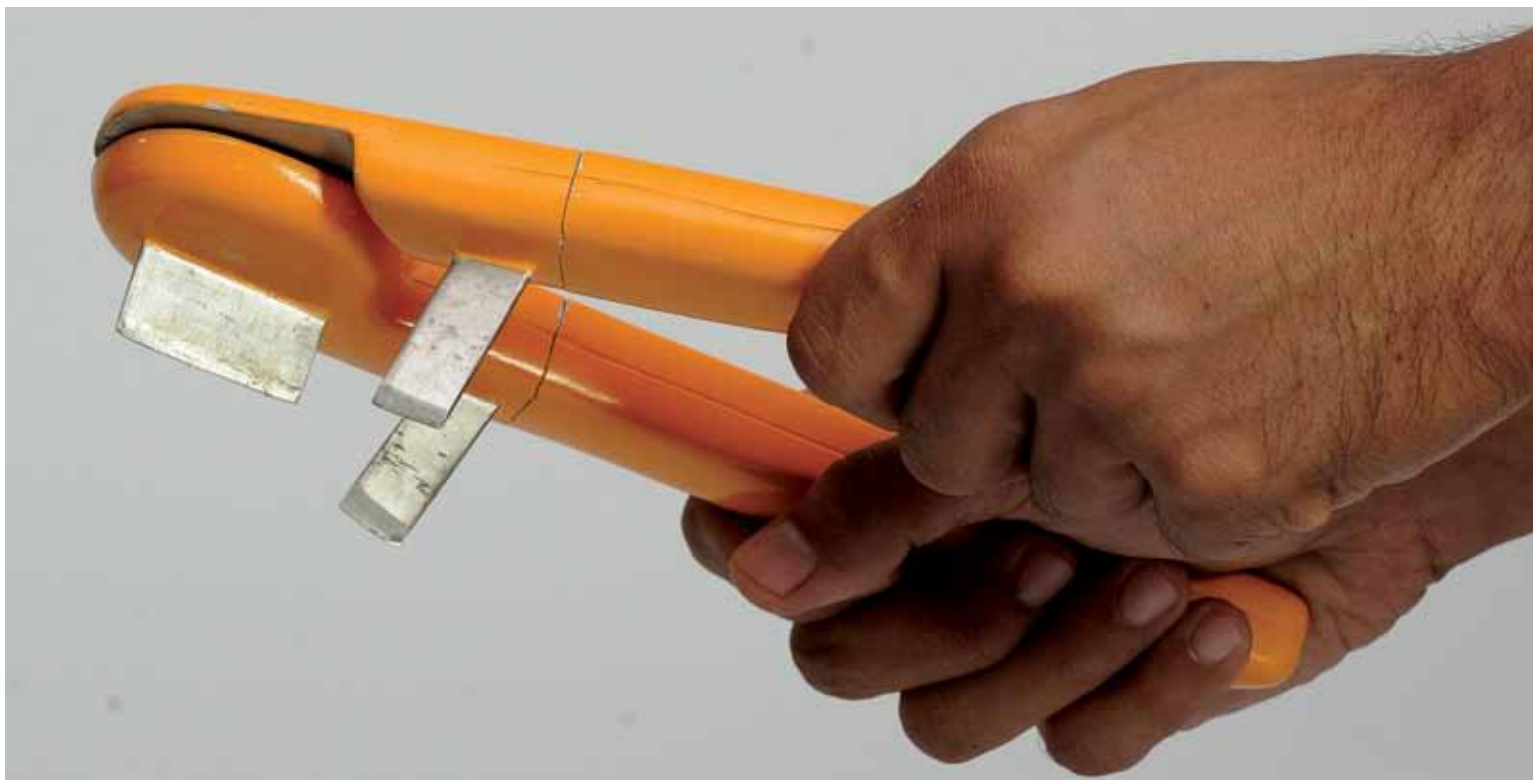




## durian opener

zal ah an

A local product requires a local tool to operate. The *durian* fruit opener is a tool designed to cater for the need of promoting tropical climate fruits to international market. Physically, the *durian* is thorny and quite difficult to open. Every species of *durian* has different rind thickness where traditionally, the durian is opened using hand tools, i.e. knife or *parang* and assisted by a gloved hand. It requires special skills and knowledge only known to some local people. In a local environment, the consumer will hold the durian on one palm and strike open the durian at the centre of the striate with a knife. Based on this mechanism, much force is applied. The thorns on the *durian* skin can easily hurt the hands. Therefore, women seldom open the durian on their own. This 'Durian Opener' is specially designed and crafted by Chong Wei Wei to ease users who want to enjoy this fruit at home. The design is a portable household *durian* opener. Using this device, the task will use less force since the opener is convenient, safe and easy to use. Furthermore, besides encouraging *durian* to be promoted to international market, this device's design caters to users with different abilities including women and elderly people as it requires less force with high safety features.



