# The HOUSE OF ARTS & CULTURE in BEIRUT

#### Main Concept

When creating "The House of Arts & Culture in Beirut" we started from the complex history and cultural diversity of Beirut.

In a way similar to how cultures from both the Middle East and Europe have coexisted in Beirut we want the diversity of the activities in the cultural house to enrich and inspire each other. "When you respect diversity it will encourage creativity".

Beirut is located between the oceans and the mountains, one part of the city is Christian and one part is Muslim. During the daytime it can become very hot under the sun while at night the cool breeze from the sea is chilling. The interconnection and interdependence between opposites can be expressed by the concept of yin and yang. Yin is the earth, the darkness and the feminine, the moon and the cold. Yang is the heaven, the light and the masculine, the sun and the warmth.

## The Building

The dark and the stable are represented by a large black cube that houses the "large performance hall". The light and the flexible are represented by a simple basic structure of beams and slabs, which interconnects with the cube and can host a variety of activities.

The stable and the flexible are in a constant intertwined harmonic motion, we give form to this by the spiral shaped motion of the staircase along the open inner yard. At the centre of the inner yard is a pond that is connected to the pond in the garden outside. By letting water flow between these ponds the outside of the house is connected to the inside. It is possible to move between the street life, through the garden and the inner yard, and up to the green roof terraces ((and experience how the outside becomes to the inside).

### Location in the City

The building turns its closed side towards the busy traffic and the scorching sun in the south, something that we want to screen off. The open north façade, which can let in light and the cool breeze from the sea, turns towards the city. At night time it becomes a "lantern" full of life and activities. The entry hall can be opened up thus creating a common outer space with the garden and the inner yard. The entry hall is vertically connected to the foyers of the "the three performance and cinema halls" by the open inner yard.

### Material

The flexible part of the building, made up of pillars and concrete slabs, has high storey heights (6.7m). Flexible wooden constructions can be placed between the concrete slabs to create mezzanines and various spaces to meet the demands of the different activities.

The flexible part is encompassed by a double glazed façade. Different materials and structures can be placed between the glasses of this façade in order to screen off the sun and create a beautiful composition towards the street.

The stable part of the building, the black cube, anchors the building to the location and creates a distinct presence in the official foyers.

### **Environment and Energy**

Well considered choices of material and energy systems are important investments that create a durable building and lower operation and maintenance costs. The heavy slabs and the massive wall of the cube function as "temperature regulators". They can keep the cold that has been stored during the night by the cooled water circulation. During the winter they can store the excess heat from people, lighting and technical equipment. Additional heat can be supplied from heat exchangers and ground source heat. Excess heat can be ventilated away by the double glazed façade or it can be used by the heat exchangers to cool the water in the tanks.

During certain times of the year natural ventilation is created when the warm black cube creates a rising air current, causing a current of cool air to flow in from ground level. The incoming air is cooled as it passes over the cool ponds.

Wind turbines and solar cell panels generate electricity and heat so that the building can be self-sufficient.

The vegetation on the roof terraces protects the roofs from the strong sun as well as adding oxygen and collecting the large amounts of rainwater that falls during the winter season. Surplus water is collected in a storeroom together with purified water from the sewer. The self-sufficient water system can also be used for a sprinkler system.