3. MUPD - Master of Urban Planning and Design

Program Profile
Introduction

The Master of Urban Planning and Design-MUPD degree offers professional education in the fields of urban planning and design. Graduates may ultimately apply their professional skills in various government agencies, private enterprises, or non-profit organizations within a variety of subject areas. The program is designed with a perspective that graduate education emphasizes the development of students' abilities to analyze, assess, assimilate, and apply critical thinking in interdisciplinary planning and design processes. The course of study normally requires two years (four semesters) for completion, in addition to a summer session.

The MUPD addresses the challenges of and opportunities for planning and designing cities. With cross-cutting concern for place, culture, environment, economics, history, and theory, the program capitalizes on the global experience of the city of Doha and aims to prepare graduates to be leaders in shaping urban environments across the region.

The goal of the Master of Urban Planning and Design Program-MUPD is to educate future planners and urban designers to guide the development of the social, economic, natural and built environments with the general goal of improving the quality of life in cities. It is imperative that graduates of the program in urban planning and design will enjoy a wide variety of employment options. Their unique transdisciplinary and problem-based, project-based education and learning experiences would be a driver for exchange of cross disciplinary topics related to the urban environment and will also provide them with the ability to grasp the effects of new technology including CAD and GIS applications on planning processes and decision making.
Program Objectives

While the following list is not exclusive and assumes that students have already acquired basic communication and team working skills in their undergraduate education, the main objectives of the program are as follows:

- Developing an understanding of the nature, purpose, methods and practice of planning. This includes knowledge about the governance, planning laws and politics and their impact on individuals and communities often in a multicultural environment and the techniques of policy analysis and project-making;
- Understanding of processes of change in the built environment and the relationships between the social, economic and physical factors associated with the development of the built environment;
- Developing the ability to undertake a substantial outcome of specialist based independent research.

Admission Requirements

1. Bachelor Degrees (BSc. or BA) degrees in built environment-related disciplines including, architecture, architectural engineering, urban design, urban planning, regional planning, urban geography, landscape architecture, interior architecture, construction engineering, and civil engineering.
2. A minimum cumulative GPA of 2.80 out of 4 scale (or equivalent) from a university or college accredited by an international accrediting association or by the Ministry of Higher Education or equivalent in that country. The minimum GPA requirements can be waived if the candidate achieved a score of no less than 650 on the Quantitative part of the GRE exam, while there is no specified minimum for the Analytical part but score will be part of evaluation.
3. Achieving a minimum score of 520 on the paper-based TOEFL, 68 iBT-Internet based, 190 CBT-computer based, 6 IELTS or equivalent test. TOEFL or equivalent test results are valid only for two years from the date of the test.
Courses Taught at MUPD

Dr. Yasser Mahgoub
MUPD 610, Urban Planning Legislation (F-2012)

Dr. Rania Khalil
MUPD 611, Urban Economics (S-2013)
MUPD 652, Theory on Urban Form & Design (elect.) (F-2012)

Dr. Agatino Rizzo
MUPD 600, Planning Theory (F-2012)
MUPD 620, Urban and Regional Land Use (F-2012)
MUPD 621, Computer Aided Planning LB (S-2013)
MUPD 601, Research & Statistical Analysis in Planning (S-2013)

Dr. Fodil Fadli
MUPD 657, Techniques of Environmental Impact Assessment (F-2012)
MUPD 655, City & Regional Planning in Arid Zones (elect.) (S-2013)

Dr. Anna Grichting
MUPD 710, Sustainable Urban &Land Design (F-2012)
MUPD 711, Urban Design in Practice (F-2012)
MUPD 653, Design & Regeneration (elect.) (S-2013)
MUPD 651, Urban Renewal Planning (Elect.) (F-2012)

Dr. M. Salim Ferwati
MUPD 712, Evolution of Built Form &Townscapes (F-2012)
# MUPD Students Enrolled in 2012

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Introduction

For decades, the Orientalists who studied the Muslim city advocated the view that the Muslim city and its town planning lacked order. They pointed to the absence of straight lines; interlocking of buildings; and encroachments on public realm. They concluded this disorder was mainly due to: the absence of institutions; excess of freedom of action that characterized Muslim communities; laxness of the authorities and officials, who were mainly interested in harems; and holy wars. Finally, in the middle of the 20th century, a new generation of scholars changed the paradigm of research on the Muslim city, finding that Islamic law and institutions were determinant factors for the complexity in the old Muslim City.

The Cartesian approach and Euclidean geometry long dominated the studies of urban fabric and morphology. The term Cartesian planning is given to the planning of cities using a grid plan and shows the close association between architecture and Euclidean geometry. Modern town planning used the grid pattern extensively. In recent times, the concept of fractals has been used to analyze many historical or interesting buildings and demonstrate that such buildings have universal appeal (as they are able to provide the viewer a sense of scale at different levels/distances of viewing). Fractal Geometry also provides an efficient tool for analyzing the urban fabric of old Muslim cities. It displaces the Cartesian approach and Euclidean Geometry that have long dominated the studies of urban fabric and morphology.

The Connection Between Fractal Geometry and Urban Morphology

Fractal Geometry is used to describe and analyze the complexity of the irregular shapes in the natural world around us. The most striking property of these 'fractal' shapes is their characteristic patterns are found repeatedly at descending scales, so that their parts, at any scale, are similar in shape to the whole; fractal geometry provides a framework for tying together previously unconnected and diverse concepts, enabling the assembly of a ‘bigger’ picture. Cities yield some of the best examples of fractals. For generations, architects and planners have attempted to impose a simple, smooth, visual order on cities. This viewpoint has always been opposed in some measure, much more so in the last 50 years, with the realization that social and economic order belies the physical form of cities and that the idea of naturally or organically growing city is optimal in many ways. In short, the view about shape and form of cities is now that their irregularity and messiness is simply a superficial manifestation of a deeper order; fractal geometry helps to explain and, moreover, it provides an efficient tool for analyzing the urban fabric of old Muslim cities.

Islamic Succession Law and the Morphology of Urban Fabric in Muslim: Its Source, Nature and Scope

There appears to be a causal relationship between Islamic Succession Law and the morphology of urban fabric in Muslim cities that is a major contributor behind the complexity in Muslim cities. Islamic Succession Law intervenes at death and birth and is deeply rooted in Muslim communities. The Muslim mathematician, Al-Khawarizmi (780-850 A.G.) introduced algebra to modern mathematics through examples from Islamic inheritance laws as measuring systems, calculation methods and geometric techniques were developed as a result of the need to partition and calculate irregular shapes.
Islamic Succession (Inheritance) Law is a branch of jurisdiction and it is a sole prerogative of a judge (Qadi). Methods of partitions and rules are applied to real estate property, as well as movable objects. Any property that belonged to a deceased person is considered to be an inheritable asset to be subdivided, no matter how small or large. Exceptions to this were assets that would become useless or not functional after partitioning. (e.g. mills, wind-towers, ovens, small pools, passages, roads, courtyards, staircases). In the case of properties that cannot be subdivided, due either to the large number of heirs, or the small size or the nature of the objects, partitioning is done by usufruct (Muhayat) or by selling off the inherited property and subdividing the income according to the same rules of subdivision. In principle, after subdivision, each partner enjoys his share separately. (ex. own road and drainage of a property). Otherwise, partners must agree to share (with all rights and immunities in common). If such conditions are not met, the partition must be annulled and made anew. After subdivision and according to the number of heirs, a rule of thumb is applied to determine the share of each heir for the sake of impartiality and pleasure. Partitioning can be done without authorities intervening if all are agreed. However, once the partition is determined and each member received his share, it cannot be cancelled. Islamic Succession Law is fundamentally a combination of arithmetic, sociology and geometry. Shares are well-defined according to kinship and family relationships. On the basis of a few fundamental texts, jurists of different schools of Islamic Law developed a complex system of inheritance that is largely applied in most Muslim countries today. Firstly, heirs are determined; secondly, complex methods of calculations are applied in theory; thirdly, assets (e.g. houses, stores, lands, etc.) are subject to a process of subdivision total of assets. In some cases, partition among primary heirs leads to a residual part. In such cases, another process of partition known as Radd (return) is applied. The remaining fraction is subdivided-with each primary heir entitled to a new portion of the residual (in proportion to his/her prescribed fraction). In some cases, partition among primary heirs becomes greater than the whole. In such cases, a process of partition known as Al-Awal (subtraction) is applied. All the shares are reduced proportionately; the fractional shares are changed to a new common denominator that is equal to the sum of the numerators.

Second Class and Third Class Heirs: The second class are comprised mainly of the male agnate relatives, i.e. heirs whose rights to inherit could be lost through the birth of a nearer relative while the third class are comprised of distant kindred. In general, these heirs have no subscribed shares; their shares are known only after the first class heirs have taken their prescribed shares.

The Impact on Urban Geometry

In contrast to what appears to be the basic unit in the city, the house, for succession law, the spatial unit in a subdivision is the room, or bayt (defined as the single roofed place surrounded with walls, with a door or entry. A direct impact on the morphology of such a derivative concept of domestic space is the setting of property lines after each new subdivision. Following construction of walls and lines of interior partitions, only rooms and other undividable elements appear to maintain their integrity in the urban fabric. In Figure 1 we see a hypothetical subdivision of a land parcel (60 x 120 m2). The five alternative subdivisions best explains the methodology and the process of subdivision and the way fractal geometry is generated.

Fractals, Iteration & Bifurcation

According to Islamic Succession Law, subdivision is also an iteration process par excellence. Iteration is a mathematical process of applying a function repeatedly, using the output from one iteration as the input for the next. When taken over a long
time span (decades or centuries—the time of development and growth of cities) it means an act of repeating an operation with the aim of defining new shares with a combination of prescribed and deduced fractions. An initial simple function of iteration results in producing a complex urban morphology at later stages—giving a fractal character to the old Muslim city.

The scale of the process may be best realized when we consider the urban dimension and the number of operations made on the daily basis—related to the rate of deaths in the Muslim city. In other words, private assets (that form the largest number of the urban space) are almost all subject to subdivision. In Islamic Succession Law, exceptions are: public buildings and endowments—protected from alterations due to religious clauses of donations. The subdivision process is continuously a point of bifurcation (splitting a main body into two parts) that gives rise to many tree-like possibilities of fragmentation that all heirs establish. While in theory such an iteration of subdivisions is endless, in reality it stops when it reaches a certain threshold of minimum “workable” shares. However, fragmentation should not be understood in isolation from other mechanisms which sometimes resulted in a re-unification of the fragments, thus establishing a dynamic equilibrium in the urban fabric (e.g. agreements and easements; endowments, donations and gifts). For example, endowment leads to the ‘freezing’ of some properties within a very dynamic urban fabric, and thus creates landmark buildings in the traditional cities that last for centuries.

**Conclusion**

The author is of the opinion that the logic of subdivision could be mathematically modeled and turned into software* that would allow for help lawyers, as well as layman, define the shares of heirs depending on the data entered and, in turn, developing software would allow for automation of the succession law and allow for future research that could further highlight the impact on the physical environment but more the past effects of succession law. The author also concludes that, any preservation or regeneration policy aimed at improving the situation in old cities must reconsider Islamic Succession Law and the re-establishment of the institutions in charge. However, although succession law may still be used in Muslim societies today, we see heirs selling off property more easily than in the past. A prime example is Doha, where the fereej is all but gone as the government has bought out many property owners to create new projects on previously privately owned, normally at a great profit to the landowner. Thus, other factors besides succession law are impacting the physical environment.

In fact, “The irregularity of geometry and urban fabric in Muslim cities is not a sign of disorder and chaos…but rather a sign of high order and complexity.” [Akbar 1988; Ben-Hamouche 2004, 2009a, 2009b]
Dr. Rania Khalil congratulated Maha: On April, 10th, 2013, Arch. Maha Abdelbaset, Lab Engineer and master student at the Department had won Professor Peter Brandon best paper award for the Quality and Fluency of Writing Award in the International Post Graduate Research Conference 2013 (IPGRC 2013). It is mentioned that Arch. Abdelbaset had contributed with two full length papers to the conference that was held at The School of the Built Environment (SoBE) at the University of Salford, UK. The conference was organized by (SoBE) for postgraduates researching in the field of the built environment. As a master student and a young researcher, Arch. Abdelbaset was offered an important opportunity to meet other candidates, to gain an insight into current international research in the field, and to gain valuable conference experience. Led by Dr. Yasser, Mahgoub and financed through XXXXXXX, Arch. Abdelbaset had the opportunity to enhance and develop her research skills, to network and to exchange research ideas and activities in a supportive environment. The conference hosted around 80 delegates from around the world this year.

ABSTRACT. Doha has undergone massive changes in economics, physical form, and population in the past few years. Through Doha’s globalization, the government approved a handful of tall buildings to be built in West Bay area, a new business district in Doha. Unfortunately, there were no Legislations to regulate the design of these tall buildings or ensure their contribution to the quality of urban life. As a result, we have a bundle of eye catching towers that shapes the city skyline beautifully but without taking in consideration their impact on the quality of urban life. This paper studies the impact of tall buildings

Theoretical framework

Spaces between towers are leftovers and parking lots

Absence of planning strategies to stick to

Absence Tall buildings legislations

Towers are icons that draws a city skyline without taking into account its impact on ground floor

Formulate Form-based Codes (FBC)

Legislations

Data Collection

Data Analysis

Case Study from West Bay

Formulate Form-based Codes (FBC)
on quality of urban life through analyzing a case study from West Bay area that addresses the problem. The analysis of the case study is based on observations that monitor social and environmental behavior. The paper proposes solutions using form-based codes. These codes concentrate first on the visual aspect of development then the relationship of the buildings to the street and to one another. Form-based should be later on integrated to Legislations that regulate planning and ensure better quality of urban life.