Chong Wei Wei

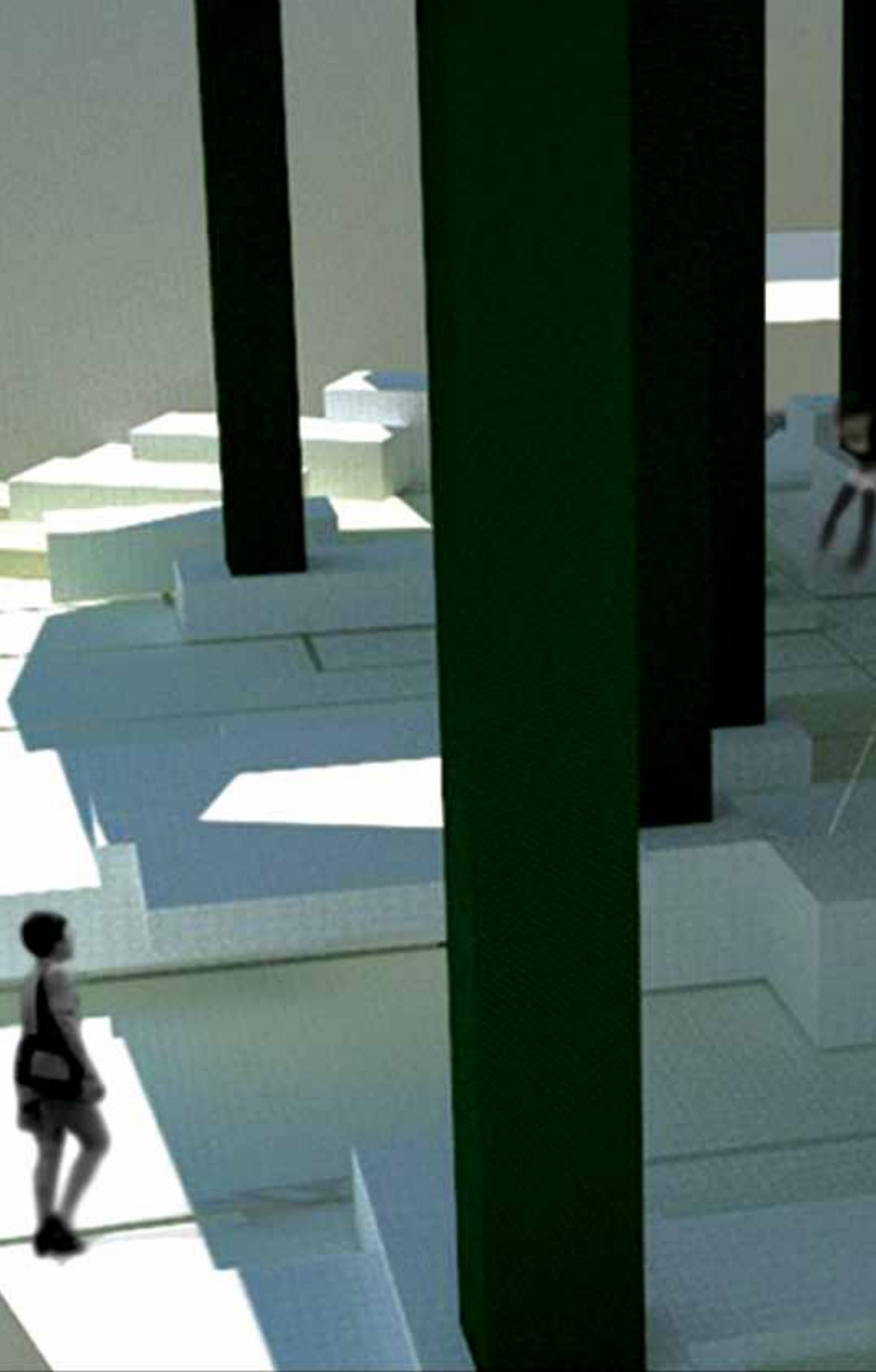
Award: Gold PRPI 2008

Co-inventors: Muhamad Faizal Che Leh, Nik Aizan Nik Abdullah, Arnis Aziz & Mohd Shahrizal Dolah













# Seal ar

N ora le e har n a  
a r a ar oh Shahr zal olah  
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ah nah I rah N r z ee Na r ahar n  
Wan Sofiah Wan Ishak and Kalsom Mohamad  
l o le e n o e on  
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STEdex'10

# Noralee Harrison

Architecture

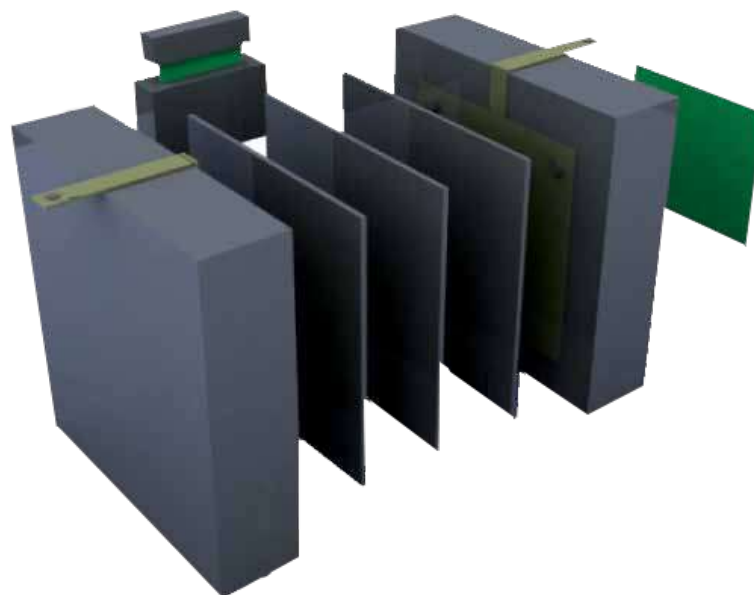
WONDERMOMO is a conceptual consumer product design which functions as a portable charger for various mini gadgets such as mobile phones, portable music players, LED light units and others.

This portable charging device was designed for users to charge their electrical devices while they are on the move. WONDERMOMO is reliable since this portable charger utilises an environmentally-friendly energy source instead of the conventional electricity energy.

Existing conventional charger needs to be attached to the electrical power socket for charging. This limitation makes the gadget inoperable when electricity is not available.

WONDERMOMO is a device solely depended on the use of renewable energy and can become an alternative to the depleting gas- and petroleum-based energy resources

Direct Methanol Fuel Cell (DMFC) liquid fuel cell is suggested as the biodegradable alternative source for energy. The output from this renewal energy can produce an appropriate amount of electrical energy voltage sufficient to power to the portable gadget. Users are able to use this reliable and portable device even when they are at an outdoor environment.





