

The House of Arts and Culture The Lebanese-Omani Centre

بيروت
[Beirut]



How to create a single institution out of a myriad of art forms and media?

**In a cosmopolitan city, in an age of icons
- how to create an architecture both fitting in and standing out?**

How to make a public building accessible to the public?

Beirut

When New York Times recently listed Beirut as the no. 1 destination in the world, it became obvious, that Beirut is ahead in reclaiming its cosmopolitan status as the Paris of the Middle East. Building in Beirut is designing for a city of inherent contradictions. The cityscape is a potent mixture of oriental and occidental architecture: Modernist, Ottoman and French colonial style, giving Beirut a distinctive diversity.

How to fit in with such a heterogeneous setting?

We propose to develop an architecture that is both contemporary and vernacular, local and unique, integrated and outstanding, creative and recreational. Blending elements of the European masterplan with the traditional souks of Beirut, merging local landscapes such as Grottes des Pigeons with urban elements like L'escalier des Arts.

A public building for local life and cosmopolitan culture.

House for Art and Culture

The program of the Lebanese-Omani Centre is a blatant accumulation of different programs – none more important than the other. How to create a single institution out of a myriad of art forms and media?

We propose to create a house for art and culture plastic enough to incorporate a host of distinct programs, different cultures, independent art forms and individual expressions into one hybrid entity – one and many at the same time.



Dead end vs. a destination

The site of the House of Art and Culture is located on the edge of the city centre, sandwiched between the ring road and one of the most popular shopping streets. With no way to pass the highway the street is doomed to be a dead-end, blocked by our project! Rather than blocking the public path, the House for Art and Culture becomes the extension of the public realm above and beyond the ground floor to the roovescape of Beirut – a destination rather than a dead-end. The sky park will host a multitude of informal programs, serving as a destination in its own right, exposing visitors to the cultural activities along the promenade on their way from the street to the sky

Art promenade - urban space as cultural institution

Since there is no apparent hierarchy in the program, we propose to organize all the different functions along a central spine, like a “street” where each program has its own “address”. The promenade connects all programs with each other allowing for any conceivable combination while ensuring complete autonomy.

Internal exterior

The House for Art and Culture will be situated in the dense urban fabric of Ghalhoul District. Rather than breaking away from the context to attract attention we propose to complete the planned city with a discrete urban block integrated into the surrounding city fabric. To fit the proportions of the site we curl the promenade up in a giant spiral staircase, ascending from the ground floor to the rooftop merging urban space and architecture. The compact block constitutes a condensed programmatic layout allowing the various arts to benefit from each other’s proximity.

The building in the city + the city within the building

The House of Art and Culture is essentially a condensed block of cultural activities and a public path to access them. The result is an urban hybrid – half object, half void – half architecture, half urbanism.

Grottes des Pigeons

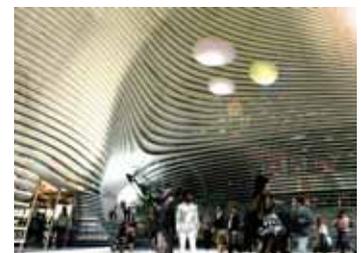
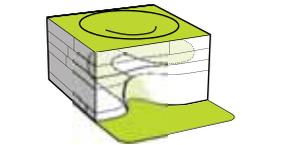
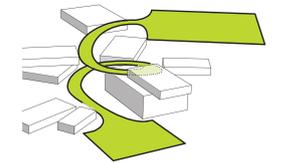
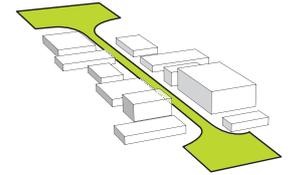
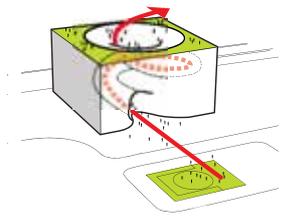
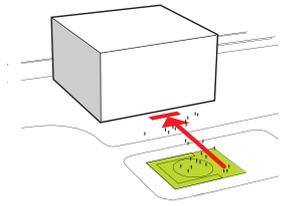
The excavated volume is like a hybrid between a Beirut block and Grottes des Pigeons - at the same time integrated and outstanding in its urban context. Like an Anish Kapoor sculpture the quality is not in the object but in the absence - not in the urban block but the urban space within it. The House for Art and Culture is both a building in the city, and the city within the building.