**Problem statement.** A damaging aspect of the tall building is how it meets the street where blank walls and security gates destroys the street life (Rangwala, 2010). The debate is no longer about whether we need tall buildings or not. The arguments now are about location, design, architectural qualities, and their sustainability (Charney, 2007). However, no one ever talks about the urban habitat and how this tall building existence will affect the life of individuals in a positive or negative way. In the case of West Bay, the goal was to take care of the “above the base” part to achieve the iconic effects of skylines and towers without paying attention to the impact of the building on the ground level or street level. Urban designers provide beautiful landscape or efficient parking in the surrounding context, regardless the necessity to have livable urban space that can enhance an individual well-being. The problem is not summing up a number of ingredients to have a sustainable building. The problem is how mixing those ingredients can add value. Most of the times it ends up having a sustainable certified building that is not sustainable in its context, harming quality of urban life on the ground level despite that they form a bundle of iconic buildings with dead, isolated, and deserted spaces between them.

**Research design.** The research starts with an introduction about Doha and what is the economic position of the state. It is important to know that Doha was a low rise city until the establishment of the new business district in West Bay. The introduction of high rise building opened the door for further development. Iconic towers with the signature of well-known architects put Qatar on the road of globalization and city branding. The lack of tall buildings construction legislation and the lack of knowledge of how buildings can affect the quality of built environment led to having a bundle of eye catching towers regardless their effect on the quality of urban life. Observations were carried out to investigate the situation in West bay area. After studying the observations results, form-based codes were formulated to solve the issues. These form-based codes can be easily transformed into legislations to control tall buildings construction and assures the quality of urban life in the area.

**Conclusion.** As a conclusion of the research, there are two facts: first, quality of urban life could not be neglected as it affects the individual life and psychology. Second, construction of tall buildings will continue as long as the country is developing and globalizing. Tall buildings are more often about power; prestige, status and aesthetics. The solution for such problem is to construct those tall buildings in a frame of legislation that ensure the quality of urban life. Standard legislation could not ensure the quality, but form based codes encourages property owners to build in ways that further a community sense, particularly in terms of the design of the public realm. Tall buildings should have in their lower part a human scaled base or podium with some activities where public and the occupants of the towers can access. Taking care of the urban environment around buildings will minimize car usage and encourages people to travel by public transportation or even cycle or walk. Local authorities should carry out a detailed urban design studies that take into account historic context through a character evaluation. In particular, these evaluations should identify: those elements that create local character and other notable features and constraints, including streetscape, scale, height, urban grain, natural topography, significant views of skylines, landmark buildings and areas and their settings, including backdrops, and local views, prospects and panoramas. Creating opportunities where tall buildings might enhance the overall townscape, or removal of past mistakes.
Abstract. Highly glazed tall buildings have a significant effect on the surrounding pedestrian level environment and microclimate. Roof materials, building heights, distances between buildings, and streets cover contributes to the formulation of the Urban Heat Island phenomenon. Recently, awareness has increased about this problem of Urban Heat Island creation around tall buildings and how it can affect the public health and the environment. The arrangement of buildings and complex plan forms has a significant effect on the microclimate. This paper studies the impact of highly-glazed tall buildings on the microclimate of the West Bay of Doha city. The methodology of the research is based on the analysis of an area in West Bay that addresses the problem. The analysis is in term of building height, building material, adjacent land cover, and spaces between buildings. The paper identifies the reasons behind the formulation of Urban Heat Island, and its environmental, economical, and social impact. Also, it proposes solutions to mitigate its impact on energy consumption and human health and comfort.

Problem statement. If the main goal of urban design is to provide a pleasing and protective environment, then climatic consideration becomes the central part of environmental urban design. Taking climate into consideration is not an issue of perception and comfort only. Climate affects the health, the social life, and the productivity of the inhabitants. First, the research aims to identify the reasons behind the formulation of UHI in West Bay. Second, to investigate its impact on environment, economics, and social life. Finally, provide mitigation strategies to reduce the formulation of the UHI.

Doha is characterized with hot-arid climate that implies certain architectural and urban features to defy the harsh weather. Construction of highly-glazed tall buildings in West Bay did not follow this pattern at all in terms of building materials, urban fabric, and land cover. This architectural typology and urban morphology harms the microclimate of the West bay area, creating Urban Heat Islands. Urban heat island phenomenon can affect the human health, comfort, and sustainability in terms of energy consumption.

Research design. The research starts with comparing the old city of Doha to the modern one through studying the urban fabric and architectural features of the old city and the modern city. This analysis proves that the urban fabric and architectural style of the old city of Doha is more compatible with the local weather conditions. Also, it highlights the main issues that West
bay suffers from. Urban heat island is one of the main concerns that affects the micro-climate of the area. The research finally suggests some mitigation strategies to minimize the impact on the microclimate of West bay.

**Conclusion.** The study of urban design morphology and climate reveal that there is a correlation between both. An innovative and serious study of both and their reciprocal relations should lead to significant improvement of the urban thermal performance. To achieve this goal, the comprehensive study of the climate elements such as behavior, wind, temperature, and relative humidity is essential. The implementation of the old town style that is more suitable for the local conditions is a very hard task. Although, some features could be translated in a more modern way to benefit its impact on the environment. This study could be further developed by in-depth experiments to monitor environmental behavior during different times of the year. Also, it can be done in different places that have different settings to determine which of the mitigation strategies are more powerful in the prevention of the formulation of UHI. Green Roof and Cool Pavement are emerging strategies that also need further study to find more solutions to encourage people using it.
AN INVESTIGATION INTO THE CHARACTERISTICS OF PUBLIC OPEN SPACES IN DOHA

Student: Bothayna Abbara
Supervisors: Prof. Ashraf Salama and Dr. Hussam Salama

The rapid extensive developments: Mega Infrastructure projects & clustering of office firms.

Accommodating all the functions and socio-economic activities in Doha.

Triggering spatially segregated communities groups of different social and economic classes.

All these factors has contributed to the production of poorly planned zones that lack effective and successful public open spaces projects.

Problem
Public spaces are crucial for the future upcoming Mega sport events such as FIFA world cup 2020 which serves Qatar Quest for becoming a top world city.

Introduction
Problem
What is this study about?
Research Questions.
Research methodology.

Literature review
Literature have been reviewed
Categories
Gap in Literature
Analytical Model
Analysis
Results
Conclusion
Importance of the Research Study

Improving the design of urban public spaces by investigating the problems of these spaces in the case of Doha city.

It contributes to the quality of public open spaces that hosts visitors who will attend future mega events that will be held in Doha.

It recommends guidelines for proper future planning of public open spaces in a mixed land use when implementing urban regeneration design and planning process in Doha and all over Qatar.

Research Goal: To contribute to the production of future successful and convivial public spaces.

Sustainable public urban projects can promote sustainable projects across Qatar. In addition, these projects can play a significant role in allowing the multi-cultural residents of the city to linger and socialize.

This thesis will address the following Questions:
1. How does the design of public open spaces in Doha affect its user’s overall experience; and how does it satisfy its users’ needs and expectations?
2. Do the physical characteristics of open spaces allow for the basic psychological aspects of its users experiences such as safety, security and comfort?
3. What is the degree of publicness and inclusion in activities is incorporated into the design of Doha open spaces and what it offers to its multicultural users?
4. Does the design of public open spaces preserve the Qatari identity and traditions?

Research Methodology

In this study I have looked through several primary and secondary sources of a number of authors and research-
ers publications specializing in open spaces with some recent journal papers. The topic of the research is an essential aspect of urban design-related research which is ideally a subjective topic and difficult to measure in quantitative methods. The thesis will mainly use qualitative research in order to study and investigate the users and human activity and attitudes in open spaces. The second research approach that will be partially employed in demonstrating the results involve quantitative methods. The primary research data will be illustrated by different qualitative and qualitative research analytical tools and tactics: such as behavioural analysis, Interviews, walk through analysis. And by analysing a random sample of 105 questionnaires which will be presented in numerical and statistical charts. I did a qualitative and quantitative analysis for all the collected data.

**Interview cognitive map**
Analysis results of three case studies according to the research four main pillars.

**Souq Waqif**

**Physical**
- **Urban Form:** small blocks and organic deformed grid.
- **Views:** visible from the surrounding urban forms.
- **Pretivation:** low rise building commercial and office buildings surrounding the site.
- **Circulation and Movement:** easy and convenient pathways well-connected places.
- **Parking Spaces:** not sufficient.
- **Open Space Amenities:** Soft Landscaping: scarce vegetation of potted plants.
- **Street Furniture:** A good number of wooden litter bins, and ATM machines.
- **Seating:** good quantity of outdoor sitting spaces of movable chairs with benches use of benches in two traditional cuisines.
- **Signage:** Appropriate use of signage system of traffic directional signs, notices, and commercial signs. Non-bilingual signage used.

**Psychological**
- **Protection from Climate Condition:** Linger in space afternoon hours due to a good amount of shading. Noise Pollution: Conversation overheard by people passing by or sitting close. Mechanical fans produced noise of the splattered water.
- **Security and Safety:** cameras protect ownership of private properties.

**Social**
- **Diversity & accessibility:** Activities are of active and socializing engagement. Socially diverse environment. Adults of an age of 22-29 years are the predominant population.
- **Attractiveness:** Outdoor sitting areas or the outdoor sitting terrace of movable table and chairs. Mixed use activity in the space.
- **Vibrancy & activeness:** During weekend in the afternoon, most of social activities and dynamism experienced in this space. Most young users walk along the beach and sitting on the ledge, making purchases from food booths in afternoon hours. Evening hour it is difficult to walk due to the dim lighting system used in the space.

**Perceptual**
- **Sense of Place:** Social interaction focused in a particular territory. Distinctive type of traditional seating.
- **Legibility:** Users visually recognizing the space through the voids and physical access (thresholds).
- **Enjoyment/ sense of belonging:** Food establishments, Retails shops. Expect like shops that having antiques of a different culture than their own.
- **Attractiveness:** Pathway that has retail shops and food establishment. Covered alleyways.

**Katara**

**Physical**
- **Urban Form:** Highly connected small mass (urban blocks) & meshed street grid.
- **Views:** High rise buildings is of recreational and mixed use. Circulation and movement. The vehicular movement is easy convenient and integrated.
- **Parking Spaces:** Adequate.
- **Open Space Amenities:** Soft landscaping. Good landscape design with a variety of species.
- **Street Furniture:** Good number of various forms of litter bins, recyclables bins & ATM machines.
- **Seating:** Variety of seating of movable chairs and tables. Of good quality, stylish of the amphitheatre, Underused love seats.
- **Signage:** Using bilingual directional signs. Designed of good size, colour and material.
- **Lighting:** It has a poor lighting provided for pathways, pavements and buildings.

**Psychological**
- **Protection from Climate Condition:** Lack of shading of trees or shading devices was clear where people enjoy and linger around most of time. People are uncomfortable using sitting areas and benches that are provided during morning hours.
- **Noise Pollution:** The golf carts produce noise pollution.
- **Security and Safety:** cameras protect both users and ownership of private properties.

**Social**
- **Diversity & accessibility:** Activities are of active and socializing engagement. Socially diverse environment. Adults of age of 22-35 was the predominant population.
- **Attractiveness:** outdoor sitting areas or the outdoor sitting terrace of movable table and chairs. Mixed use activity in the space. Presence of scheduled (programmed) activities
- **Vibrancy & activeness:** During weekend in the afternoon, most of social activities and dynamism experienced in this space. Most young users walk along the beach and sitting on the ledge, making purchases from food booths in afternoon hours. Evening hour it is difficult to walk due to the dim lighting system used in the space.

**Perceptual**
- **Sense of Place:** Cuisines that are serving different kinds of food. i.e. (Egyptian, Turkish, Indian and Qatari). Amphitheatre, Walkways beside the beach.
- **Legibility:** Users visually recognizing the space mostly through its edge.
- **Enjoyment/ sense of belonging:** Restaurants and cafes of outdoor sitting areas. Outdoor ledge and benches with sea view. Visual aesthetic detailed design of mosques different style of Qatari Architecture.
- **Attractiveness:** The shaded alleyways between the building with outdoor sitting. Walkways with bench view.

**The Pearl**

**Physical**
- **Urban Form:** Pod urban form. Large blocks especially in the parcel of Porto Arabia.
- **Views:** Low and high rise building. Circulation and Movement:
- **Vehicular movement:** is easy and convenient. Obstacles block the ease of movement through the space.
- **Attractiveness:** Not appropriately designed pedestrian pathways dimensions.
- **Parking Spaces:** Adequate.
- **Open Space Amenities:** 1. Soft landscaping. Good landscape design with a variety of species. The planted spaces add a sense of human scale.
- **Street Furniture:** Good number of various forms of litter bins and recyclables bins.
- **Seating:** The planted beds that are used for functional purposes. Less adequate number and type of seating. The use of movable chairs and tables. Benches that are well dispersed. Non-adjustable fixed type of benches.
- **Signage:** Bilingual directional signs. Designed of good size, colour and material.
- **Locating master plan for the space as a tourist guide**
- **Lighting:** The lighting fixtures lighten the pathways.

