



MultiComfort House Student Contest Edition 2018

Teachers Day in Dubai
Proceedings feedback

During the proceedings of the “Teacher Day” in Dubai, Saint-Gobain has organized a visit to the site, which is part of the task, together with a few coordinating teachers from approx. 10 countries.

We have asked the participants to give us a short feedback after visiting Dubai and the site in order to be shared with all the students participating in this year edition. This report contains impressions and/or visions about the contest task and the site also.

We have merged all this information in this document.

SAINT-GOBAIN would like to thank to all participants for their support and feedback in drafting this document.

1. Zuzana Peskova, Czech Technical University in Prague, Faculty of Civil Engineering, Departement of Architecture

About climate

First what you feel after leaving the airport building is hot. Temperature over 40 °C hits you without grace. In the summer, there is over 50 °C, in winter about 20 °C. Sky without clouds, minimum raining days. So, you cannot worry about heating. Buildings are air-conditioned 20 °C average. Sometimes you are like in huge sauna: from hot outside to cold inside, from cold inside to hot outside. I was surprised how there is windy; the windblown sand covers surfaces.

About city

Dubai is a city of entertainment and shopping. You must always be wondered. Shopping centres and other facilities attract people by different experiences. Water shows, laser shows, singing fountains, ... It is not surprising that the entrance to Burj Al Khalifa is via the Dubai Mall (huge shopping centre). Exciting experiences, that is what is going on. There is nothing unrealizable. The records of Guinness Book are overcome in Dubai. Wow - effect is everywhere. In gradation of word “good” is Dubai the fourth form (after better and the best). And the main reason is simple: Business. Attracting people by entertainment makes them spend money ... Dubai is mainly newly building city, built on the sand. The sustainability is very important common part

of thinking about design in Europe and USA. In Dubai this is not the main task today, but I am sure in the future it comes.

About people

Nations in Dubai are mixed: Arabs, Pakistani, Indians, Chinese and others ... there is international spirit of the East. People are friendly and helpful. Most frequently question to me was: “Where are you from?” I was surprised how many people know where Prague is and some of them visited Prague and was amazed by my native city... There are no people in public space during the day because of the high temperature outdoor. At the evening the city starts live with people in the streets, all the lights and shows. Children are also in the streets into late night hours (in European context), shops and public facilities are (of course) open too.

About the site

The site district is as a huge construction site. Luxury completed buildings are solitaires in sand and traffic infrastructures. The scale is over humane-being. The cranes coo-create the panorama. Very important is creek and panorama view. The site makes rootstock for skyscrapers level (Burj Al Khalifa included).

The infrastructure and facility is very good (metro, water taxi, football field, newly build library and others planned cultural facilities, nearby shopping centres ...). I was amazed by ship building and shipbuilders community in the area of site. It meant a strong context for me. But during the discussion I was surprised, that this is not important for Dubai municipality. They are going to move the shipbuilders community to the different part of Dubai without sentiment, proud of let them making they work in new place. So, I found out that Dubai is city looking only to the glory gold future days, not looking sentimental back to “gone with the wind”.

And at the end, my three good (firmly hope) tips

for your design

- 1) Do not think “European way”, think “Cosmopolitan way”.
- 2) Do you think your idea is magnificent (generous)? Make it magnificent (generous) even more ... two or three times ... and it will be good for Dubai.
- 3) Design something the best ever in the world... it’s not important what way. Your design has to be attractive, innovative, surprising, wonderful ... you must get people to want the only one: live in your-designed-houses, in your-designed-district ... but avoid the “tinsel”, your design must be “genuine gold”!

2. Jo Janssen, architect / lector Hasselt University, Faculty Architecture and Art Belgium

8.45 - 9.00 AM Transfer Hotel to Contest Site

- Temperature in hotel is comfortable, a conditioned space; during the walk of 20 meters from entrance lobby to the van, the exposure to the the the outside temperature is already in the early morning an unpleasant experience. The transition between the inside and outside is a climatological ‘hard transition’.
- Ride to the site of the competition: no pedestrians on the streets, only cars; streets are made to drive, not to walk or cycle.

Site Cultural Village 2, 9.00 AM

- 33 °C and already very exposed to the burning sun. First what you are looking for is a place for shadow. A provisional roof is the only possibility..
- There is no shadow, only sand and dust; all cars parked in the vicinity are covered with sand and dust: it is an unprotected area where one is fully exposed to the sun, the wind and the sand. Even the metro station ‘Creek’, which nearby is covered with sand and dust.
- There a few trees in the environment, but they seems to be lost in this area and not that it is naturally to have trees here on this site.
- It is very tempting to walk in the water to cool down, but it is forbidden to swim in the water.
- The location is an almost complete empty, open area, a ‘beach’, without existing buildings, a new area to be developed and

developed. The sand surface ends in the water. The water is very calm.