Block of sandstone

The building is cloaked in a striated skin of the local sandstone, making it blend in with the local architecture and landscape. The striation invokes the geological layers observed on native rock formations. Where the public trajectory enters the building the layered façade becomes steps, landings, arena and roof terrace.

Behind the sandstone slabs the actual climate screen is free to change material to meet the requirements of the contained programs. Transparent when views are desirable at lobbies, restaurants and workspaces. Translucent when daylight but privacy is wanted and opaque when the functions need to be darkened. A sunken courtyard on the top floor is integrated within the envelope allowing the breeze to pass through the outer skin.

The horizontal sandstone lamellas are varied in depth according to studies of thermal exposure taking into account natural shade from the adjacent buildings. The result is a gently varied façade that combines the stability of a calm structure with the movement of public flows and the daily passage of the sun and shadow.



Internal Exterior

Urban life will be an integrated part of the House for Art and Culture. A public path is carved out of the condensed block of cultural programs extending the urban space within the building while creating public access to all its constituent programs. Rather than having the main entrance on the ground floor – all programs will be directly accessible from the art promenade within. The building is a pedestrian infrastructure devised as an "internal exterior" going from the street level plaza up to the skypark on top. The internal exterior is an informal place for exhibitions, marketplaces, lectures, leisure, park, concerts etc. within the frame of the block. The internal exterior constitutes 175 meters of art promenade like a contemporary reinterpretation of L'Escalier des Arts. The internal interior will help break open the iron cage of the traditional cultural institution, reintroducing it to the city, making it livable and accessible.



Eroded block of program

The public path is excavated from the stack of cultural programs leaving an imprint on all the spaces it passes through. The horizontal layers in the façade slide out like an eroded block of sandstone forming stairs, informal seating, shelves, windows and skylights. Each space is conceived like an encounter between the programmatic organization and the public passage: functionalism formed by flow.



Sky park

At the roof garden the art promenade expands into an informal amphitheatre open to the sky. Bars and cafes, book vendors and street artists, locals and visitors will gather to hang out in the afternoon admiring the panoramic views of Beirut's skyline or simply enjoying the casual atmosphere. The amphitheatre will be a perfect gathering for outdoor concerts or open air cinema. Conceived as a purely public space, it can also easily be used for special events as a massive expansion of the indoor capacity.



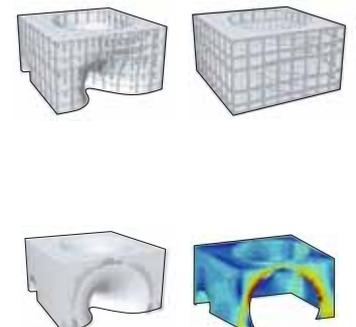
References:

- The traditional souk of Beirut is an urban space both indoor and outdoor. An inviting envelope for a great diversity of functions active all year around.
- L'Escalier des Arts (the Saint Nicolas Stairs), is a 125 steps and 500 meters span staircase. The stairs are used as an open-air art exhibition site.
- Grottes des Pigeons - One of the main tourist attractions (for locals and foreigners) is the sand stone rock with a picturesque location and formation
- Anish Kapoor - Kapoor's pieces are often simple, curved forms, engaging the viewer, evoking mystery through the works' dark cavities, awe through their size and simple beauty, tactility through inviting surfaces and fascination through their reflective facades.