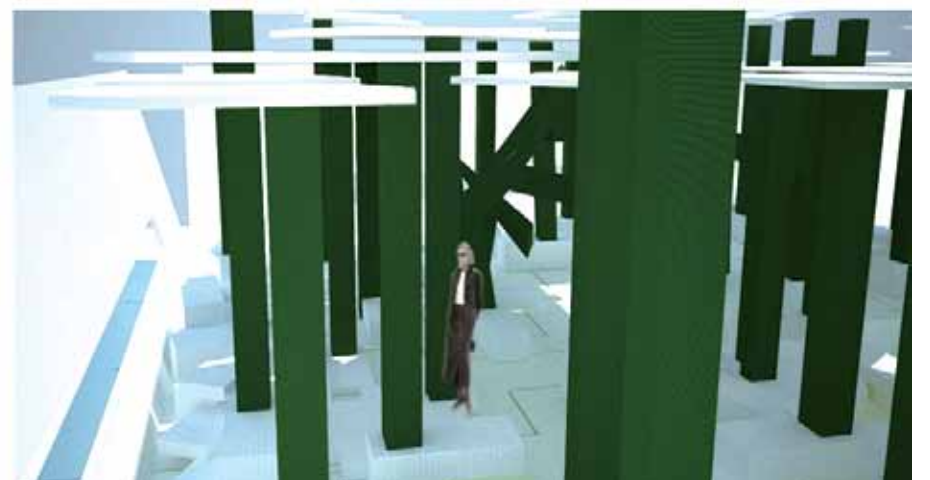
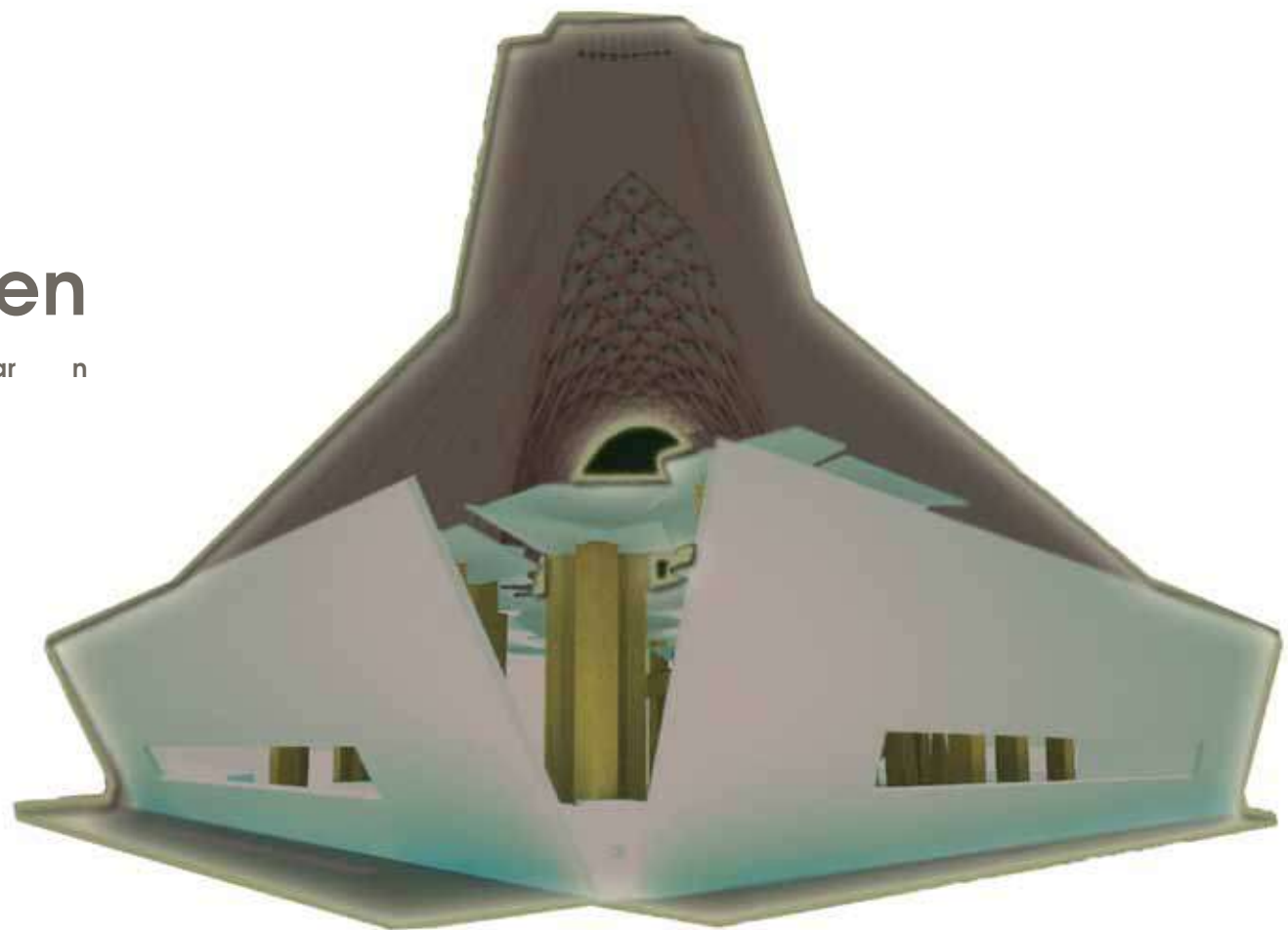