- The area is an island cut off from surrounding areas, It is located on the water, ‘Khor Dubai’ or ‘Dubai Creek’, opposite Dubai Festival City (including Festival City Mall, Festival Waterfront Center, Crowne Plaza Dubai - Festival City hotel, Hotel InterContinental Dubai). The area is bordered on the north side by the Business Bay Bridge, on the west side by the busy Al Khail Road road, on the eastern side by the water Khor Dubai / Dubai Creek, and on the south side by the Mohammed Bin Rashid Library, which is currently the only permanent building for this location under construction.
- On the north side, north of the Business Bay Bridge, the ‘D1 Tower’ (284 m high) is very visually present.
- Along the waterfront are shipyards for the construction of small and medium-sized ships. The shipyards seem to be a self-evident activity on the water side: boats which are build are placed perpendicular to the water, behind this covered workplaces are situated, for the processing of rough wood to shelves for the construction of the boat. The workshops are a two-sided open structure with a roof on it, for protection against the climate, mainly the sun.
- The site conditions deal with the climatological conditions. Leaving the site and entering the van with its airconditioning feels as a relief.

3.A. Remizov, Chairman Russian Sustainable Architecture and Building Council

The mission of modern residential architecture as a place of people's lives becomes equivalent to the mission of the image of urban identity, economic impact, a reference to human values bearing the genetic code of culture, art and national self-esteem.

The intensive population growth in Dubai due to expats and as a result of the demand for residential, office space, shops and studios forms the state's attitude to architecture, as to the most effective way to declare itself in the world political and economic space.

Modern residential architecture is perceived as an object conveying information about the city's potential, rather than a utilitarian receptacle of people.

Due to the orientation towards a large number of expats, there is a need to create non-traditional forms of housing, their openness and

associativity of artistic solutions.

Architecture is determined by climatic conditions, creative approach and commercial opportunities.

The main problems that need to be addressed are:

- keeping high-rise city landmarks;
- cooling and ventilation of houses with traditional architectural and planning techniques, as well as innovative technical solutions;
- creation of a comfortable pedestrian environment taking into account the access to water;
- use of alternative energy sources integrated in architecture;
- creation of an image should be based on the concept of regional traditions.

4. Prof. Dr. Architect Héctor García Sánchez, Escuela de Arquitectura de Las Palmas G.C.Spain.

*Ka-ánna bin-nâri mâ bil-
mâi min bálalin
Húçnan wa bilmâi mâ bin-nâri
min dárami*

water

This fragment of the **Qasídat Al-Burda**, poem written by **Al-Bûsîri** in 1213, reflects the sensation that I had to get to Dubai and feel its thick atmosphere. You don't see the desert but you feel it. The heat of the Sun envelopes you and the body responds immediately generating a strange moisture that runs through all its pores. The sea is present, but its water seems to be part of the burning ground. Not refresh. Everything is heat, in contrast to the inside of the buildings. Breathing is suffocating and, at the same time, it makes you feel live in a strange way. You need air, you need feel the air. Outside, the air does not move. When it moves it is to carry the heat more deeply inside your body. When you breathe, you feel a burning and invisible fluid in your interior, like if you were breathing Sun, not Air. Only the

*It is as if on fire
there would be the moisture from the*

*.....and in the water was the combustion
that is on fire
Qasídat Al-Burda
Al-Bûsîri , XIII c.*

air is cool inside the buildings. The dishdash, the kaffiyya, The Abaya, the hiyab, and so on, are the ancient and simple architecture that allows the body to counteract the conditions of the extreme heat. These are the perfect transformation of wool and silk as an optimal system to protect and adapt the body to the environment. However, the predominant architecture is no longer traditional. Getting to Dubai is like getting to another business city in the world, only the presence of the desert distinguishes it. There are no remains of history and tradition. All is new. The city grows day and night... non stop. By the day there are no people walking in the streets. Only cars, buses or the subway. The public spaces are the shopping centers. People go out at night to socialize there.

Leisure life is the night... And, in this amazing urban growth fever, we found the intervention area. Another replica where the genetic of the city will continue its development. However, the plot has a value. An inland coastline runs it. A spit from the sea penetrates inside the land. The sea accompanies a strange landscape between desert and new city. There are small groups of boat builders. Also some fishermen who still maintain the tradition. The waving line between

roofs, sometimes

**without
belt ...**

the desert?

clay?

land and sea remarks a border in which the life of the city and its people seems to be forbidden. There is nobody there. However it is the great opportunity. It's the project.