**Psychological**
- **Protection from Climate Condition:** Didn’t provide suitable shading for the benches are fixed.
- **Users feel protected from sun while they are purchasing through covered colonnades.**
- **Attractiveness:** It has a gathering node with outdoor services and sitting of movable chair and tables and indoor air conditioned arcades retail shops.
- **Mixed use activity in the space.**
- **Vibrancy & activeness:** During morning it is a hostile space. Evening and afternoon hours during weekend when the spaces are more vibrant.

**Social**
- **Diversity & accessibility:** Activities are of active and socializing engagement. Families and couples are the predominated users of the space especially during afternoon and evening hours.
- **Attractiveness:** It has a gathering node with outdoor services and sitting of movable chair and tables and indoor air conditioned arcades retail shops.
- **Mixed use activity in the space.**
- **Vibrancy & activeness:** During morning it is a hostile space. Evening and afternoon hours during weekend when the spaces are more vibrant.
Results
It is clear from the results that Doha city holds the potential to create several successful and convivial public open spaces. Government organizations and other stakeholders have already developed key strategies in an effort tried to achieve this. A greater effort in investigating and analyzing of the three open spaces helps in developing principles for successful open spaces. It will improve the design of future projects. The following are a proposed guidelines that are obtained from the results of the three case studies.

Proposed Guidelines

Designers and urban planners have to apply and implement and ensure to include all the following key principles in the design of future public space:

Signs: Using luminous material for directional sign, reduce driver and pedestrian frustration, improve traffic flow, promote roadway safety. Locate directional signs inside the public space or at the reception desk to help visitors find their way.

Seating: Using attractive colours and materials outdoor café seating, to draw people such as the case in Souq Waqif and KATARA. Providing secondary type of seating (seating walls, steps with view, retaining walls that allow sitting) to increase overall seating capacity. Locating seating in vibrant and active spaces; due to that people like to observe other dwellers in the

Open Spaces amenities: Have accessible public toilet facilities in the public open spaces. Use of mechanical fans with spray to splatter water on the outdoor sitting areas, will reduce ambient temperatures make users more comfortable sitting outside during lunch time and the afternoon hours. Vendors and food stalls should be easily accessible but not obstruct regular circulation. Of colourful material with shading devices to draw attention to users such the case at KATARA.

Sociability: Provide diverse activities in public spaces not be limited to traditional markets, also to provide passive and active involvement. Provide good amount of attractive focal and gathering node with defined edges in order to attract people and motivate them to linger. Including disabled and the elderly needs when designing public open spaces by designing roads with ramps.

Comfort: Avoid design huge structures (whether they are walls or buildings), because they are unlikely to facilitate a feeling of conviviality. Design places with distinctive character and identity to be positively memorable and attract frequent visits. Because people will have a sense that they are in a unique place. Provide adequate lighting.

Safety and Security: Vehicular circulation should be banned or tightly controlled inside the open spaces; interrupts users’ comfort and reduces their sense of safety. Provide crosswalks painting and the use of traffic signals. To protect pedestrian from motor traffic.

Conclusion,

It is found that there is demand for building successful and liveable public space in Doha. It is one of the major issues that need to be addressed to embrace the multicultural backgrounds and diverse communities which reside in or visit Doha. As results the municipality, the government, private developers, and planners and architects should show their commitment in interpreting and applying guidelines for design of convivial public open spaces.
Architect Suhail Zakhour awarded his MSc at Distinction Level from Cardiff University (UK). Suhail’s dissertation was titled “The influence of urban form on the microclimate and outdoor thermal comfort in the city of Aleppo”, and it was supervised by Dr. Mike Fedeski, Honorary Senior Lecturer at the Welsh School of Architecture.
4. DAUP Profile
The table on the right shows a summary of the DAUP activities for the last three consecutive years, 2002-2013. The details is posted on the department websites under the DAUP Annual Report. Similarly, this chapter deals with the DAUP annual report but meant to be illustrative. It goes through three sections:

1. The Department Profile that concerns with social activities, conferences, workshops, exhibitions, trips, and news that take place in the department or with a joined effort with other institutes.

2. Focus that contains articles written by the faculty members. These articles represent the faculty specialties that usually are reflected on their taught courses or research interests.

3. Seminars or public lectures that were conducted by our faculty members or guest lecturers.

### Summary of the Dept. Annual Report

#### 2012-2013

**Academic and Support Staff**

- Faculty: 13
- Teaching Assistant: 3
- Support Staff: 1
- On-Study Leave: -
- Total: 17

**Undergraduate Program**

- Enrolment: Fall 2012 Spring 2013: 79
- Graduates: Fall 2012 Spring 2013: 7
- Total number of registered students: Fall 2012 Spring 2013: 86

**Graduate Program**

- Enrollment: 7
- Thesis Completed: 1

**Research Projects Awarded in 2012-2013**

- UREP: 5
- NPRP: 2
- Qatar University Start-Up Grants: 2
- University Internal Students' Grants: -
- External Grants: 1

**Publications**

- Refereed Journal Papers: 19
- Conference Papers: 27
- Technical Reports: 1
- Book Chapters: 6
- Book Reviews: 1
- Editorials and Essays: 26

**Seminars – Public Lectures – Short Courses**

- Seminars and Public Lectures Delivered by Departmental Faculty Members: Inside Qatar University: 13
- Seminars and Public Lectures Delivered by Departmental Faculty Members: Outside Qatar University: 26
- Short Course Delivered by Departmental Faculty Members: 3
- Seminars and Public Lectures Attended by Departmental Faculty Members: 47
- Seminars and Public Lectures Delivered by Visiting Academics and Professionals: Invited Public Lectures/ Keynote Speakers: 4

**Other Activities**

- Faculty Consultancy: 6
- Community Service: 15
- Awards and Achievements: 3
- Conferences Attended: 33
- Workshops, Training and Visits: 23
- Events Organized: 13
- Students' Activities Competitions: 3
- Awards: 1
- Other Activities: 6
Dear CENG Members,

You are Cordially Invited to the First

Coffee with the Dean

For the new academic year 2012-2013

“Coffee with the Dean” at 10:00 am is every other Wednesday event with Dr. Rashid Alammari the Dean of the College of Engineering. That event is an opportunity for socialization with other faculty members of the college. Such an event is a unique social feature of QU. One can have coffee, tea, a bite, and sweet. If you get promoted or have a happy event, that is the place to announce it, and surely, you will draw a nice smile on everyone’s face.
NAAB Substantial Equivalency

The Department of Architecture and Urban Planning is currently seeking the substantial equivalency offered by the National Architectural Accrediting Board (NAAB) of the United States of America. After successfully passing the first review visit that took place in Fall 2012, the department is now preparing for NAAB second visit that is scheduled in December 2013. The term “substantial equivalency” identifies a program as comparable in educational outcomes in all significant aspects, and indicates that it provides an educational experience meeting acceptable standards, even though such program may differ in format or method of delivery. The designation is valid for six years beginning 1 January of the year in which the final visit (Visit 3) take place. In order to maintain the designation, the program must be visited again in the sixth year of the designation.

The Bachelor of Architecture Program, B.Arch. at the Department of Architecture and Urban Planning is developed taking into consideration the NAAB criteria and standards. It translates current international and regional trends into a balanced and responsive curriculum. The content and delivery of the program is dependent on the continuously evolving worldwide higher education in architecture, while placing a considerable emphasis on regional issues.

The NAAB Substantial Equivalency for the B. Arch. program, which the university and college have designated as a high priority for the department’s activities and development, is a tangible outcome of the institutional support from which the program benefits. This process has been a catalyst for program minor modifications to meet NAAB requirements and of introducing facilities improvements such as the ALRC-Architecture Learning Resource Center, which continues to be implemented.

Achieving NAAB substantial equivalency is therefore a strategic objective for the department. To this end, Qatar University, through the President’s office, the VP for Academic Affairs office, and the College Dean, has pledged its full institutional and financial support for the NAAB substantial equivalency process. The department administration and faculty are deeply vested in the NAAB process and have an excellent understanding of the entire 2012 NAAB Procedures and Conditions for Substantial Equivalency. All architecture faculty members contribute to this process and are structured into task groups to prepare for various requirements.
NAAB Visit in Photos
Rubina Singh speaks to Ashraf M Salama, Professor of Architecture and Urbanism and Founding Chair of the Department of Architecture at Qatar University, about the various challenges faced by Doha as an ‘emerging city’ in the Arab World. 11:44 PM, 20 April 2013,


Last week in Doha saw many seminars involving experts in the field of urban development discussing the city of Doha, the past, present and future ... the architectural, social, economic and cultural aspects ... the new and the old.

One amongst these was a symposium organised by the Qatar Faculty of Islamic Studies (QFIS) which brought together experts in urban development to discuss Doha as an ‘emerging city’ in the Arab World. Amongst these experts was Professor Ashraf M Salama, Professor of Architecture and Urbanism and Founding Chair of the Department of Architecture and Urban Planning at Qatar University.

Prof Salama has held permanent, tenured and visiting positions in Egypt, Italy, Saudi Arabia, United States and the United Kingdom, and holds the fellowships of the Royal Society of the Arts-FRSA and the Higher Education Academy-FHEA, UK.

He has published over 130 articles and research papers in international conferences, academic refereed journals and authored and co-edited seven books on architectural design pedagogy and the dynamics of people and environments.

Professor Ashraf Salama’s work on Doha’s architecture and urbanism is based on extensive research over the past two years, funded by Qatar National Research Fund (QNRF) under the National Priorities Research Programme.

A unique feature of the project is that it is interdisciplinary in nature — crossing the boundaries of different disciplines (architecture, planning, urban geography, environmental psychology) and engages the graduate students of the Master programme of urban design and planning at Qatar University.
His latest book (authored jointly with his post-doctoral research associate—Dr Florian Wiedmann) Demystifying Doha: On Architecture and Urbanism in an Emerging City will be launched this summer and features a comprehensive discussion on the evolution of architecture and urbanism as products of the contemporary global condition while also exploring among others, issues pertaining to emerging service hubs, integrated urban development strategies, image-making practices, urban identity, the dialectic relations between the city and its society and sustainable urbanism and concludes by suggesting a framework for future studies of the city.

According to Dr Ashraf, Doha as an emerging city keeps positioning and re-inventing itself on the map of international architecture and urbanism with different expressions of its unique qualities in terms of economy, environment, culture and global outlook. Excerpts from an interview...

How does your research differ from other studies and how does Doha fare as an ‘emerging city’?

Doha with its global outlook is beginning to position itself as a knowledge-based economy and this is evident by the presence of international universities, high-tech IT industries, businesses and international partnerships in key academic fields and industries. So, the question that can be posed here: Is the urban environment of the city able to accommodate these practices?

There have been a considerable number of studies by specialists on investigating images and the development of architectural language. However, how these images relate to people and how people react to them was never integrated into the discussion of architecture language.

In our research we measure reactions of people to images of buildings and public open spaces and we investigate environmental preferences.

Additionally, while a considerable effort is made to develop responsive architecture and urbanism in the city, the dynamics of people and the everyday urban environment is a critical aspect that has received little attention.

In this respect, in attempting to understand the impact of multiculturalism in Doha, our investigation focuses on examining how different people from different cultural and socio-economic backgrounds perceive the city, its architecture, and spaces.

We also investigate urban mobility, and how people move in the city, and how they use the spaces within, how they relate to their workplaces, living areas and entertainment spaces.

What is the impact of globalisation on Doha?

Globalisation comes with its positive consequences and also with challenges. For example, it boosts the economy through diversification of investments activities. It is translating the vision of Doha as a future hub in different areas — such as a cultural...
hub exemplified by museums and cultural events, a sports hub manifested in a considerable number of hallmark and stage events from the Asian Games of 2006 to the successful bid for World Cup 2022, a business and services hub witnessed in the intensive activities of international companies, banks and high-tech oil and energy industries. Yet, there are a number of challenges facing Doha including economic diversification, effective and efficient urban structure and coalescing society.

Within this global condition, what are the challenges of sustainable urbanism in Doha?

One key challenge can be identified for each area of sustainability in the case of Doha. The establishment of a sustainable economy will essentially depend on a successful transition from a real-estate driven city to a diversified regional and business hub.

For sustainable ecological balance, a more efficient urban structure will be developed on the basis of a new evolution within urban governance. Thus, the key challenge in developing environmental sustainability is the installation of good governance and appropriate regulations that guide, regulate, restrict and monitor urban growth.

In the case of establishing a sustainable society, a new identity will emerge, one that can mediate between local values and the continuous internationalisation patterns of Doha. However, this new identity cannot only be produced by governance it must also be the direct product of an interacting and thus coalescing society. Luckily, these challenges are being addressed through many government initiatives and policies.

Can architecture and urbanism be seen as a reflection of the psyche of society’s culture? And if so, how would you describe the psyche of Doha as represented in its architecture currently?

In my view, there is no one psyche; there are multiple. I can envisage three voices; the first voice calls for a complete return to traditional architecture and its value system, another voice adopts pure ‘modernity’ and calls for addressing the global condition, and the third voice calls for reconciliation and balance.

The three voices represent various interests and ideologies, and are evident in contemporary architecture of Doha. Still, we can say that the three voices combined reflect the contemporary psyche of Doha.

Can there be a place for traditional ideas to exist in the emerging character of Doha?

Balancing need and supply is the first step toward reducing any negative consequences in evolution. The issue of maintainability should be addressed as an integral component of the thought process of initiating and developing large-scale interventions.

The impact of global architecture can be made positive by awareness, participation, and relating the current developments to socio-cultural aspirations. In this respect, successful interventions can be seen in the architecture of the Education City, Katara Cultural Village, Sharq Hotel to name only a few. Notably, the restoration of Souq Waqif is an excellent example of efforts. Also, the vision of Msheireb project is being translated to address the desired balance. Yes, I would argue that there is a place for genuine traditional ideas as manifested in
some of these projects.