■ Eng Sin Yin  
 ID Registration:  
 Award : Gold PRPI 2008, Silver-International Technology Exhibition 2009 &  
 Silver-British Invention Show and Competition 2009  
 Co-inventor: Mohd Shahrizal Dolah, Bakri Bakar, Shahrul Azman Shahbudin  
 Sazrinee Zainal Abidin & Lim Chin Haw

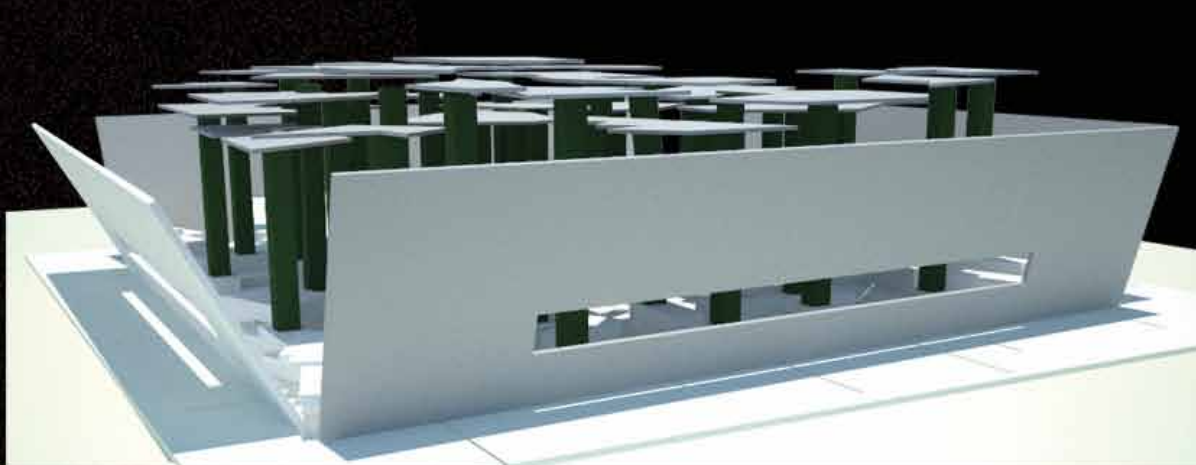
# Memorial to a Memorable Event

Wan Sofiah Wan Ishak & Kalsom Mohamad

A Memorial to a Memorable Event commemorates the aftermath of the Iranian Presidential Election of the previous year. The memorial is for events that followed the election without espousing any ideological, political stand or affiliation. The artefact seeks to evoke the emotions, sentiments and aspirations leading to the events and trailing after them.