Water and earth. Water and sun. Raw material that, for once, should be considered as DNA for the urban project and the new buildings. Matter that should not forget the value of tradition and its perfect adaptation to the environment...

...our houses are wool, or cane, or mud with palm leaf

Our clothes are one, no colors, without cuts or shapes,

why did you come? Do you really like the palm trees and

Do you like wool houses and our clothes and roofed

Poem: **For some western visitors**

Saadi Yousef

5. Prof. Dr.-Ing. Mike de Saldanha, University of Applied Sciences Darmstadt, Germany

Aim and Scope of the Task

The interesting and challenging task consists of finding an answer to creating a space for living, interacting and connecting within the framework of the hot Dubai climate as well as an open-minded, international community while recognizing the context and tradition of the location. This task shall be solved both within the scale of the individual living spaces as well as the surrounding quarters. Key aspects here are comfort, sustainability and a high social quality.

Climate and Atmosphere at the Site

On the day of the visit the climate was hot (40° C) with medium humidity (40%), which allowed one to be outside for a certain amount of time. There was intense solar radiation as well as wind. In the shade together with the wind it was somewhat comfortable whereas it was not possible to stay in the sun for more than 5-10 minutes at a time. The intensity of the sunlight made sunglasses necessary. During the day, the surfaces along with the soil tend to heat up and emit thermal radiation. Although it was not a particularly hot day for inhabitants of Dubai, the climate of that day would be considered as extremely hot by European standards. The air smelled like the sea; the earthy and sandy soil

was warm and moist. The close proximity to the water and sea was thoroughly sensible.

Due to these factors, sun protection for the buildings and common spaces outside will be extremely important. The wind should not be blocked completely. Areas with water should be included as they can improve the microclimate. Dark surfaces, which absorb the radiation, are not recommendable. Neither are even surfaces that reflect sunlight directly with a glare.

Historic Context

The site used to be a Dhow boat shipyard. Shipyard workers would work, live and spent their free time there. The connection to the water in combination with fishing reflects the cultural roots of the Emirati at the coastline. Due to the boat construction history, wood is a present material.

This spirit should be implemented into the urban planning as well as the formulation of the buildings. It is required that the direct accessibility together with the possibility to touch to the water remains. As it is an integral component of the Emirati culture to experience water and to be able to go fishing, these aspects need to be included in the overall design.

Social Context

The aim is to find an answer regarding the design of the outside spaces, building structure and interior design while integrating aspects of (thermally) comfortable living and meeting points. It is important that a vibrant community shall not become a gated community. Therefore, the area needs to be created as a space for cultural exchange and meeting point with the local community. The architecture shall provide

suitable interior and exterior spaces as the current surrounding building structures as well as the whole city itself do not provide satisfying answers to these tasks as of now.

The overall goal is to find an architectural solution to providing living spaces in an extreme climate, which not only incorporate the identity and history of the site, but also create room for intercultural exchange and encounters. Comfort and sustainably are key aspects in this context.

6. Giancarlo Paganin, BSc, MSc, PhD in building engineering, associate professor at POLITECNICO DI MILANO_Italy

Site experience has been more a very interesting contact with a broad context (well beyond the physical limits of the project area) than a detailed analysis of a specific lot; even if the plot is partially occupied by existing assets – the ship yard, the ship under construction, the houses of yard workers – the task in effect could be seen as a “grass root project” because nothing will probably remain on the area except the “intangible legacy” of the site related to the use made by people of Dubai of the actual area. The site is used mainly as an interface between people and the creek: fishing, sailing, walking on the waterfront, maintaining and storing the boats are declared as typical activities that people in Dubai associate to the site and that are likely to be expected, at least partially, from the project. On the other hand, the general characteristics of the Dubai context will give a lot of suggestion to the participants

- the extreme weather: the summer, 3 months in which outdoor activities are almost impossible during the day and even during the night; the moderate period, 5 months in which outdoor activities are possible all day long; the intermediate period, 4 months in which outdoor is practicable only at evening and during the night but not during the daytime;
- the multicultural environment, in which people from a lot of different nationalities shares spaces and infrastructure;
- the search for innovation in the real estate industry both in technical aspects and in new ways of living in the spaces: this search for innovation may give the participants the chance to propose different interpretation of the “cultural village” project task;
- the interest of the authorities towards the

different aspects of sustainability, from the use of renewable energy to solutions to the improvement of social cohesion;

- Dubai vision for its development has been summarized in the term “future accelerator”, i.e. Dubai expects to be the place in which the future solutions are experimented in advance respect to other locations;
- concerning innovation in building the factors that have been discussed during the site visit are summarized by the following keywords: smart building, renewable energy and 3D printing and manufacturing;
- the surface standard for residential building are quite higher than EU standards in terms of square meters per inhabitant;
- the on going development of several infrastructure for public transport in order to provide transportation systems that can alternatives to the car (car is actually the only way people move in the area).