How does Doha fare in terms of ‘image making’ and what are some challenges?

What is important here is that Doha is learning a lot from the experiences and experiments of other cities. ‘Image making’ practices in Doha can be seen as a reflection of the three voices I mentioned earlier. Still, more effort is needed to avoid the practice of literal borrowing or ‘cutting and pasting’ or cloning images. This can be enabled through critical consciousness and the screening and filtering of ideas and images — the incorporation of academic discourse into design practices.

I would say, in order to build responsive architecture, we must not copy our past, nor must we copy other people’s present. We need to embark on a comprehensive effort toward re-interpretation of traditional images and the integration of efforts of academia, public institutions and design practices/professional architects.

In your opinion, is there enough importance being given to urban open spaces particularly vis-a-vis the labour community which constitutes a large majority of the population of Doha? What more needs to be included in urban development planning that is not being done so far?

There is a considerable effort and attention given to developing effective urban open spaces. In addition to the Corniche promenade, this is evident in a wide variety of projects that include the Aspire Park, Rumeila Park, the outdoor green space of the Museum of Islamic Art ... These open spaces are available to the public and accommodate a wide spectrum of needs of socio-economic and cultural groups. However, one should say here, the degree of “public-ness” or “openness” varies where the labour community is not fully considered in some of the new projects.

Therefore, in order to instill in people the sense of loyalty, a more inclusive approach to the design of these spaces should take place to create more effective places of desired cultural encounters, while accommodating the needs of the labour community.

What can be done towards making Doha a more coherent society?

We need to think of the city from three key angles to development — the conceived city, the perceived city and the lived city. The conceived city is based on decisions by the public sector, specialists, architects and planners. The perceived city represents the interactions between people and companies, and the networks that develop. The lived city is the way in which people actually live and interact with their environment, exemplified by their houses, workplaces, public spaces, etc.

The three approaches function as parts of a cycle where the results of understanding the lived city (individual experiences of environment) and perceived (business networks) should feed back into the conceived (policy) again.

Our observation is that the lived and the perceived city are an outcome of a non-responsive conceived, and the cycle will do well with some work so that a sustainable city can take root. Therefore, the three angles need to be integrated both in academic research and professional practice.
Short Answers:

I, me, myselfs

Best thing that ever happened to me....Being an academic

My greatest fear.... Losing focus

My greatest weakness.... Never saying no to work

My strongest personality trait.... Supporting others

My weakest personality trait....
Thinking too much about the future

Most dearest possession/treasure....
My writing, research and publications

My favourite celebrity ... There are many

I love ... Many things, but one important thing is urban life but not crowdedness

I dislike ...Anxiety

I idolise ...Good, kind and caring people

I can’t live with ...Anger

Coffee or tea? Coffee

Snow or sun? Sun but not heat — snow but not ice

Gadget I couldn’t do without....
Many, but access to the Internet is crucial

Biggest turn on/ turn off ...
Turn off - being forced to interact with self-centred people

Turn on - many good things in life makes my life worth living

Doing quality work

I don’t believe in...Revenge
Beyond the Consumption of Knowledge: Questioning of and Questing for Future Forms of Pedagogy in Architectural Education

By
Keynote Paper, MAEC-2012
Professor Dr. Ashraf M. Salama
Chair, Department of Architecture and Urban, Planning, College of Engineering, Qatar University;
Fellow Higher Education Academy-FHEA;
Fellow Royal Society of the Arts-FRSA

This paper responds to some of the negative tendencies that continue to characterize the delivery of knowledge in architectural education teaching practices. It accentuates the shift from mechanistic pedagogy to systematic pedagogy and explains the characteristics of each. Building on critical pedagogy and the hidden curriculum concept transformative pedagogy is introduced as a form of pedagogy that can be interwoven into middle-of-the-road teaching practices. Translating the premises underlying these pedagogies and building on the on the speaker’s earlier work on design studio pedagogy and the teaching practices involved, an argument for introducing a theory for knowledge integration in architectural design education is articulated. With a focus on multiple types of research and the emerging knowledge a contextual analysis of the reasons for developing a theory is introduced and reasons are categorized. The milieu of the theory is constituted in several contextual elements including a critical analysis of conventional teaching practices and contemporary culture of architectural education.

The theory encompasses a number of underlying theories and concepts derived from other fields that differ dramatically from architecture. It consists of three major components: the disciplinary component; the cognitive-philosophical component; and the inquiry-epistemic component. Each of these components encompasses other smaller components integral to the building of the theory itself. Notably, the three
components address ways in which knowledge can be amalgamated, how the desired incorporation would meet the capacity of the human mind, how such integration relates to the nature of knowledge and how knowledge is acquired, conveyed, and assimilated.

Possible mechanisms for knowledge acquisition are an indispensable component of the theory, whose aim is to foster the development of responsive pedagogy critical to the successful creation of built environments. These include inquiry-based, active, and experiential learning and are identified as learning mechanisms amenable to work against the ills of worldwide architectural education. The paper demonstrates how the theory and its underlying components and mechanisms can be applied to both lecture based courses and design studio sittings. In an attempt to address the challenges architectural education should encounter, the implementation of the theory is believed to offer students multiple learning opportunities while fostering their capabilities to shift from passive listeners to active learners, from knowledge consumers to knowledge producers, while positioning themselves in a challenging future professional world.
On May 10, 2013, a poster hung all over the building that caught my attention said, “The Department of Architecture and Urban Planning, College of Engineering is pleased to invite you to the 3rd Annual Architectural Day at College of Engineering Female Campus, Architecture Exhibition Hall. Wednesday, May 23rd 2013. The Exhibition is open until October 21st 2013.

Now you are informed about an important event that annually takes place here at Qatar University.

The DAUP Annual Architectural Day offers students the opportunity to present their work. It is also a powerful tool for communication between department production, student’s skills and performance with the community. The department exhibition also displays produced samples of different courses, which staff and students can use during the course. It reflects the department Strategic Plan, productivity and progress as it will show a sample of the achievement of the student along the five year studying time in the department. The displayed students work includes: Posters, Models, Sketch Books, Researches, and Portfolios. In addition to a digital display of the different displayed items.
Young architects showcase tomorrow's Qatar in QU Architecture Day. Aspiring young architects showed off their designs for the Qatar of the future in a day of exhibitions, seminars, lectures and debates organized by Qatar University's Department of Architecture and Urban Planning (DAUP). The Architecture Day, on 8th May, featured student projects including designs for a kiosk at Aspire Park, the redesign of the interior of QU food court and the design for a waterfront villa, among other urban intervention projects in the historic center of Doha and the emerging business district of West Bay. The students gave presentations on the background to the projects, their influences and specifications and the final designs to an audience which included industry experts, alumni, QU faculty, families and fellow students.

SPEC The annual exhibition culminated in a panel discussion – Doha Architectural Debate: critical reflections on the design practices and the urban scene in Doha, coordinated by Dr Yasser Mahgoub and Dr Djamel Boussaa from the DAUP – which included architect Dr Rashid Al-Matwe; Professor Attilio Petruccioi, Dr Djamel Ouahrani, and Professor Ashraf Salama. The debate generated lively discussions among the panelists and the students.

College of Engineering Dean Dr Rashid Alammari celebrated the students' achievements, saying: "These projects highlight the talents of our young architects, in support of the Qatar National Vision 2030. They are very professional and inspiring, and show that our students are capable of competing with the best of their peers internationally." Head of the Department of Architecture and Urban Planning Professor Ashraf Salama said:

"Innovation and collaboration are at the heart of QU’s architecture programs. We want our students to use the inspiration from their culture and surroundings to create buildings, which answer the needs of society and the demands of the environment, whilst also being great architectural statements. Their projects here are testament to their hard work over the year and to their great talent."

The exhibition, curated by associate professor Dr Hatem Ibrahim is the annual showcase for the five-year undergraduate architecture program at QU. This trains female students to focus on the livability of a building, ensuring it is sustainable, but also considers factors such as transport, the surrounding environment and social and cultural issues. Students receive one-to-one tuition from faculty members and are encouraged to collaborate with one another, sharing ideas and influences. They are schooled in critical thinking, analysis, successful presentation skills, effective use of IT and research practices. They are also required to undertake two internships during their program, including one placement with a consulting company and another with a construction firm. The program is currently preparing for the second visit towards accreditation from the US-based National Architectural Accreditation Board (NAAB).

4-15
في يوم من افتتاح اليوم المعماري لعام 2013 والذي يضم المعرض العمري السنوي والذي يتضمن عدد من الطلاب في تغليق أعمالهم الفنية، يحاولون الاحتكار بدور بذرة حول طريقة العرض الأفضل بما يضمن حضور أبرز الأعمال الفنية. في اليوم التالي لافتتاح المعرض، وعلى يمين ويسار مدخل المعرض تظهر أعمال الطلاب بالألواح المائية والأكراكيات والصور الشفافة التي يجسد العناصر العمادية الخلاقة بجمالها وتميزها الواضح. فقد خُطبت تلك الأعمال الفنية إلى طبيعتها، أيام طوال من التدريب والسهر من قبل الطلاب لفهم مفاهيم التصور والابداع في انتاج الفن المعماري. ومن بين تلك الطالبات تسترجع الطالبات التحديات التعليمية والجوانب في اتخاذ القرار. أما المشرف على تلك الأعمال الدكتور محمد سليم الفرواتي فقد أنه كله كتب تلك اللوحات وكاد يتردد إلى سمعه كلمات الطالبات في الأسابيع الأول من الفصل الدراسي عن استحالة انتاج ما تم انتاجه في السنة السابقة وأنه غير ممكناً. نقدم نتائج مربعة. أما الآن وبعد إسابيع من العمل الجاد تعلو الابتكارات، وتكون النتائج النهائية لما حفظ من جناح ما جعل الجميع يُبدع أعماله بهذه الأعمال، بخطوات عدة يقترب الباحث إلى أعمال أخرى قامت بها نفس طالبات السنة الثالثة. هناك قع عالم الأعمال الفنية، كيف تساهم بعض الطالبات في العمليات البناء، وصولاً إلى المجالات البناء. وتعلق الرمزي عن تلك الأعمال. ارتفعت الطالبات لوحات تشرح الفنون وكيفية تحويل الحقول إلى الأساليب مع أغراض المكتبة، والتي يصل بعضها منها إلى 80 مترًا أو أكثر. لقد أكد المشرف على أن اجتماع التعليم الجديد والذي يتطلب المشاركة الفعالة للطلاب في عملية التعليم وطموح الطلاب للقدرة بالصيغة جعل ما تم في المعرض مفتاحه مع الجميع. تضمن المفاهيم أيضاً أعمال الطلاب من كافة السنوات من التمثيل المعماري المرفقة بأعمالهم التوضيحية. ولوجاً إلى النهاية في المواد التعليمية الأخرى التي لا تقل جمالاً وأخذًا من الأعمال السابقة الذكر. ولكن، يطول الحديث عنها. وهنا ندعو المهتمين بزيارة المعرض والذي سيستيقفي في اليهود الرئيسي لبني الطالبات لعدة أشهر.

بقلم د. سليم الفرواتي
قسم العمارة ينظم حملة للتوعية البيئية

اختتمت أمس الأول الأربعاء الحملة التوعوية لتلاميذ المرحلة الابتدائية التي أقامها نادي الأنشطة الطلابية بقسم العمارة والتخطيط العمراني بكلية الهندسة بجامعة قطر بمناسبة الاحتفال بيوم الأرض 2013 أبريل 18 الذي انطلقت الخميس الموافق.

وقد عكست الحملة اهتمام القسم بترسيخ وتعزيز المفاهيم البيئية لدى التلاميذ وبالمملكة وهو

وقد أظهر بعض مفاهيم الاستدامة وأهمية إعادة التدوير وبعض القضايا البيئية في فصولها على مدار الأسبوع قبل العرض بناء على نصائح نادي الأنشطة الطلابية بقسم العمارة والتخطيط العمراني وإعداد المدربين من معلمنا الاسماء وطلاب تلاميذ وطلاب تلاميذ التعليمية.

وقد تضمنت مساعدة تنفيذ الحملة من إدارة المدرسة، والحضور من إدارة المدرسة، وتعزيز الحملة من إدارة المدرسة.

وقد أظهرت الأكاديمية الابتدائية اهتماماً بمشاركة الأطفال في الأنشطة الصغيرة بعد الإفرازيت في الأسابيع السابقة.

وقد استهدفت الحملة الأطفال ما بين 6-10 سنوات وما يناسب المرحلة الابتدائية وما قبلها من المرحل التعليمية.

وقد كتب الفنانون في القسم بجامعة قطر عن تأييدهم لدور الحملة في ترسيخ مفاهيم الاستدامة ودور الطفل في المساهمة على حماية البيئة على كوكب الأرض، واعتقادهم بأهمية إعادة التدوير.

وقد تم توزيع بعض الكتيبات التي ختم أكثر من 50 طريقاً لتسهيل مساعدة في نشر مفاهيم الاستدامة والبيئة.