AERIAL VIEW



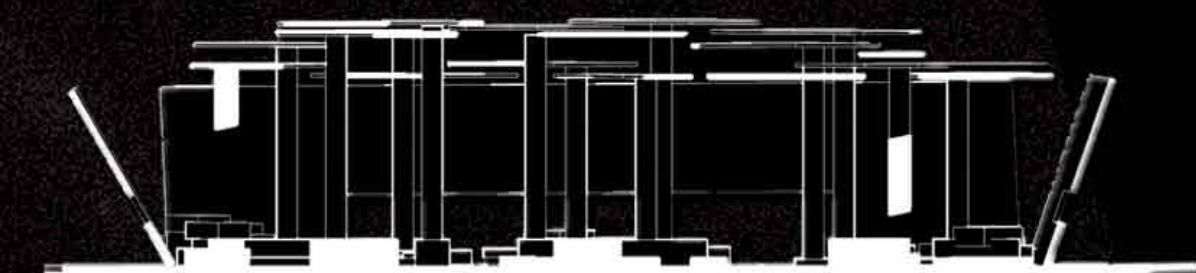
RIGHT ELEVATION



FRONT ELEVATION



REAR ELEVATION



SECTION X-X'

The artefact begins with the deconstruction of the ballot box as an icon of the electoral process which symbolises the events that followed. These events are further expressed as deconstructed monoliths representing the force and effects that swept through the occasion.

The approach is steeped in symbolism, it is not limited to the monument alone as it also allows for experiential participation. It asks visitors to walk through it right up to the heart of an inner sanctum for a fallen one during those events. Even if this was missed, the memorial would still be perceived as a sanctum in its entirety by the idyllic ambience created within by the stark, robust geometry and scale of the components. They further enhance the character of the space and the interplay of filtered celestial lighting.

■ Aisan Kianmehr  
Award: Joint 3rd Place.  
8th International Student Competition:  
A Monument To A Memorable Event  
Organised By Commonwealth Association  
Of Architects.



# Location

oha a a r a y n a'ar

The proposal is a research complex for the Institute of Advanced Technology (ITMA), Universiti Putra Malaysia. About 16,000 square metre of laboratory facilities are needed to house the institution's five research laboratories. The complex is also a showcase of several green technologies, from solar-assisted air-conditioning to mechanical waste management. The site is on a small hill in Bukit Ekspo, UPM surrounded by three lakes. There is an existing 40 feet high gantry tower spanning over a 50 feet diameter solar bowl which offers interesting dynamism to the proposed new development.

Curiously, the proposal takes the name 'green sprawl' which seems to be an antithesis to green site development. However, upon closer inspection of the group's design intention, the sprawl is a result for the need of views, natural ventilation and daylighting which formulated the basis of passive design strategy. The building consists of two main components: administration and laboratories. The administrative spaces are housed in a long curvy spine that straddles the edge to the hill top. Growing out of this spine are five laboratories which radiate from the centre of the solar bowl.

The curvature of the spine on top of the five laboratories enables the occupants to have a commanding lake view. The decision to let the attached laboratories to 'fall' down the hill allows a series of small wind turbine to be ideally placed on top of the spine without any obstruction.

The most important statement made by this building is that the first and foremost duty for a green building is to explore the passive design potential before indulging in sophisticated green technologies which is the focused R&D of the five laboratories. This is evidenced by the shallow planning of all the zones allowing the benefits of natural lighting and ventilation in to all areas. As important relics on the site, the high gantry and the solar bowl, are celebrated.