Concerning specifically the site characteristics and constraints, it is possible to focus some subject as, for instance: the proximity of the library that is now under construction and that will represent a landmark for the site; the variation of the creek level due to a tide that has been declared as an excursion of 2 meters and this could be considered both for permanent structures on the waterfront and if participants want to use floating items in the project; the creek itself that represents a resource that could be used for several purposes and in different ways considering the peculiarity of the salted water; the proximity of the infrastructure for public transportation both on ground (metro, bus) and on water (taxi boats).

7. Jozef Kuran, Slovak University of Technology in Bratislava

Dubai - the city

The city of Dubai is a pearl in necklace of United Arab Emirates. Situated by Persian Gulf (Arabian Gulf) and spread alongside the coastline. This layout condition defines the overall linear concept of city developing scheme. Natural conditions are overwhelming and straightforwardly influence whatever architectural effort possible. Dubai is colorful and pulsing city, in which many different nations found their place. Effort is noticeable everywhere, day or night. Burj Khalifa tower is strong visual feature, widely accepted as iconic structure visible from great distance around the city.

Dubai always aspire for the best, excellent is the starting point, smashing is expected. Even if the structures, buildings, emotions, experiences, impressions can be judged as "grand", practical sense, durability, objectivity, relevance, usability, feasibility is always present in every aspect of effort - architectural or social based.

Journey of Dubai, starting as petite compositions of small houses surrounded by white sands, to nowadays global city is headed to future. Dubai, in my humble opinion, really likes looking to future, but traditional aspects are always present, thus providing a valuable sense of direction for this mass scale urban structure, some kind of essential basic point to rebound.

Contest site

The Dubai creek provides curvilinear extension of seaside extended deep in urban structure. Creek is still used to fishing purposes, water transportation. Traditional ships (dhows) are strong visual inspiration. Nevertheless occasional fresh breeze upon water surface is really refreshing. Connection to this water surface is a story worth narrating.

Cultural village (planned) is laid alongside creek costal line, opposite Festival Waterfront Centre. Significant public building - Sheikh Mohammed Bin Rashid Library (currently under construction by Dubai Municipality) is placed in the central coastline position, starting by your contest side and ended by 6th street extension. This building is important neighbor to talk to during any daring design concept. Triangular contest site plot is a starting point to reach the planned Cultural village urban structure. It could aspire to be precise and elaborate but engaging and mesmerizing tapestry of ideas formed to usable design. Dubai loves enjoyable places

Contest

This contest is an opportunity to tell the whole story - not only concepts, ideas, shapes, volumes, surfaces, patterns (oh yes - patterns are applied very carefully everywhere in Dubai) resulting in floorplans and sections. All elements of sustainability awaits to take their part in creative process. Considerable local natural conditions are daring you to create more than outstanding - to create the extraordinary, that's what Dubai is usually expecting.

Advice

Please take into consideration that staying outside is limited for significant period of year (sometimes even in night) but it is very inspiring to directly feel the vivid atmosphere of surroundings. The key is to find the strategy for future concept of Dubai planning in terms of responsible and inspirational resources usage. Don't be afraid to imagine unexpected, to challenge harsh elements to be helpful for society. World is changing and the reasonable movement needs to find understandable form.

8. SANDRA TREIJA, RIGA TECHNICAL UNIVERSITY

Location

The main advantage of the competition site is the location next to Dubai Creek, which has been a significant factor in urban development of the Dubai through the decades. Today it represents the high recreational potential of the entire district.

The project area is well equipped with transport

infrastructure - it is easily reachable from Dubai Airport, as well as from the city centre. Business Bay Bridge, a Creek metro station and Al Jaddaf Marine Station all located next to the area, hence the provision of the area with different types of mobility is well provided. In the future another crossing of Dubai Creek will be developed.