وفي تعليقه على العملية قال زيغلر: "باسم الديوان الديموان ومدينة لوسيل أسمحوا لي أن أشكركم مرة أخرى على المبادرة الممتازة للخروج مع الطالبات للاحتفال بيوم الأرض هذا العام. فقد نتج عن المبادرة الخضراء احتفال مفهوم لدء أسبوع وقد يجوز أن نطلق عليه "سبيع الاحتفال بالأرض" ونحن نرى أن فكرة ترسيخ مفاهيم الاستدامة عند الصغار هو
5. Focus

Faculty Contributions
Over the past decade or so, the wealth produced by Qatar’s oil and gas exports has generated a construction development boom in its capital city of Doha and the surrounding vicinity. Since the late 1990s, the number of inhabitants has grown from less than 400,000 to more than 1.7 million today. In many respects, Doha is portrayed as an important emerging global capital in the Gulf region, which has been positioning and re-inventing itself on the map of international architecture and urbanism, with a global image of building clusters of glass office towers, as well as cultural and educational facilities.

While focusing on the architectural and planning aspects of Doha’s intensive urbanization, this first comprehensive examination of the city sets this within the socio-political and economic context of the wider Arabian Peninsula. ‘Demystifying Doha - On Architecture and Urbanism in an Emerging City’ features a comprehensive discussion on contemporary architecture and urbanism of Doha as an emerging regional metropolis. It provides a critical analysis of the evolution of architecture and urbanism as products of the contemporary global condition. Issues that pertain to emerging service hubs, decentralised urban governance, integrated urban development strategies, image-making practices, urban identity, the dialectic relations between the city and its society and sustainable urbanism are all examined to elucidate the urban evolution and the contemporary condition of Doha. ‘Demystifying Doha - On Architecture and Urbanism in an Emerging City’ concludes by suggesting a framework for future studies of the city as well as for investigating the future of similar cities, setting out an agenda for sustainable urban growth, while invigorating the multiple roles urban planners and architects can play in shaping this future.
Contents: Preface; Introduction: globalisation and the emerging city; Overview of architecture and urbanism in the Arabian peninsula; The urban evolution of Doha: from a vernacular settlement to an emerging service hub; Contemporary urbanism in Doha: from decentralised governance to integrated urban development strategies; Contemporary architecture and image-making practices in Doha; Dynamics of population and the urban environment of Doha; The challenges of sustainable urbanism and the future of Doha; Conclusion: introducing an analytical framework for emerging Doha; bibliography; Index.

Reviews: ‘The authors provide an authoritative account of the development of Doha in the context of the rapid growth of Arabian Gulf cities. The book identifies the social and cultural changes associated with this growth and its positive and negative impact on the city of Doha. Such unbridled growth as seen in Doha can have deleterious consequences as the authors clearly identify. They propose the need for an urban development vision that integrates social, cultural and economic factors. Consequently, this book is a necessary guide for Doha’s decision makers in the public and private sector as well as design and planning educators and professionals. Although Salama and Wiedmann focus on the Arabian Peninsula they develop a unique investigative approach relevant for the study of other regions as well.’

Henry Sanoff, North Carolina State University, USA

‘Salama and Wiedmann offer a far-reaching examination of the city of Doha within the larger context of the Arabian Peninsula. While their main focus is on the evolution of the city and its morphological transformations, they successfully map such evolution to socio-cultural, economic, and environmental aspects that characterized the growth of the city. Addressing the institutional environment in which decisions are made, the book highlights important aspects of urban governance. Discussing the multifaceted aspects of sustainable urbanism, the authors propose a framework for future investigations in similar contexts. The inclusive nature of the book makes it a necessary reading for policy makers, academics and professionals in architecture and urban planning. This is a great addition to the library of architecture and urbanism in the Middle East.’

Attilio Petruccioli, Qatar University, Qatar and Poly-technic University of Bari, Italy
The launch of the book “Stitching the Buffer Zone” accompanied an exhibition of the same name at the Artos Gallery in Nicosia, Cyprus. Organized by the ARTos Foundation, the exhibition was part of a larger event entitled “Does Europe exist?” which took place from 1–15 November 2012 within the Cyprus presidency of the EU Council. Stitching the Buffer Zone was a collective exhibit which featured the works and installations of architects and urbanists Anna Grichting Solder, Maria Costi de Castrillo, Stephanie Keszi and Georgia Frangoudi and included models, plans, videos and installations illustrating the design scenarios and architectural and landscapes concepts for the future transformation of the Cyprus Buffer Zone.

The product of military and political conflict, a 180-kilometre-long buffer zone has divided Cyprus since 1974. Largely undisturbed, it is an ecologically valuable area with the potential for transformative change. Cyprus became an independent republic on August 16, 1960. Fourteen years later to the day, a United Nations ceasefire came into effect that divided the island in two, following a coup d’état by Greek Cypriot and Greek elements that prompted a military intervention by Turkey and established Turkish Cypriot control over the northern part of the island. As a result, a Green Line Buffer Zone runs for 180 kilometres across the island, covering three percent of the land mass and encompassing abandoned rural villages, fallow agricultural lands, and crumbling stone buildings in the historic capital of Nicosia. Strict adherence to the military status quo in the Buffer Zone, enforced by the United Nations Forces in Cyprus (UNFICYP), has frozen development and, on a more positive note, has allowed this landscape to escape the construction boom on both sides of the Green Line: Meadows have recovered from contamination caused by pesticides and artificial fertilizers, hillside forests have been preserved, and wildlife has been allowed to flourish. Like the Korean Demilitarized Zone (DMZ), the Green Line is now really “green.”
and has become a haven for wildlife and biodiversity.

The Buffer Zone is both a “territorial wound” and a future “space of reconciliation and reconstruction” and has engendered a number of projects that seek to reweave the disrupted spaces and segregated communities of Cyprus. The book - Stitching the Buffer Zone. Landscapes, Sounds and Trans_Experiences along the Cyprus Green Line - presents three such projects with various approaches to envisioning or re-visioning the abandoned landscapes of the Cyprus Buffer Zone at different territorial scales.

The first part of the book - “The GreenLineScapes Laboratory: From a Deep Wound to a Beautiful Scar” - presents an ongoing initiative that seeks to initiate “healing ecologies” in the physical and psychological rift of the Cyprus Buffer Zone - where the untamed forces of Nature have engendered a spontaneous process of cicatrisation - and suggests the opportunity to create a beautiful scar through the creation of an ecological landscape of memory. [A. Grichting Solder]. Structured along three lines and projectual approaches- 1. Third Landscapes and Healing Ecologies; 2. Palimpsest: (Re)Activating Layers of Palimpsests; 3. Co-Creating Ecological Landscapes of Memory – the project and research reflects on how the Cyprus Buffer Zone might be transformed from a military dividing line into a memorial landscape of cultural and biological diversity, and this through a process that brings together the communities on both sides in a common vision for a peaceful and sustainable future.

The second chapter entitled “The Stitches - Connecting the two Nicosias again” proposes a functional stitch aiming at recreating the broken threads of the City. Sound becomes a tool in the urban context that promotes revival through encounter. Creating common and shared experiences, the project aims at surpassing this zone of prohibition, while preserving the gap in the memory of the city, also seeking to generate more stitches to occur.[M. Costi de Castrillo]

The final chapter, “Trans_experiences” addresses the experience of border crossing, and is an attempt to invent mechanisms that transfer the experience of the buffer zone into a real space in order to redefine the perception of the boundary and to generate new spatial connections and transmutations. Through transient interventions, different elements are assimilated, intermingled and transformed, leading to a new 'crossing experience'. [S. Keszi & G. Frangoudi].
1. Introduction

Energy consumption can be attributed to many factors; general economic conditions, energy prices, technology, and attitude towards energy use. Studies indicate that although people are often aware of the benefits of using energy efficiently, a variety of social, cultural, and economic factors often impact their behavior towards energy consumption. This research poster presents the findings of a research project to understand the behaviors, attitudes, and levels of understanding among faculty, staff, and students as related to energy use in Qatar University buildings.

2. Objectives

Understand the psychological, cultural, and institutional context within which energy-related decisions are made in higher educational facilities.

Identify factors that influence energy consumption behavior of higher educational facilities users.

Assist institutions and public agencies design and implement more effective energy-saving policies and programs.

How are users’ behaviors impact energy consumption?

How do indoor climatic conditions influence energy consumption behaviors and work performance?

3. Methods

A multi-method approach is used in five diverse buildings at Qatar University including web surveys, behavioral observations, environmental measures, and interviews. Topics covered include:


Data were collected using the following sources:

Questionnaire surveys to samples of different user groups.

Systematic observations to observe behaviors & traces & measure ambient conditions.

Interviews with key informants and focused group interviews with different members of QU community. A measuring device was used to measure the different environmental aspects. The device is manufactured by NIEAF SMITT Industrial Technology. The NI T8820 is a complete 4-in-1 Environment Meter for measuring light (Lux), temperature (°C/°F), humidity (RH) and sound level (dB).
4. Discussion
Overall 159 respondents in the five buildings completed the questionnaire; 18% administrators, 21% faculty members and 60% students. The analysis considered differences between the three population groups; faculty members, students and administration staff towards energy conservation behaviors and attitudes. The findings of this research focused on users assessment of the following aspects: environmental conditions and satisfaction, lighting conditions and satisfaction, energy saving awareness and behaviors, and willingness to take action.

It was observed that: lights and equipment were usually left working after working hours. heavy clothing was worn by users in classrooms and offices during hot summer months due to very low temperature. Occupants reported that very low temperature distracts their work performance. respondents suggested the need to establish of recycling strategy in the university to benefit from paper and other useful wastes.

5. Conclusions
The findings of the study are summarized as policy recommendations to improve energy conservation in higher education facilities:
- Develop greater awareness of energy conservation efforts. More attention should be given to occupants' behavior as part of energy reduction efforts. System-based energy conservation measures by themselves are insufficient to reduce energy consumption if building occupants are not actively engaged in the process.
- Methods and tools developed by this study can be duplicated in other building types and facilities.

“This research poster was made possible by a UREP award [UREP 10 - 040 - 6 - 003] from the Qatar National Research Fund (a member of The Qatar Foundation). The statements made herein are solely the responsibility of the authors.”
ABSTRACT
Since the early 1990's, the concept of sustainable development in general and sustainable architectural design in particular has remained the subject of intense debate. Importantly, however, this debate has continued largely in isolation from the embracing theory of sustainable development from which the principles of sustainable architectural design have been drawn. The existing building sustainability assessment tools such as BREAAM, LEED, and Green Building are mainly proposed for use in the US and Europe. Recently, models and checklists have been made to develop sustainability assessment tools for the booming cities the Middle East and North Africa (MENA).

By: Dr. FODIL FADLI who was awarded the CEng Research Day 2013-Best Research Poster Award.

This study was made possible by UREP award [11-026-2-010] from the Qatar National Research Fund (a member of the Qatar Foundation). The statements made herein are solely the responsibility of the author.
THEORETICAL & CONTEXTUAL BACKGROUND

Sustainability Assessment Tools (SAT) are systems which examine the performance or expected performance of a ‘whole building or development’ and translate that examination into overall assessment (Fowler and Rauch, 2006). The recent decades have witnessed a maturing of concern and interest in building performance that is increasingly evidenced in building design. Sustainable or green design is not simply about attaining higher environmental performance standards or investing in new values; it is also about rethinking design ‘intelligence’ and how it is placed in buildings. The distinction between the notions ‘Green’, ‘Intelligent’, “smart” and “Sustainable” is critical in what underlies valid sustainable buildings. Sustainability assessment is a procedure used to evaluate whether environmental, economic and societal changes arising from man’s activities are decreasing or increasing our ability to maintain sustainability (Forbes, 2008).

OBJECTIVES

Based on recent research work conducted by the author and funded by the Qatar National Research Funds (QNRF) under the Undergraduate Research Experience Program (UREP project # 11-026-2-010); this investigation focuses on: Studying and reviewing QSAS, while attempting to give answers to the main research question by tackling two main aspects; 1- the first aspect concerns what is measured by the choice of indicators; or the scope of the SA Tool, 2- and the second aspect deals with examining the quality of the system from the perspective of its robustness as a process of appraisal.

METHODOLOGY

The research method adopted in this study is based on a comparative evaluation of QSAS versus well-established assessment tools both at the international level (BREEAM in the UK and LEED in the US); and regional level (ESTIDAMA in UAE).

BUILDING SUSTAINABILITY ASSESSMENT (BSA)

During the last two decades, the science of ‘assessing sustainability in the built environment’ has flourished and the number of assessment tools exploded dramatically to reach over 70 tools worldwide (BRE, 2004). Local assessment systems have developed in different countries and regions; responding to perceptions of what is needed in their local conditions. These assessment systems and tools share much in common but also evidence differences of scope, approach, reporting and mitigation measures. Research undertaken in the field note that the two most widely used building rating systems today are BREEAM (UK) and LEED (US). However, globalization has also introduced a new set of choices for those developing, owning, or occupying a sustainable building resulting in a variety of different ratings systems originating in different national markets and with different methods and scopes (Hirigoyen et al. (2008).

QSAS provides assessment of different type of buildings during design, construction and operation. The
The initial form of QSAS was applicable only for three types of buildings: school, residential, and commercial buildings. Today, it has 11 toolkits dedicated to various buildings.

RESULTS INTERPRETATION

1- Maturity: QSAS is not as mature as BREEAM or LEED; the system needs to mature through its widespread use in the country and the region, by increasing the number of assessed buildings. 2- Scope: Despite its variety in scope of buildings, QSAS lacks the meso-level. 3- Dimensions: QSAS is one of the rare SAT that includes the socio-cultural indicators into account. 4- Flexibility-Time/Space scales: QSAS is more flexible in time than in spatial scales. It should provide extra spatial levels between the building/technological level and the macro/micro scales. 5- User-friendly: Because of its lack of maturity, QSAS is still complex to be considered as a user-friendly system. 6- Readability, Results interpretation, and Graphic display: results can be hard to read and understand. A request for more comprehensive graphic display is necessary. 7- Mitigation measures: more elaboration of this important step in an EIA system is crucial and important.

