#### Concept

The House of Arts and Culture is a twenty- four-seven city house, fuelled with the creative potential of a vibrant cosmopolitan culture that thrives on activity, community, and cultural life.

In Beirut's central district, the city holds an inexhaustible sense of myth and memory; ever changing as excavation reveals histories. New construction remodels the city, and in turn creates a continually regenerative public life. Beirut is comprehended as a porous city, where distinctions between public and private, old and new, inside and outside, are blurred and seamless.

These expressions are injected into the House of Arts and Culture. Different cultural houses are interconnected by a series of viewing and communicating platforms that are open, porous, flowing, interactive, vibrant, and illuminating. Spaces sequence through the building - moving changing and becoming more intimate and shaded. A sculptured program is generated, the mass of the building compressed to strengthen the relationship with urban surrounds, and extruded to give presence, height and identity. The north-south axis creates connection from the sea to the mountains, the south façade is a 'billboard' for motor traffic and beyond, the north the street and public front door.

The House sits adjacent to a city traffic artery, nestled amongst similar site and zoning envelopes. The coast, plateau and the mountain are metaphors for the House; street interaction, terrace and transition, exhibition and outlook.

## Material Expression

Concrete is a familiar local material, well established and proven. Chosen for intrinsic qualities and architectural expression, it is the primary structural solution, visual and thermal mass, inherent fire protection, and acoustic performer. Attributes of colour, form and texture will be exploited to create ambience in each space.

The facade is multi-facetted, regenerative, reacting - yet always robust and protective. Solid concrete walls with thermal mass incubate, insulate and stabilize. The relief and texture in the concrete











North-South Connection



surface is adapting, changing and alive - representing ideas about the house and the city. Strategic porous zones within the concrete allow specific and controlled light penetration. The exposed windows to the south, north and east are protected. Glazing is controlled to the east and the west. Large deep frames, and recessed glazing systems prevent excessive solar gain. Screens offer sunshade, and recessed walls and corridors create outdoor and shaded buffer zones in front of larger glazed areas. Operable windows can allow fresh air. Where suitable the facade is porous and transparent to allow direct visual connections from the house to the city.

#### Stacking

The main considerations for the location and position of the large performance halls is flexibility with direct loading access for optimal use and to organise public spaces of the building.

From the entry the main stair rises as a street, penetrating the building as a meandering journey. The southern end visually reconnects with the city at large. From the main lobby visitors can circulate directly to any performance zone or exhibition zone or alternatively through and/or to the dynamic fixed and ever changing program and daily activities dispersed in the building.

The restaurant and retail spaces remain public at all hours. An onstreet elevator links an outdoor urban park, with cinema, bar and elevated plaza as a flexible extension of the street and art program of the city. The perforated terrace with green cascades is a space for activity - for poetry, music, painting, sculpture and performance.

#### **Incubator and Exhibition**

As incubators for artistic pursuits, the spaces have potential for improvisation - animating, enlivening and transforming conventional program. Both theatres are acoustically controlled spaces with the most flexible uses and ease of access directly off the loading dock. The loading dock supports the whole building utility and transforms into a new performance and exhibition space. A public space below ground creates a new Cinematheque gallery. The outdoor cinema





Loading





and terrace can be used for performance, art and public activity. The exhibition gallery space can be adapted in many configurations.

#### **Performance Spaces**

In order to provide maximum flexibility and minimise turnaround time the large performance hall has been designed as a multi-purpose venue incorporating six large retractable seating units on compensator lifts. Hydraulic raised seating options for the main theatre allow different performance modes. These can be arranged in either Italianate or arena-style configurations. In the Italianate configuration, a small balcony provides the design seating capacity. For conferences, conventions or special events requiring a flat, open floor, the seating can be stored or moved to the rear of the hall. The hall is a multipurpose venue which will be used for both spoken word theatre, dance and music and therefore will require a variable acoustic using an electronic reverberation enhancement system.

#### Lighting and Illumination

Natural light permeates the building. Light is filtered and dappled through perforated walls, screens, ceilings and greenscapes. In darkness, the building emanates internal life and activity. Voids and gaps join creating volumes of ambient glow and shifting colors. The light and drama of events creates a beacon in street and sky projecting a city wide and world presence.

## **Engineering and Structure**

Five parallel and perforated walls run north-south defining both the eastern and western extremities of the building envelope and the flanks of the primary circulation cores. Secondary walls either span onto or punch through the primary walls. Tertiary, primary and secondary walls combine to describe the boundaries of the internal and semi-external spaces, forming dramatically cantilevered volumes. The deep wall sections provide transfer structures to deliver the load from the irregular structure above to the more regular layout below ground. Elements of the superstructure are suspended from walls, by utilizing very slender tension components that can be incorporated into screens and trellises thereby disappearing into the envelope.



Exhibition Flexibility



Maintain the flexibility



Illumination



# Acoustic

This facility incorporates a number of performance spaces. It will be important to achieve appropriate acoustic conditions for each of these spaces. The key considerations are; theatre planning and systems, sound insulation, background noise levels, room acoustics design.

## **Ecologically Sustainable Design**

A range of sustainable initiatives optimise the building's environmental performance. An appropriately designed envelope (including structure and its facade) is the most cost effective method of ensuring sustainable outcomes. Optimising the envelope will help maximise occupant comfort, reduce annual energy costs and HVAC sizes. Sustainability initiatives include; use of thermal mass, natural daylighting, passive ventilation, prevention of excessive solar gain, efficient artificial lighting, water storage and efficient water use, energy systems such as photovoltaics, solar hot water and material selections that reduce environmental impact.

## **Building Services**

The aim is to create comfortable, well-designed and well-maintained environments for the benefit of building users, operators, and owners. It must be highly energy and water efficient and buildingspecific, accounting for initial investment, ongoing operational costs, flexibility and adaptability in use. Where possible, spaces will be mixed mode ventilation. Natural ventilation will maintain internal thermal comfort for transient spaces where conditions are favourable. Mechanical systems will be used only where the function areas require close thermal control.

## Electrical

At this preliminary stage, the total electrical load estimate is 8 MVA. This needs to be developed and confirmed further for exhibition floor plates and exhibition and specialist audio visual and communications installations.







