

## Concept - Urban and architectural objectives

**Who does read Beirut?** The transposition of a sentence from the French psychiatrist Jacques Lacan marked the beginning of our ideas for the project of the House for Arts and Culture in Beirut.

That question reveals that the true reading and consequently the knowledge of an element begins when you look at it with criticism (or look at it objectively).

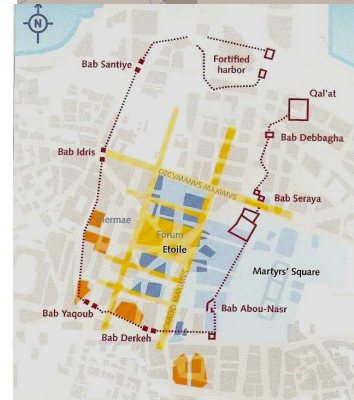
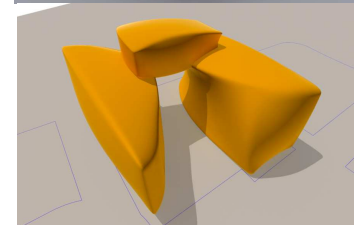
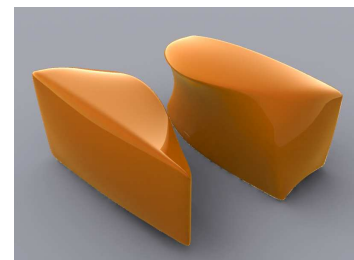
Before analyzing the urban context of Beirut, it may first be necessary to analyze the **social context**, which is multicultural and highly scattered, in order to understand exactly for whom the House will be built. The House must be of use to Lebanese people, before being a centre for the production and diffusion of culture at an international level. The guidelines request a building for the rebirth of a city: an intellectual arena, a place for self expression, for creation and that it be multicultural. A building that can give power to artistic activities, developed even during the war and recognized as important all around the globe. A building with no boundaries. We ask ourselves who is this building for, if the religions and interpretations of culture are so many.

**Multiculturalism** has been translated in a building with an elevated number of facades. We thought about splitting functions in macro volumes in relation with each other. Two principal volumes that seem to look at each other and speak to each other, while they are connected up and down by a flying volume and an underground volume, which is the Hall. Functions concerning the theatre and oral expression take place in the east wing, in the west wing all the other activities and in the central volume the cinema and the cafeteria. Besides the configuration of this building of excellence, it provides the opportunity to recognize or at least guess, which functions take place inside. The public space – designed like a garden, an element which is always present and typical of the Arabian architecture – which is in between it is also an element of conjunction like a space for the meeting.

Then we analysed the **urban context**. In the Historical City Centre of Beirut, the buildings follow the lot geometry, with rectilinear facades on the main streets and open spaces inside. We have decided to follow this configuration with the facades on the outside of the lot, while internally, the facades appear smoother and more curved.

Reading historical maps of the city we have seen how in medieval times near the area urban doors were present, elements of connection between an outer and an inner space. The boundary of the historical city has been moved, whilst the walls have now become a highway. The building shape and the **central**

## The Imaginary



## The Symbolic

**room of public space** that is generated gives the opportunity also to have some views on the “outside” city, so going over to an other division.

The composition reminds to primordial shapes, to ancient emotions, revised and smothered in an organic way, (the megaliths also is present in Lebanon in Baalbeck). The natural shape wants to accommodate and invite you in, first going down under ground to later going up and elevating ourselves with culture. A building that is at the service of and is a meeting point for all Arts and Culture (**Mādina for Culture**, trad: city, but also servant of culture).

## Functional and spatial organization

### Access

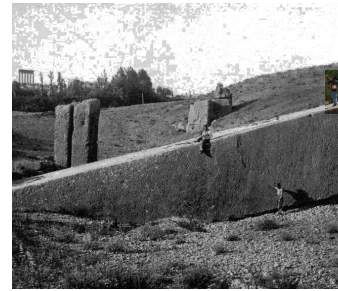
There are **different entrances** to the building: north principal entrance (Level -1); service west entrance for deliveries, the staff and the parking (Level 0); a north entrance dedicated to the theatres and the cafeteria to be used in the evening (level 0). With sliding doors and walls it is possible to isolate the different functions and permit access to some areas only.

### Vertical and horizontal distribution

The main entrance is from a ramp that leads to the **great Hall at the lower ground (-1 level)**, 8 meters high, lit during the day with natural light through chimneys visible from outside also similar to the décor on the floor of the public space. The hall is linked to the **two vertical distribution elements for the visitors and artists** constituted of Foyers with high ceilings both located on the north sides, where there are stairs and elevators. All the activities overlook on these Foyers. The **staff vertical link** is independently located in the south side of the west wing. On the east side of the Hall (L-1) is the Theatre's Foyer, linked with the Great Performance Hall (L+1), the four level Balconies, the Small Performance Hall (+4,+5), the Cinema (+5,+6) and the Cafeteria (+4). The Cinema and the Cafeteria are the only function areas located in “Bridge Volume”. On the Hall's west side are the Exhibition Spaces (0,+1), connected with a separated staircase. It's possible to reach, also from the lower ground level (-1) all the other functions: Library (+2,+2.5), Administration offices (+3), the Workshop and Training Rooms are also linked to the cafeteria (+4) and the Cinemateque (+5), also linked with the Cinema.