Construction principles

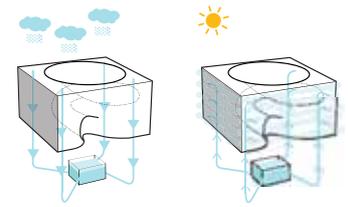
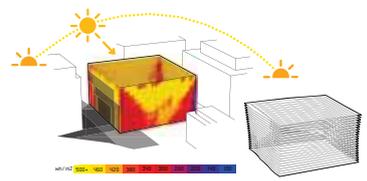
The building structure has been designed and will be detailed based on locally available construction expertise. The structural approach has been to subdivide the building into a series of regular building modules in both directions such that a standard grid which supports a series of columns that in turn supports downstand beams and slab is achieved. The frame is formed in reinforced concrete. This standard pattern and structural form is distorted around the building penetrations so that vertical columns become inclined around the voids yet still retaining the primary structural philosophy. These inclined columns act together with the floor plates to form arches and catenary structures which allow the internal openings to be accommodated. The introduction of such internal disturbances results in a series of internal horizontal forces in addition to external horizontal forces such as wind and notional forces. These forces require resolution and are transmitted via the floor plates to the external elevations where they are resisted by elevational vierendeel frames tuned to accommodate these forces. The vierendeel frame module is on a denser grid than the primary structure allowing the cladding to be fixed to the building at closer centres.



Smart Sustainability

We propose to combine contemporary intelligence with vernacular wisdom to create an architecture tailored for the local climatic challenges. “the best of the old and the best of the new”. Rather than considering sustainability as an add-on of active machinery, we propose primarily to explore passive initiatives: engineering without engines.

The average yearly dry bulb temperature in Beirut is 21.6 degrees, almost a perfect climate that also drives our environmental design. The challenge is to transfer the summer heat (absolute maximum 32.6 degrees) to the winter, and transfer the coolness of winter (absolute minimum 4.4 degrees) to the summer. If achieved with 100% effectiveness there would be no need for external energy supply for climatic control and the building could show that art and culture go hand-in-hand with the best sustainability intentions of the world. This is our goal, and the following are our methods:



Variable facade depth minimizing thermal impact

The amount of solar exposure on the four facades during an entire year is simulated and calculated. The data is integrated in the design as the lamellas vary in depth according to solar exposure, reducing the need for cooling and heating throughout the year.



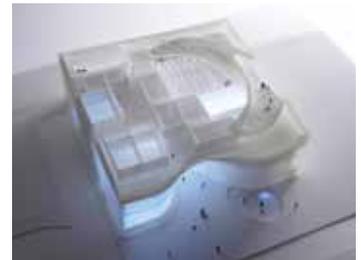
Water on sandstone for a cool microclimatic oasis

Beirut is an urban heat island with a need for 882 cooling degree days and 379 heating degree days. Evaporation of water from clay pots is a timeless method for natural cooling. We propose fragmenting the facade and thus creating an enormous surface area of local sandstone. The building collects water during the rain season. In dry summer months, the accumulated water will be spread onto the facade and evaporate, thus cooling the surface of the building as well as the air around the building. The building will counteract the urban heat island effect by creating a cool oasis locally. Visitors will meet a comfortable climate even before they enter the building.



Plants for clean indoor air

Plants and animals have coexisted for millennia. We emit carbon dioxide, plants absorb it, and vice versa for oxygen. Plants also absorb chemicals from the air, and recent research is beginning to catalogue these effects. The human body emits quite naturally certain chemicals, such as methyl alcohol, acetone etc. Standard solutions to this problem are the requirement for large amounts of ventilation to dilute these chemicals, but the more elegant solution is to introduce plants that actually eat these chemicals. The Peace Lily is particularly fond of these chemicals from humans, and our project therefore includes large clusters of this plant.



Minimalistic high technology zones

The implementation of all the above methods will provide a building with a very high degree of passive, natural, comfort. Occasionally, however, there may be a need for our human technological intelligence, such as, exhibitions requiring climate and humidity controlled environments. In such cases the most effective modern technology will be needed, but because the building itself is so inherently climatically stable, the size of the machines needed will be minimal, and the energy and resource use will also be minimal.



Economic sustainability

The theme running through all the above methods is maximizing space and comfort while minimizing resource consumption and energy use. In economic terms this will mean that the building will need very little future funds for maintenance and utility bills. Income from activities in the House of Arts and Culture will therefore not need to be shared with energy supply companies but can be used exclusively for promoting more arts and culture.