RECOMMENDATIONS

Rating systems, on their own, are not sufficient to achieve genuine sustainability in the built environment. What is needed are more ambitious sustainability targets than those necessarily assumed by any present building rating system. For countries in general, this means thinking beyond the green building rating systems now used. The challenge for Qatar is to think beyond QSAS, as this on its own may not be sufficient to achieve genuine sustainability for Qatar’s built environment.
The City of Doha: Historical Background

Doha, the capital of Qatar is the largest city, with over 80% of the nation's population residing in Doha or its surrounding suburbs. It is also the administrative and economic centre of the country with a population of 1,963,124 persons to the end of May 2013 (http://www.qsa.gov.qa/eng/index.htm). In 1825, the city of Doha was founded under the name of Al-Bida. The name "Doha" came from the Arabic ad-dawha, "which might have been derived from "dohat" — Arabic name for bay or gulf — referring to the Doha bay area surrounding corniche. In 1820 Major Colebrook described it as following:

"Gutur - Or Ul Budee [Al Bidda] once a considerable town, is protected by two square Ghurries near the sea shore; but containing no fresh water they are incapable of defense except against sudden incursions of Bedouins, another Ghurry is situated two miles inland and has fresh water with it. This could contain two hundred men. There are remaining at Uk Budee about 250 men, but the original inhabitants, who may be expected to return from Bahrain, will augment them to 900 or 1,000 men, and if the Doasir tribe, who frequent the place as divers, again settle in it, from 600 to 800 men." (Rahman, 2005).

The city of Doha was bombed about three times which explains the disappearance of a large number of its historic buildings and areas. First it was bombarded by the British vessel Ves- tal in 1821, then it was bombed again in 1841 and the village was completely destroyed in 1847 after a battle against the Al Khalifas of Bahrain.

Al Koot, the Turkish fort was established by the Ottomans in 1880 adjacent to Souk Waqif and near the main maqbara (cemetery) to control Doha and secure Souk Waqif from stealing, as most of the prominent traders had their houses in the Souk. A small force was garrisoned in the Koot, but left with the signing of the protection agreement of 1916 between Great Britain and Qatar. Subsequently Al Koot Fort was used as a prison for a time. Al Koot fort was a home for the guards who patrolled the souk at night, a service paid for the traders who refused to pay taxes. This confirms that Souk Waqif is well deep in history and was established well before 1880 when the Ottomans built their fort. According to Mr. Mohamed Ali Abdullah, the person in charge of the rehabilitation of Souk Waqif that the latter goes back as far as 1850s. (Boussaa, 2010).
In 1916, the city was made capital of the British protectorate in Qatar. During the early 20th century, much of Qatar’s economy depended on fishing and pearling, and Doha had about 350 pearl- ing boats. However, after the introduction of the Japanese cultured pearls in the 1930s, the whole region, including the town of Doha, suffered a major depression and Qatar became a poor country, plunged into poverty.

Oil was discovered in 1939, but its exploitation was halted between 1942 and 1947 because of World War II and the Bahrain embargo. Oil exports and payments for offshore rights began in 1949 and marked a turning point in Qatar. The 1950s saw the cautious development of government structures and public services under British tutelage.

During the 1960s, new administrative centers sprang up to manage the vast revenues. In 1969, the Government House opened and today it is considered to be one of Qatar’s most prominent landmarks. Following the withdrawal of the British, the State of Qatar declared its independence on September 3, 1971. Doha as the capital of the new state, attracted thousands of foreign experts and workers, employed in the construction and engineering industries.

Since then, Doha has seen the most extraordinary expansion in international banking, sporting and tourism activities, as evidenced by the many modern towers, malls, hotels and seats of power. These are scattered throughout the city, and through huge developments like the Pearl, a whole commercial, residential, tourist and leisure complex beyond the West Bay area.

The physical development of Doha and the various conurbations of the peninsula have been accompanied by extensive preparatory work, which led in many occasions to the destruction of historic buildings and areas. There is a national pride in the redevelopment with demolition being seen as a necessary process. Table.1 shows the major events that happened in Qatar and which can be included in a tourist’s tour for the historical sites in Doha.

Table.1. Major Historical Events in Qatar

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000 BC</td>
<td>Ubaid pottery from Mesopotamia found in Qatar is thought to be the world’s earliest evidence of international trade.</td>
</tr>
<tr>
<td>3000-1000 BC</td>
<td>Qatar flourishing as a trading port between Mesopotamia and the Indus Valley</td>
</tr>
<tr>
<td>2nd Century AD</td>
<td>Greek geographer identifies “Qatara” on his map of the Arab world</td>
</tr>
<tr>
<td>628</td>
<td>Qatar is one of the first civilizations to convert to Islam</td>
</tr>
<tr>
<td>1515</td>
<td>The country comes under Portuguese influence</td>
</tr>
<tr>
<td>1847</td>
<td>Sheikh Mohammed bin Thani, predecessor of the current ruling family, relocates its base to Doha</td>
</tr>
<tr>
<td>1850</td>
<td>Three Bedouin tribes, the ancestors of the majority of contemporary Qataris, move to the peninsula in search of fresh water</td>
</tr>
</tbody>
</table>
1868 Treaty with Britain recognizes Qatar’s independence from Bahrain
1893 Sheikh Qassim bin Mohammed Al Thani, the founder of the modern state of Qatar, defeats Ottoman forces
1940 Oil is discovered at Dukhan
1971 Qatar becomes a sovereign state
1973 Qatar University
1975 Qatar national Museum
1991 Production of gas begins in Qatar’s North Field
1996 Al Jazeera launches the first independent Arab satellite news channel, breaking the monopoly of state controlled media in the region
2008 Qatar National Research Fund is endowed
2009 Qatar Science and Technology Park opens; an important step in realizing a knowledge-based society
2012 New Doha International Airport will open, effectively tripling Qatar’s international passenger capacity to meet growing demand

Souk Waqif: From Survival to Revival

Located behind the Corniche, off Grand Hamed Street, Souk Waqif is a showpiece of traditional architecture, handicrafts and folk art, and was once a weekend trading area for the Bedouin. The origins of the Souk date from the time when Doha was a village and its inhabitants gathered on the banks of the Mushaireeb wadi (river) to buy and sell goods. In Arabic, Waqif means (standing); refers to the merchants and inhabitants who were obliged to do their businesses by standing because of the water flooding on both sides from the Wadi Musheirib, and pouring to Al Khrais area in the souk before reaching the corniche.

Souk Waqif is a maze of alleyways covering a wide area, with separate sections selling perfumes and traditional forms of Qatari national dress, luggage, tools, general hardware and gardening equipment, tents and camping equipment, kitchenware, spices, traditional sweets, rice, nuts, and dried fruits. This shopping destination is renowned for selling traditional garments, spices, handicrafts, and souvenirs. It is also home to tens of restaurants serving cuisines from all over the world. Although this market dates back to the 1850s, it has been recently rehabilitated back to its original character. It is now considered one of the top tourist destinations within Doha.

The Private engineering Bureau of the Diwan Amiri launched the rehabilitation project of Souk Waqif in 2003. Since most of the buildings in Souk Waqif were privately owned, the government bought these buildings from their owners in order to start the work. After a detailed survey it has been found that 2/3 of the buildings were authentic, while one third of the historic buildings were demolished and replaced by modern structures. (Mohamed Ali, 2008).

The strategy adopted in conserving Souk Waqif consisted of the following measures and actions:
• Restoration of the old part of the Souk,
• Replace the new structures with new ones inspired from the old buildings,
• Modernize the infrastructure of the Souk,
• Remove all the advertisement signs which disturb the image souk.

Beginning in 2004, the Souk started to be rehabilitated according to traditional Qatari architecture techniques, using local building materials. Currently enjoying the last phase of rehabilitation project, Souk Waqif is a major tourist place
to explore. There has been a Souk on this site for centuries, as this was the spot where the Bedouin would bring their sheep, goats and wool to trade for essentials. It grew into a scruffy warren of concrete alleyways in recent years but now its tourist potential has been recognized and it’s been cleverly redeveloped to look like a 19th-century Souk, with mud-rendered shops and exposed timber beams. Despite the fairly ‘Den-sification’ of the area, the chief business of the Souk continues unabated and it remains one of the most bustling and thriving traditional markets in Doha.

The revitalization project was based on a thorough study of the history of the market and its buildings, and aimed to stop the dilapidation of the historic structures and remove a number of inappropriate alterations and additions that were introduced. The Private Engineering Office in charge of rehabilitating Souk Waqif attempted to revive the memory of the place. In order to achieve this, alien new buildings have been demolished, metal sheets on roofs were replaced with traditional roofs of danjall and bamboo with a binding layer of clay and straw, and traditional strategies to insulate the buildings against extreme heat have been re-introduced.

Recently, Souk Waqif has become a major hub for art galleries and workshops, hosting several art galleries and local concerts during holidays and special celebrations. In addition to shops, cafes, restaurants, hotels the Souk Waqif Art Center is located in the restaurants area. The Center combines a selection of small artistic shops with a number of exhibition rooms laid out around a long narrow courtyard.

Some new features were also introduced, such as a sophisticated lighting system that illuminates the market’s streets. In complete contrast to the fake heritage theme parks that are mushrooming in the region, Souk Waqif is both a traditional open-air public space that is used by shoppers, tourists, merchants and residents alike, and a keeping as a living market day and night.

Fig.3. Souk Waqif; a Living heritage day and night and a major landmark that reinforces the local city identity.

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Form Active Structure Systems: The Case of Three-Hinged Arch

By Dr. M. Salim Ferwati, Students: Areej Al-Jerjawi, Leen Ziab, Farah Al-Khasib

Definition:
Systems of flexible non-rigid matter structure, in which the redirection of forces are effected by particular form design and characteristic form stabilization.

Types:
1. Cable structures
2. Tent structures
3. Arch structures
4. Pneumatic structures

This article will concentrate on Arch Structure.

Definition:
An arch is a structure that spans a space and supports structure and weight above. There are three Types:

Fixed Arch
Two-Hinged Arch
Three-Hinged Arc
The reason of choosing the 3-hinged arch

1- Suitable for big spans
2- Easy to ship and install
3- Has no moment resistance

Features of 3-hinged arch:

Three- hinged arch free to move under temperature change without secondary bending stress

Three- hinged arch free to move under uneven settlement without secondary bending moment

Case Description

Analysis of 3-Hinged Arch

Three Hinged Arch Structure Long span structure system with three- hinged arches Segmental foundation arches with suspended free-form roof structure Funicular curve: irregular polygon Arch rise: 1/3 span

Suspended Ceiling-Corrugated Sheets are the ideal solution for covering the roof of industrial buildings or factories.

Roof: The structure is covered by a glass roof which protects the suspended ceiling from any potential coming wind.

Braces: The system has braces connecting the main 3-hinged arches together, it’s main function is to resist any expected forces coming from the other direction.

Asphalt: Is a sticky, black and highly viscous liquid or semi-solid form of petroleum. It may be found in natural deposits or may be a refined product.

Cables: Cable structures utilize the cable as the principle means of support. Because cables have high tensile strength, but offers no resistance to compression or bending. They must be used purely in tension.

Connections-Hinges: A welded support fixture with a true hinge is necessary for larger spans, the transmitted moment is limited and need not be taken into account in the design of the arch.

Force behavior of the hinge:

Axial and shear forces from the arch are transferred by contact pressure to the steel shoe and thence via the hinge down into the concrete foundation.

Case Description:

Span: 50 m
Height = 1/3 span = 16.67 m
Cross section dimensions: 5"X5"
Material: steel.
The arch is a part of circle with radius 27m
The cross section of braces : 0.4 X 0.4 m
Material used in braces: steel
Section

Arch cross-section

Detail 1

Detail 2

corrosion protected mild steel or stainless steel plate with bolts
base plate bolted to foundation with holding down bolts or post fixed expanding anchors
weep hole for drainage

Detail 3

Hanger wire

stainless bolted steel plate

single bolt or pin

Model | Coil (mm) | Thickness | I (cm²/m) | Wt (cm²/m) | Usage
---|---|---|---|---|---
WLYX 18-63.5-825 | 1000 | 0.25 | 3.49 | 1.90 | Roof Panel
| | 0.3 | 4.19 | 2.23 |
| | 0.4 | 5.58 | 2.97 |
Force Behavior and Deflection

**Force Behavior**

- Horizontal load deflection
- Vertical load deflection

**Deflection**

Total deflections with the structural members designed for using safety factor of 5.0. The deflections are magnified by a factor of 10 for better illustration.

**Structural Analysis**

**How to reduce deflection:**

Reducing deflections can be done in many different ways:

- Strengthen the members. This approach results in extra mass that is not needed from a strength point of view. Since low mass is crucial for an economic design, this is not a desirable approach.
- Strengthen the soil. Sintering the regolith before erecting the structure will result in a higher modulus of subgrade reaction, and therefore lower deflections of the tie. It does not affect the arch deflections. Calculations show that the modulus of subgrade reaction would have to be increased about tenfold to get in the range of desired deflections. This is very likely not possible to be achieved by sintering the regolith. More research data is needed for this topic.
- Cambering. All of the loads can be assumed permanent. Therefore, cambering of the members is a solution. The members can simply be manufactured in a shape opposite to the calculated deflections. Manufacturing has to be done very carefully and exactly to enable construction onsite. A comparison of habitat masses for different safety factors will be given after the end walls have been designed.
6. SEMINARS
AND PUBLIC LECTURES
Energy efficient building's

By Dr. Djamel Ouahrani

Department of Architecture & Urban Planning
Date: 26 September 2012

Buildings use a considerable amount of energy. In many developed countries buildings account for 30–40% of the total national energy use. In the GCC countries 60% of the electricity is used for cooling the buildings. Most energy sources used today are non-renewable fossil fuels. These last cause a lot of pollution and they emit greenhouse gases, mainly carbon dioxide. International action such as the Kyoto protocol and more recently Durban protocol has put pressure on countries to lower their carbon dioxide emissions which has led to efforts to reduce burning of fossil fuels including reducing the energy use in buildings.