### Main Functions

The **Hall** is the **focus point** with functions related to accueil and orientation; **area of representation and self-representation** and the interchange of ideas.



## The Real



People are drawn to the presence of different activities and thus stimulated to look further into the items inside all buildings. The **model of the central room** aims at developing all activities around a central core.

The external greenery comes inside creating both a winter garden in the Hall, and two vertical green walls in the west and east foyers.

The **Great Performance Hall** (L 0,+1,+2,+3), with a flat floor and hiding seats for different use, four balconies of varying levels and a "palco reale". The changing and meeting rooms are located around the fly tower and at level +3, between the great and the small performance halls.

The **Small Performance Hall** (L +4,+5) is designed to allow the maximum flexibility of the representation of space for theatre, fashion shows, conferences, parties, as a dance floor etc..

The **Cinema** in the Central Bridge Volume with the removable seats and the lateral sliding walls can create an open space with direct views on the exterior. It could also be possible to design a moving roof which would be useful on summer nights.

**Temporary Exhibition** (L 0,+1) on two levels; through big doors opened in the façade it's possible to bring in large works of art directly from street level. Temporary exhibitions will take place in huge open spaces, mainly convenient for contemporary art, limited only by the facades. The use of filtered natural light are both possible (membrane in fibreglass for a uniform diffusion of light) or obscuration systems to create a dark room for multimedia installations.

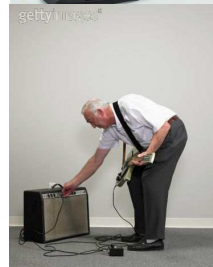
Special attention is given to ensure **accessibility for all** kinds of users with elements that generate stimulus, perception linked to sense of vision, sound, touch and kinesthetic.

The **Library** (+2,+2,5) with a double high in the central area, with reading rooms leaned on it, designed with acoustic insulation and translucent walls to let the light pass through, seem to remind us of alveolar cells.

**Workshop and Training Rooms** (+4) located mostly in the west wings, but Theatres and Dance rooms are near the Theatres. This Area is directly linked with the cafeteria and a lounge area for artists. The **Cinemateque** (+5) is directly linked with the Cinema.

### **Structure and materials - suggested technical and building solutions.**

The facades has been resolved with a weft of **three-dimensional pixel** (width 20x20x12) that create a regular grid and an uniform chromatic yield. Three different materials have been used (ceramic coloured ivory, transparent glass and translucent white glass).



### **The Drives**



**Ceramic** has been an element always typical in Arabian tradition and architecture; the project wants to reinterpret this material connecting it to the contemporary symbology of **Electronic Art**, using the pixel as the main constructive element of the image and the architecture of the building.

Consequently, to the natural shape of the facades special ways of (posa a secco) resting to dry on regular grids have been studied to put the “pixel” in a uniform way and with an opacity increasing from the bottom to the top also referred to the functions located inside. Transparent and translucent pixel at the base of the building, full pixel towards the top.

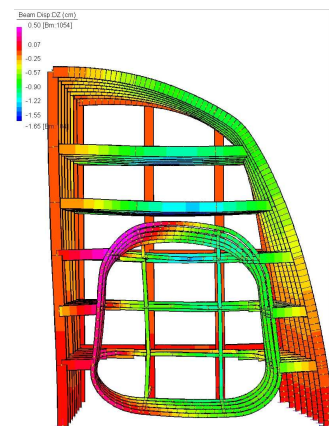
### Technological solution

The **HVAC system** is based on a heat pump that includes a reversing valve and optimized **heat exchangers** so that the direction of heat flow may be reversed. The reversing valve switches the direction of refrigerant through the cycle and therefore the heat pump may deliver either heating or cooling to a building. This system is coupled with cooling tower.

In order to improve air quality and also to control thermal loads for summer cooling, green wall (vegetation layers) is applied on the fly tower envelope towards the garden. This technology can limit the heat island effect, and reduce the surface temperature of the wall below the green, which is exposed to direct solar radiation (this phenomenon is more evident when solar radiation reaches its maximum). In this case the effectiveness, is due to the shielding from the solar radiation, involving complex phenomena of evapo-transpiration, and modifying convection and radiation heat transfer from the wall surface to the surroundings.

A water layer is placed just behind the not-continuous ceramic curtain wall. The goal of this strategy, based on evaporative cooling, is to control temperature and local moisture. The water is gathered and reused into cooling towers.

Visual comfort is achieved in the exhibition room by natural daylight that pass through light-diffusing insulating glass elements, able to illuminate rooms evenly to a depth of 15 metres with minimum shadowing. This technology is coupled with dimmerable lighting system.



Outdoor evaporative cooling