Waterfront

The waterfront of the site is relatively lean, it is suitable for boat launching in the water, as well as angling and other forms of human contact with water. According to Dubai's municipality, water in the Gulf of Dubai is not suitable for swimming due to water contamination. Water level fluctuations in the Dubai Creek are about 2 m.

Heritage

Part of the project area is currently used for the construction of traditional wooden boats (dhow). Currently, a large boat is being built on the shore, claiming to be registered as the largest boat in the world. As this is the only evidence of the historic use of the site, it needs to be given due consideration in the design process.

9. Prof. Arch. Sergiu Petrea, UAUIM, Bucharest

The site is difficult yet challenging, with few strong points to rely on but with a great perspective for future development. The context from previous contests is missing quite a lot and it will be difficult to be approached by the students. You can't explore the directive paths emerging from the landscape, nor the influence of nearby heritage. It is difficult to comprehend the easiness with which the site can be transformed through political decision since there are a few remains of culture and tradition (ships building yard, soccer field).

The impression is of a powerful horizontal line in which it is difficult to mark and preserve the human presence as the developers require. From the other side of the water channel the view is great, the site is projected over a very dynamic skyline that will be a very favorable background for the development.

The site has good connections with the future city infrastructure and will be easily integrated in the desired master plan. The position along the shore will generate the desire to "play" more with the water front for the students although it is difficult to manage because of the climate. The proximity of the massive structure of the Public Library as well as its iconic silhouette will force

Weather conditions

During the visit of the project site (13.09.2017 from 9.00 to 10.00), although there was a slight breeze, the air temperature (40°C) was inappropriate to stay outside without shading. This is one of the project's challenges - how to design in hot and humid climate not only buildings but also outside public space, providing their users with comfort.

Context of Dubai Development

As the project site is located in the part of the city where active development is planned, the future projects of the surrounding areas - Cultural Village 1, Cultural Village 2, Dubai Festival City, Dubai Creek Harbour etc. will have the significant impact to the area.

the development so consider future connections to this area and influence the mass of the assembly as well as the design of in-between spaces.

The restrictions are important due to site constraints (hard to include a basement, also an underground parking, there are problems of tides and water level rising etc.) and will lead to additional challenges for the project.

Last but maybe of much more importance, sustainability as a strategy is hard to achieve because of harsh climate conditions (the high temperatures are quite a problem for designing user friendly outdoor spaces and will have to be properly understood by the students who might not be prepared for working with such conditions).

However, the site is fitted for a daring development due to its strategic position alongside the water front and the opportunity to integrate social and cultural diversity. The aims of the developers "SUSTAINABILITY, INNOVATION, DRIVE THE CITY FURTHER" may be enhanced by the site features and the student's creativity but with the condition that the requirements will be clearly specified in the design brief.

10. *Teemu Hirvilammi, Tampere University of Technology Finland*

Context:

Currently contest site is an open area to be develop as a part of cultural village areas. Now days it houses functions for self-motivated actions appreciated by the users. Main actions are fishing and playing football in the weekends, but most visual action of area is the yard for building wooden boats with a wood storage and a wood workshop. These functions are to be moved as part of urban development.

Site:

Topography in the site provides quite easy conditions for building. It is strongly characterized by curving river alike water and views the opens along it and another side of it. The site is rather quiet despite of the passing car traffic on the bridge in between cultural village areas.

Surrounding buildings

The area is developing to be a Cultural village containing multicultural living environment for expats and their families. The scale of the buildings variates dynamically according to masterplan draft. Dominant building of area is the new library in construction what creates public functions to area. The existing buildings are in various style but uniform the pale colors.

Traffic:

Competition site is a public transportation hub with an easy access by metro and water taxi.

Climate:

Climate is harsh and demanding for rather extreme heat on summer and when easy weather for outdoor living is few winter months.

11. *Dipl.-Ing. (FH) Architect Roland Matzig, Jury Member*

We took the bus from the hotel which is located just opposite the river, crossed the bridge and within a few minutes we reaches the side. On side there is nothing - at least this "nothing" was surrounded by two interesting situations. Firstly there is the shore almost 1 km in length. Water tide is about 2 meters only, so you find a nice "beach of sand". Secondly there is a "freaky" shipyard. Not very professional but an area big enough to build the biggest dhow (sailing boat for carrying material) ever build. The area is

given for free to the people who build their ships there. This "situation" is what is called "cultural heritage" in the task. For me as „born und risen in "Good old Germany" it took some time to understand that a country and a city like Dubai is talking about heritage when something is older than one decade. So one of the challenges will be to reflect this local heritage in designing something sustainable and not just something "extraordinary looking".