Good indoor comfort and low energy use can be achieved by applying climate-sensitive design. Such climatic design however requires increased knowledge among architects and engineers and a change of current building techniques and architectural design. It is however not easy to change current construction techniques and therefore energy codes may help in achieving low energy use and comfortable buildings.

Building energy codes can be either prescriptive or performance-based – or a combination of both. Prescriptive codes state which type of building elements are allowed and the exact composition of these elements or, more commonly, they put specific thermal requirements on different elements of the building envelope. Performance-based codes, on the other hand, put requirements on the thermal performance of the whole building. The type of code chosen will depend, to a large extent, on the level of knowledge among designers and builders. The codes must be easy to understand, possible to implement and easy to enforce by the authorities. In most countries the first codes are prescriptive because they are simpler.

In the Jordan project, in order to identify the optimum U-values for the construction elements, we have simulated the thermal behavior of an apartment which is the most commonly constructed building type with the highest energy use in Amman Jordan. It was shown that it is possible to achieve good indoor thermal comfort by applying a climate-conscious design without the excessive use of energy in mechanical heating and cooling systems. The optimization process carried out for the climate of Amman found the requirements on thermal transmittance (U-value) for both roofs and walls to be between about 0.5 and 0.7 W/m²K. The optimum window to floor ratio (WFR) for a south oriented main façade was found to be between 12% and 20%. These requirements would allow a total saving in energy for cooling and heating of up to 70% for a typical apartment in Amman.
Sustainability: Context or Technology?

By Mr. Erick van Egeraat

Over the past 25 years Erick van Egeraat has realised many award-winning masterplans and designs for residential, commercial and mixed-use developments in both Europe and Russia. Furthermore, he has led successful innercity regeneration projects in Amsterdam, Milan, Budapest and Moscow. His rehabilitation work on the Drents Museum recently got commended by Her Majesty Queen Beatrix of the Netherlands. In 2012 he was given the title ‘Holland’s most published architect’.

Drents Museum Assen

The most important aspect of Erick van Egeraat’s design for the new entrance and extension of the Drents Museum is the consistent integration of the museum into the fabric of the city. A balanced play of building, landscape and water, creates a new identity for the extended museum, emphasizing both the scenic character and the cultural-historic face of the city centre of Assen. The new exhibition wing covers 2000 square meters, all under ground. Its staggered, organic roof consists of a public garden that connects the existing city parks. Openings in the roof allow daylight to enter the exhibition spaces below. The existing coach-house will serve as the museum’s new main entrance. Its historic facade will be left untouched, but the entire building will be lifted off the ground and onto a spectacular glass plinth. During the day, the glass plinth allows light to enter the building. At night, interior lighting highlights it in an elegant manner. The design by Erick van Egeraat won an international competition in 2007.
PUBLIC SEMINAR 3.

Social Sustainability and the Historical District Projects: Souq Waqif in Qatar as a Case Study

By Mr. Diaa Noufal, University of Angers Angers, Pays de La loire FRANCE
Date: 7th November 2012

Mr. Noufal has acquired over more than 10 year’s hands-on business experience mostly with research and consultancy companies specialized in real estate markets and urban developments. He provided consultancy to a large number of developers on medium and mega scale projects in UAE, Saudi Arabia and Qatar among other countries. His portfolio of projects comprise a wide spectrum of types including commercial buildings, retail markets, hospitality projects and residential developments in addition to mixed use projects and master planned neighbourhoods. Mr. Diaa Noufal is currently a PhD nominee at University of Angers (France). His current research is revolving around clusters of creativity and innovation in the context of urban planning and cultural districts. Mr. Noufal holds an MSc in Urban Planning from University of Tours (France) where he presented a master research dissertation entitled “Social Sustainability and Historical District Projects: Souq Waqif as a Case Study”. This research has been awarded “Best Student Research Award in Social Sciences and Humanities” at the Annual Research Forum held by Qatar Foundation in Doha in October 2012.

The conflicts between economic growth, social well-being and ecological environment have frequently been highlighted. There is evidence that rehabilitation projects, while generating economic activity and improving the physical environment, also lead to many serious social problems, such as forced eviction and gentrification. Other issues include conflicts involving the cultural role of heritage and loss of social continuity and community neighborhood, exclusion of community participation, property speculation, loss of sense of place, urban sprawl and social exclusion. Thus, there is an urgent need to address the concept of socially sustainable development in the rehabilitation of urban historic districts. The case of Souq Waqif provides a unique opportunity for the topic where there was no previous relevant research. In addition, its urban context and the city are unique considering the architectural components, and environmental, cultural and social context. Lessons learned from studying social sustainability in Doha are expected to add remarkable input to the understanding of the city urban development and the resulting social change.
For some scholars landscape is a poetical emotion, for others it is an aesthetical experience connected to vision. I believe that landscape (as architecture) is structure i.e. a system of elements hierarchically ordered and in dialectic interdependent relationship. The complexity of such system (imagine a valley in a pre-industrial moment with its settlements, routes, agricultural implants, etc.) can be interpreted only through the simplifying concept of type and its transformation in time or typological process. The reconstruction of the typological process is an unavoidable necessity prior to any intervention of design on a given landscape.

In spite of the complex stratifications of civilizations that have transformed its landscape, forms and uses, I believe that two main moments of this process have created the Mediterranean character of our region: the first phase of the formative cycle corresponding to the installations and routes on the ridges and the fourth phase of the formative cycle corresponding to the systematic formation of the large plains. The ridge phase with its typical natural morphology is the real backbone of the landscape; the plains phase with the geometric division of the land, the installation of the Hellenistic and Roman modules and grids has left a network of formal relations still readable in the present landscape.
Emerging Building Sustainability Assessment Systems BSAs, The Case of the MENA region

By Dr. Fodil Fadli
Qatar University, Department of Arch. & U P
Date: 28-10-2011

Since the early 1990’s, the concept of sustainable development in general and sustainable architectural design in particular has remained the subject of intense debate. Importantly, however, this debate has continued largely in isolation from the embracing theory of sustainable development from which the principles of sustainable architectural design have been drawn. The existing building sustainability assessment tools such as BREAAM, LEED, Green Building and BEPAC are mainly proposed for assessing the sustainability in the US and Europe.

Recently, tools and frameworks have been developed to become sustainability assessment models for the booming cities and regions of the MENA region and Gulf countries. As such is the case for Qatar and its Q/GSAS tool. This presentation aims to present major international and regional BSAs and ways of their fitting in specific local contexts.

Exclusive Aspects of Omani Vernacular Built Environment

By Dr. M. Salim Ferwati,
Qatar University, Department of Arch. & U P
Date: 12 December 2012

Each of the built environment tradition contains forms, designs, and symbols that communicate basic information to its users about what is intended and what is prohibited. Users discern information from their interactions with other people in environmental settings, combined with their personal/family interests and intentions. The seminar concentrates on the design aspects that have a substantial role in defining the identity of the Omani cities. The argument of this study is that the layout of the traditional streets and architectural design encompass certain aspects (Stimulation plus Curiosity, Collective Architecture, Atypical Structures, Soul-Touch Places, Semiotic Presentation, and Cosmophilia) that intended to serve users. To justify this argument, a walled Arab neighborhood was mainly examined through the case study of Sur Lawatyia located in the Muscat Governorate, Oman.
Tahrir Square: A Reclamation of Public Space
By Dr. Hussam Hussein Salama, Assistant Professor, DAUP, QU
Date: 26th December 2012

During the 18 days of the Egyptian Revolution, Tahrir square presented an interesting model of the role of public space in the socio-political life of cities. The Square became an arena of negotiations, a realm that hosted multiple forms of public discourse. It was an urban utopia, a place of community engagement, collective projects, social discourse, and most importantly, freedom of speech and expression. This presentation highlights the patterns of space adaptation and social organization that emerged in the square during that period. It emphasizes the symbolic meaning of public space as a crucial component of urban life. The paper builds on Henri Lefebvre's interpretation of space and his three dimensional conceptualization: the perceived, the conceived, and the lived. It places more emphasis on the notion of "lived space," or representational space as it is physically experienced, imagined and appropriated.

Criticism and Evaluation Research in Architecture - Conflict or Co-Existence
By Professor Ashraf M. Salama, Qatar University, Department of Arch. & U P
Date: 20th February 2013

This seminar introduces the role of perceived and measured quality in architecture and the urban environment. On one hand, traditional architectural criticism carried out by "expert critics" employs subjective methods of assessment of primarily universal values and aesthetic properties of buildings. On the other, environmental design and performance evaluation—typically performed by researchers and academics—uses objective evaluation criteria and methods of analyzing buildings in terms of health, safety, and functionality, as well as psychological, social and cultural performance. This relates directly to the satisfaction of the buildings' major stakeholders including occupants, staff, visitors, facilities managers and owners.

The intent of this seminar is to demonstrate that two seemingly opposing paradigms of architectural criticism and performance evaluations can co-exist, even complement each other, and the importance for them to co-exist in this age of green and sustainable design. It is argued that both methodologies and outcomes should co-exist in order to obtain a comprehensive assessment of quality in architecture. Al Azhar Park in Cairo and the Education City in Doha will be presented as cases that illustrate both perspectives toward a more integrated and effective discourse in architecture and urbanism.
Born and educated in Ireland, Bridget has lived and worked in the UK since 1978. A Fellow of the Chartered Management Institute, Bridget developed her career in Education for 25 years progressing from teaching Mathematics to becoming Principal and Chief Executive of Bexley College in Kent, where she led 450 staff serving 7000 students. The college specialised in Construction studies. Bridget joined the CIOB as Chief Operating Officer in November 2008 and is responsible for the Institute’s Operations team, a portfolio which includes, education, examinations, membership services, international development and IT.

Abstract:
The Chartered Institute of Building (CIOB) represents for the public benefit the most diverse set of professionals in the construction industry. Today our community includes over 47,000 individual members and over 500 corporate organizations around the world. We are considered to be the international voice of the building professional, representing an unequalled body of knowledge concerning the management of the total building process.

Whether you are studying full or part time, get ahead of the rest by taking the first step to gaining your professional qualification at the CIOB.

The CIOB recognizes worldwide educational programmes that promote excellence in the built environment and has developed a number of agreements with international organisations as a way of recognising and supporting membership and standards.

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Students of accredited programmes can be assured that their chosen programme meets the highest academic and vocational standards. Students of accredited programmes enjoy exemption from membership requirements and access to the CIOB library and information services, professional development activities as well as careers advice and progression opportunities. Outstanding students of accredited programmes are awarded CIOB Certificates of Excellence.

CIOB accreditation is an internationally recognised seal of quality assurance for the teaching institute and the gold standard of educational programmes in the built environment. The award of accreditation signifies that both the teaching institute and the programme have met the highest standards of quality. This is rewarded by the use of the CIOB logo for advertising purposes.
By Dr. Florian Wiedmann

Department of Architecture & Urban Planning

Date: 20th March 2013

Dr. Florian Wiedmann graduated from the Technical University of Dresden (2003) and the University of Stuttgart (2006) with a Master’s degree in Architecture and Urban Planning. After completing his Master’s dissertation on the urban development of Dubai, he continued his research on urbanism in the Gulf region by writing a PhD thesis at the University of Stuttgart between 2007 and 2010. In 2011 Dr. Wiedmann accepted a post-doc position at Qatar University for an extensive research project funded by the Qatar National Research Fund for which he is investigating the various ways economic diversification impacts urban structures in Doha.

Abstract


Doha has witnessed rapid growth during the last decade, with its large-scale projects shaping a new urban landscape and transforming the city into an emerging hub for many services. Massive public investment in urban development, coupled with liberalization of markets, has brought about a construction boom that has produced a new urban environment based on decentralized case-to-case planning with negative outcomes like fragmented and inefficient urban morphologies, lacking diversity and identity. This endangers future sustainability.
By Dr. Shaibu Bala Garba
Date: 27th March 2013

Dr. Shaibu Bala Garba has his training and experience in the fields of architecture and planning. He has a B.Sc and M.Sc in architecture from Ahmadu Bello University Zaria Nigeria. He holds a Master of Architecture with specialization in housing from McGill University Montreal Canada, a Master of City and Regional Planning from KFUPM, and a PhD in Urban Design from the University of Newcastle Upon Tyne, United Kingdom. Dr. Garba teaches at the Department of Civil and Architectural Engineering, Sultan Qaboos University, Oman. Dr Garba is active in research in the area of urban studies with a focus on urban management and governance, housing and community design issues, and environment and behavior studies.