Acknowledgements:  
Nor Mariah Adam & Elias Salleh







■ Tan Khang Hung, Saiful Azam, Noor Adili Kamaruddin, Nurul Ain Ahmad, Loo Jie Hsin & Haw Yoke Ah

Award: First Place Winner,  
ITMA Complex Design Competition,  
Universiti Putra Malaysia



# no le e en

he or an er o l l e o e en o r ee e han o he ollo n ho  
ho h roe o l no ha e een o le

Prof. Tan Sri Datuk Dr. Nik Mustapha R. Abdullah  
Prof. Dato’ Dr. Abu Bakar Salleh

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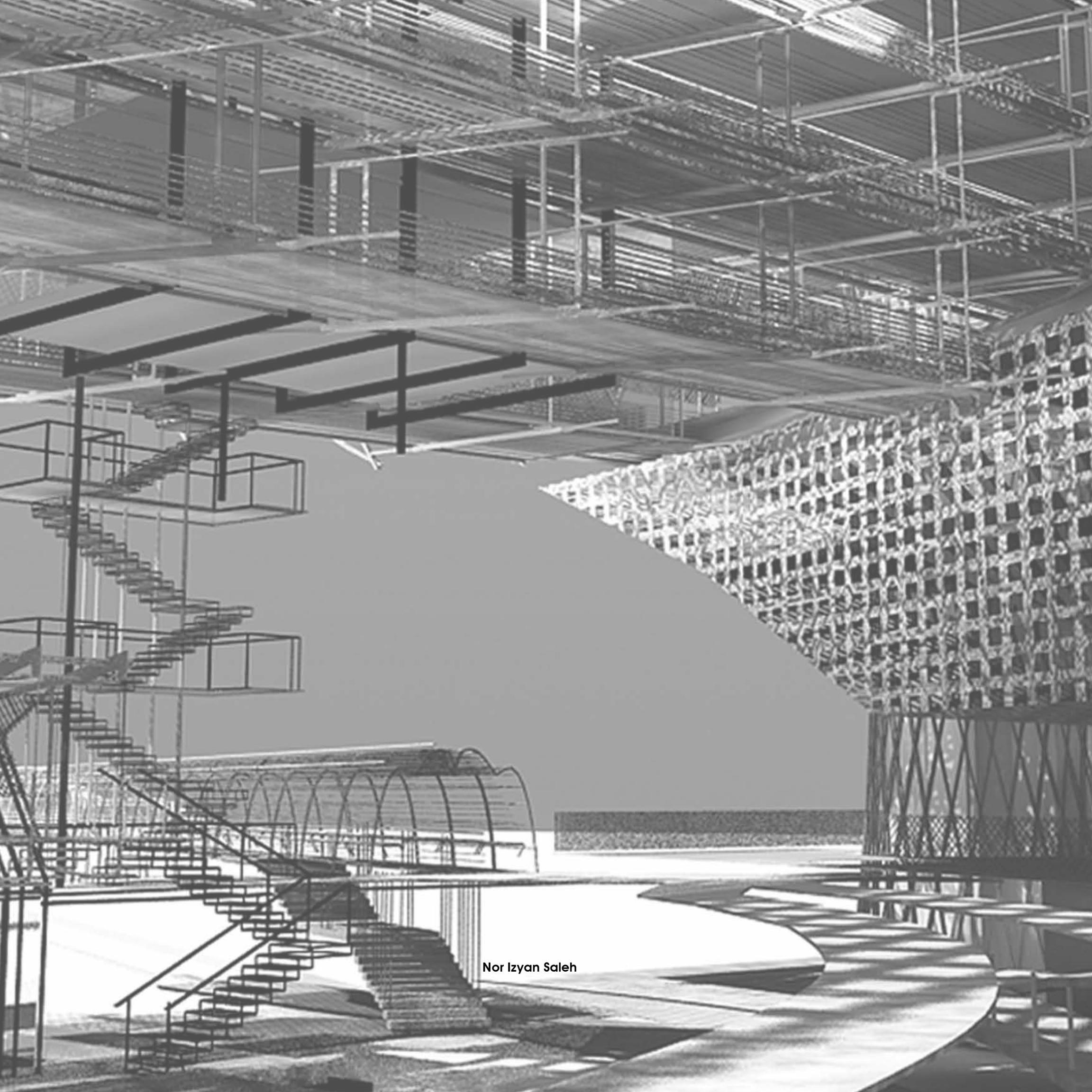
All the dedicated staff of:

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Administration Office

Photo by:  
Na r ah ar n

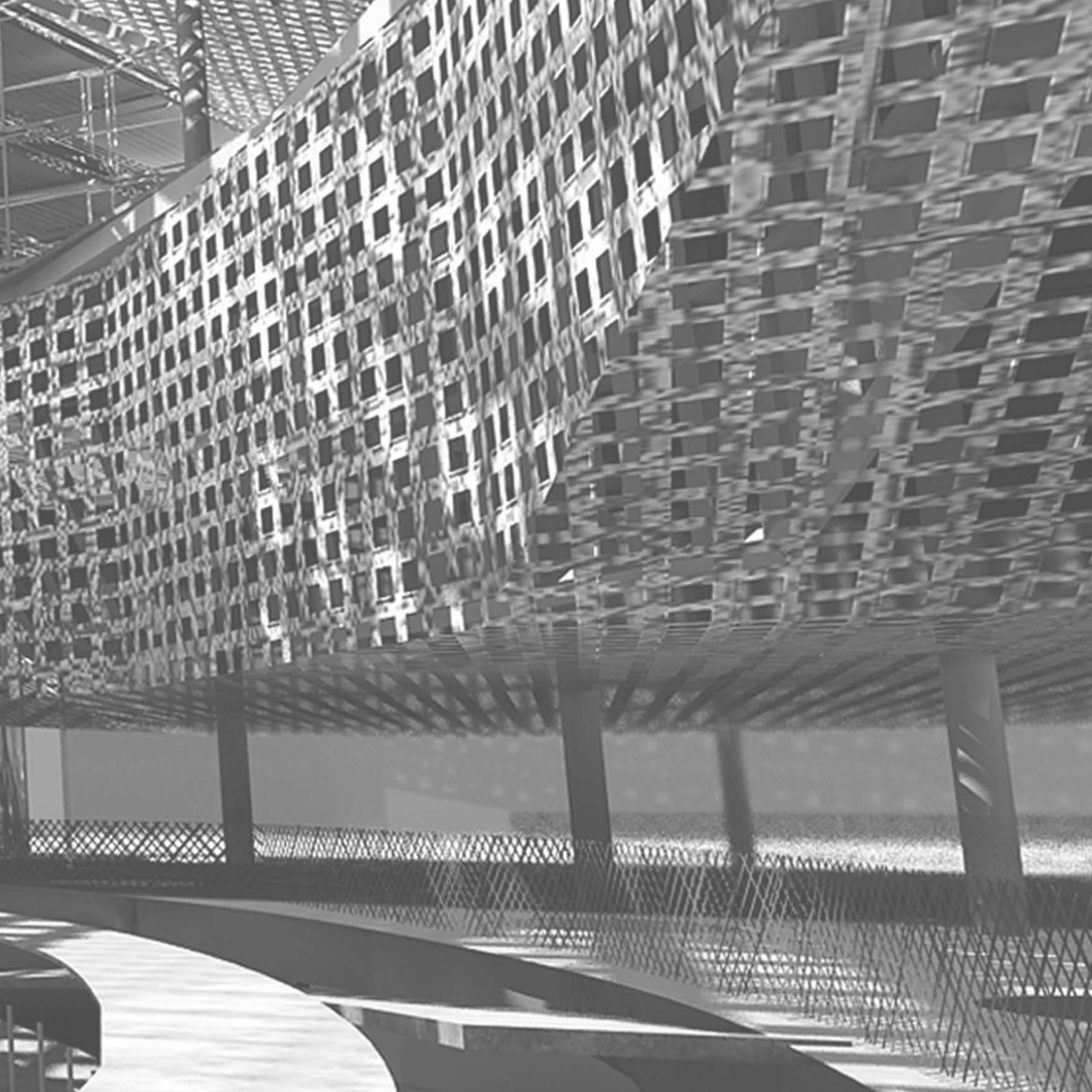






Nor Izyan Saleh









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