Abstract
The presentation will examine “sustainable urbanism” as a concept and its impact on built environment related education, research and practice. The presentation will start by highlighting that the term is meaningful within the context of 20th century urban development, in which rapid population growth along with urbanization has transformed the form of cities and in the process generated negative social, economic and environmental impacts. The presentation will examine some of the historical processes accounting for the change, the nature of impacts generated and how the impacts have contributed to the rising quest for “Sustainable Urbanism” as a universally acknowledged policy goal in urban development. The presentation will also examine the inherent challenges that have hindered the ability to achieve the goal of sustainable development and urbanism in many countries. The presentation will discuss how these inherent challenges are reshaping built environment education, research and practices, individually and collectively as a system. The presentation will conclude with emphasis on the need for improved synergy between built environment education, research and practice as a way to facilitate better understanding of urban development patterns and the formulation of innovative and creative solutions to development problems.
By Milton Gardner
Architect AAA, Architect AIBC, FRAIC, EDAC, AIA, UPDA Levl A, B. Arch, University of Texas School of Architecture, Austin, Texas
Date: 17th April 2013

He, a founding Principal of Kasian, was Chairman of the Architectural Institute of British Columbia Energy and Environment Committee; Representative of the Royal Architectural Institute of Canada's Committee on Architecture and the Environment; Chairman of the BEPAC (Building environmental Performance Assessment Criteria) Foundation; member of the committee developing the Environmental Guidelines for British Columbia University, College and Institute Facilities; and has lectured widely on sustainability.

Prior to immigrating to Canada, Milton practiced with international firms in Boston, Houston and Los Angeles, and taught at the Boston Architectural Center and California Polytechnic State University. In Canada, Milton has worked with Arthur Erickson leading projects such as the Robson Square/Vancouver Law Courts Building, the Government of Canada Building, the Evergreen Building and a large community development in Kuwait. In 1980 Milton began practice as a principal and subsequently has lead many award winning projects.

Abstract

Sustainability in design and construction is a global challenge which can only be met by local focus. For example, in Qatar, water is precious, whereas in Canada, water is abundant. In Qatar, most building materials are imported, whereas in Canada, wood is abundant and renewable, and Canada has the resources and technology to produce most building materials. In Qatar, the potential for solar power is very attractive. In Canada, depending on the actual location, the potential for solar power is limited.

A common challenge shared by all is durability and sustainability over time. Another common challenge is to gain the support of clients and authorities to achieve sustainable goals, and to build sustainable cities. The presentation will be centred on some of the projects in which we have addressed local challenges and opportunities and the outcomes.
7. Students in Action
Dr. Yasser Mahgoub, Associate Professor, Qatar University and his students presented the outcome of their project “Recycling for a Sustainable Environment” at Sustainable Qatar, Friends of the Environment Center (October 8, 2012). Students were required to design and construct a full size table made from a recycled material of their choice. The constraints of this assignment were: to use one primary and one secondary available materials, to use minimum glue, tape, adhesive or bonding materials, and the table must be able to hold an average distributed weight of (20 KGs) (ex. Books, newspapers, reports, etc.). The goal of this assignment was to increase the students' awareness of the sustainability concept and possible reuse of discarded materials. Dr. Mahgoub class came up with innovative ways of incorporating the materials.

http://www.sustainableqatar.com/recycling-for-a-sustainable-environment/
Musheireb Project Site Visit by Dr. Yasser Mahgoub, Architect Shiney Rajan, and First Year Architecture and Urban Planning Students

(12 December 2012)

Msherieb Project Visit News

Students from the Department of Architecture and Urban Planning visited Msherieb Project on Wednesday December 12, 2012. This was part of their course Introduction to Architecture and Allied Arts with instructor Dr. Yasser Mahgoub and T.A. Shiney Rajan. The visit started by a stop at the MP-Office to wear the site safety outfit. The students started their site visit by inspecting renovated traditional houses guided by Artist Muhammad Ali Abdullah. They also inspected the newly discovered archeological sites inside the houses. The students then visited several parts of the project under construction including one of the new buildings that is nearing completion. Then they headed to Msherieb Projects Office where they discussed the use of architectural patterns in Msheireb Project with Architect Tim Makower. They also visited the design studios and administrative offices. Finally they visited the Art Gallery and inspected items collected from old Msherieb site as well as new items developed by the design team.
Under the topic of Women Designing and Engineering a Sustainable Environment, The Department of Architecture and Urban Planning, College of Engineering, at Qatar University was proud to host a group of female engineering students from the University of Applied Sciences, Western Switzerland (HES SO) for an educational cultural exchange day. During their visit to a number of engineering companies and research sites in Doha, 18 female perspective students from seven different engineering technical backgrounds and 2 lecturers were invited to attend a round table discussion and brief presentations at QU. The discussion allowed the exchange of experiences and views between Swiss and Qatari engineering students. HES SO students were also hosted for an afternoon visit at some QU students homes for more intimate and personal interactions. The day of exchange culminated with a reception hosted by the Swiss Embassy for students and faculty.
Under the topic of Celebrating Sustainability, the Department of Architecture and Urban Planning had organized its first competition. The event was organized as part of the department students social club activities supervised by Dr. Rania Khalil and with support from the department TA Reham Qawasmeh. The event aimed to increase awareness of sustainability and through the re-use of recycled materials in a socio-learning gathering of students and faculty.

All four architecture student groups competed in designing a sustainable booth scale 1:1 of recycled materials. Each group was assigned a color that characterizes the design of their booth and offered a sustainable lunch--designed based on the assigned color. Students work was evaluated by selected faculty at the time of the event in terms of design, assembly, materials used, structural integrity/stability, and collaboration.
Memorial photos
Celebrating Sustainability Competition and Lunch 14 February, 2013
Students in Action 5
Malaysia Field Trip, Graduate & Undergraduate Students

DAUP Architectural Field Trip 2013
Architecture, Urbanism and Landscapes of Malaysia

9th to 16th March 2013

Head of Department
Dr. Ashraf Salama

Organizing Committee
Dr. Anna Grichting
Dr. Hatem
Eng. Reham Qawasmeh

Under the supervision of Dr. Anna Grichting, Dr. Hatem Ibrahim, and Architect Reham Qawasme, the department of Architecture and Urban Planning has organized its second field trip to Malaysia. The country of Malaysia, proposed for this year’s Architectural Field Trip, is a rapidly developing, multicultural country in which Islam is the official religion (60 percent of the population is Muslim). Students will be introduced to different cultures within the Malaysian society such as the Malay culture, the Chinese culture, the Indian culture, the Eurasian culture, along with the cultures of the indigenous groups of the peninsula and north Borneo.

Malaysia is also home to Award winning contemporary architecture, namely the Petronas Towers in Kuala Lumpur by Cesar Pelli, the University of Technology Petronas by Foster & Partners, and the Menara Mesiniagi Tower by Hamzah & Yeang. Students will have a chance to visit some of the new developments in the country, for example the new city of Putrajaya, located 25km south of Kuala Lumpur. A visit to University of Putra, Faculty of Design and Architecture in Malaysia is also planned. Students will be able to experience life and learning in a different country.
Menara Mesinianga - Bioclimatic Skyscraper

A commercial office building by Ken Yeang featuring "vertical landscaping" and a number of passive low-energy features adapted to the tropical climate. This skyscraper won the Aga Khan award for bringing various bioclimatic concepts together in one simple building. The design became a new genre of tall buildings. The "Bioclimatic Skyscraper"

https://vimeo.com/64896424

Video by Maha Sobhey

Colonial City Malacca

History provides copious evidences of the influence of water on the growth of civilizations. Nearly all the great cities of the world grew up around water that provided the key not only to supplying freshwater, but also to agriculture and trade. Literally means the "muddy river confluence", Kuala Lumpur, like any other city, has been affected by the presence of two main rivers, Klang and Gombak. The settlement started in 1587, when a member of the Selangor royal family, Raja Abdullah, opened up the Klang Valley for tin prospectors and the city was born. The development of the city has emerged as a way to address its different economical and political situations. From its independence in 1957 till today, Kuala Lumpur has been emerged as one of the most competitive global cities in the world.

https://vimeo.com/646534710

Video by Nadine Macauley

Melaka, Malaysia: Colonial Influence on the Urban Planning of a UNESCO World Heritage City

A UNESCO World Heritage City, Melaka, Malaysia's urban planning is influenced by colonial rule. Portuguese, Dutch and British. Today, it is a unique city dissected by inner and outer cores done deliberately by urban planners to preserve the old while making way for the city's modern needs. Fully embracing its past, Melaka progressed without disregarding its past.

Kuala Lumpur Cityscape

https://vimeo.com/64973057

Video by Rana Al-Asadi

Putrajaya, World's Garden and Intelligent City

Putrajaya is a planned city located 25km south of Kuala Lumpur. It serves as the federal administrative center of Malaysia. The seat of government shifted in 1999 from KL to Putrajaya, due to overcrowding and congestion in KL. However, KL remains Malaysia's national capital. It is the seat of the King and Parliament, as well as the country's commercial and financial center. Putrajaya was the idea of Tun Dr Mahathir Mohamad (the fourth Prime Minister of Malaysia from 1981 to 2003). In 2001, Putrajaya became Malaysia's third Federal Territory after KL and Labuan.

https://vimeo.com/64820419

Video by Abdoed Al-Mansarri

PutraJaya Wetlands

PutraJaya Wetlands is believed to be the largest constructed freshwater wetlands in the tropics. It has a total area of 200 hectares (3.35 km²). PutraJaya Wetlands consists of 24 wetland cells: Wetlands Park (Taman Wetland) and the other Wetlands areas. The Wetland now is also a wildlife sanctuary which attracts a huge variety of animals to the combined terrestrial-aquatic wetland environment.

http://vimeo.com/64580037

Video by Rama Al-Asadi
On Sunday, October 5, 2012, students decided to have their lecture given outdoor. This experience meant to add incentive element to the teaching environment and at the same time encouraged students to feel relaxed. The right photo shows students sitting on the grass and paying attention to the lecture. It was nice and successful experience as demonstrated by the significant participation of the students in the discussion and questions. In order to be able to follow up with the instructor, students brought with them a hardcopy of the lecture with their notebooks.

As part of the course planned activities, students had a site visit to the Male Stadium at Qatar University. It was an illustrative lecture for “the space frame roof system”. This trip helped students to look at the structure details, member connections, and support points, while at the same time they examined the proportion of the overall structure as span, thickness of the structure, and height. In the left photo we see the instructor lecturing about the metal roof system, while the students’ participation in the lecture demonstrated by their questions and comments.
Alumna Talk: In the Department Architecture Day 2013, three of our alumna participated in telling their stories from education to career. Here is one of these presentations conducted by arch. eng. Hanan Ramahi.

From Education to Career: A Syntax of Mind
Hanan Al-Ramahi

WHO I AM ...
Hanan Al-Ramahi

Education:
BSc. Architectural Engineering - Alumni 2010

Career:
Allies and Morrison Architects – 1.5 years
AECOM Middle East Lmtd. - Current

The moment you chose Architecture ...

A Syntax of Mind ...? How?

Syntax:
“the study of the principles and processes by which sentences are constructed in particular languages”.

Space Syntax:
“Is a science-based, human-focused approach that investigates relationships between spatial layout and a range of social, economic and environmental phenomena.”
A Syntax of Mind ...? How?

Mind Syntax?
Looking at ordering, arrangement, interaction and the construction of ideas and the build-up of thoughts.

shelter → architecture

Getting there?

Almost!
ADAPTIVE FACADE

Adaptive facade treatment is created by reusing the exterior skin to regulate the amount of sunlight that penetrates into the internal spaces and thereby controls the heat gain. Represented by a system of precast concrete perforated panels which vary in the light transmittance amount according to facade orientation, functional needs and optimum light quality, these design elements were inspired by the mimetic patterns of Al-Sadu traditional windows. Facade weave, which is the interplay of geometry, creating a dynamic weave ...

Core facade: perforated light and shade impact is realized among solid walls varying from the more solid exterior panels to the more perforated to reach the top view deck with a panoramic view over the Corridors.

North facade: textured openings of solid wall and covered layer to enhance light effect inallee, multi-purpose hall and educational exhibition.

South East facade: solid wall and second layer openings are adding to the functionality, changing light and facade quality, reaching light effect on the solid background.

South West facade: solid walls with larger openings to allow functional needs of facade and multi-purpose halls. Solid non-perforated panels create varying light and facade effect and light effect on the solid background.

facade layering and structure

environmental performance of facade treatment, material light and shadow}

narrative exhibition concept

Experiencing the historical and cultural evolutions over time through the vertical movement patterns in the exhibition. Removing the physical boundaries between exhibition levels and maintain visual continuity.

THE BOX THEORY

Inside - inside
Inside - outside
Outside - inside
Outside - outside
outside - inside
a good concept is not only a ‘result’, but also a ‘process’.

LEARNING MUCH FROM SCHOOL?

read, read, read!
learn the language

Do not ask too many questions.
use your head!

they’re ‘guidelines’ not ‘rules’.

open your eyes, ‘rub’ your eyes.

THE BOX THEORY

ALL? – NONE?

‘UNFOLD’ THE BOX

what does a ‘GOOD’ concept ‘LOOK’ like?
detailed? or good-looking?

LEARNING FROM CAREER ...


from conceptual to actual.

better understanding of space.

the bigger picture first.

attention to detail.

make decisions, when and where to compromise.

‘watch’ and learn.

architecture is not only ‘holding the pencil’

the first dream of any architect is to build a good house for his family.

If you CAN do it .... then you’re SUCCESSFUL

many thanks for your attention!

Contact me:
hanan.alramahi@gmail.com
hanan.alramahi@aecom.com
## Congratulations

To Senior Students for successfully defending their Final Projects

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<td>Ayah A. Shehada</td>
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Dear Alumna, now you stand on the edge of the academic life or you have already stepped away into the profession. DAUP wishes you a successful and prosperous future.

Ashraf M. Salama, Chair of AUP