- 0- Welcome to the House of Arts & Culture of Beirut, from now on, "The House"...
- **1- Horizontal and Vertical.** The programme is grouped according to its qualities. By dividing the functions into two categories according to their requirements on height and interaction, we obtain two volumes: a tall box and a low plinth. In the box, we place the programme that requires big heights and vertical circulation, while in the plinth we accommodate the programme that could enjoy a direct connection to the street. By keeping the plinth as low as possible, we ensure maximum urban conditions, in the surroundings and within the plinth itself.
- **2- A 1000m2 billboard and an elevated plaza.** How to position the Magic Box and the Active Plinth? The Magic Box will be placed on top of the plinth facing the ring road. Its close façade will protect from the noise of the cars and from the South sun while it becomes a large billboard for the ring. The free space is an elevated Plaza for the users and pedestrians.

## Context:

A very busy road, a quiet plaza, and two as yet unknown future buildings (40m and 150m height) form the immediate surroundings to The House.

- -South: the façade facing the ring is the only one that enjoys a long distance view. It will be visible from thousands of cars and pedestrians in the ring. This fact leads us to place the box next to the highway. The box is the announcement of the building. It will become a billboard that may announce the activities of the house, or project a movie, or be rented for advertisements on certain occasions to generate extra funding... However, we have to take the noise from the cars and the sun radiation from the south into consideration, and therefore we propose a very closed façade, with just a few openings that answer the big scale demands of the façade.
- -North: Protected from the noise and the afternoon heat and enjoying the morning sun the elevated Plaza will be facing the existing square in front of the site. At a different level (10 m higher), this Plaza becomes a podium for concerts, a platform for exhibitions... a lively space.
- *-East:* After the opening of the tunnel under the ring, the pedestrian route to the north will be established. The exhibition hall, the lounge, and the café are placed along this route.
- -West: The service entrance and the delivery zone will be on this side. The façade will contain very little openings in the box so we minimize the strong sun radiation from the west.

The fact that from 10m height upwards, just 50% of the site is occupied will help to liberate a bit of space in the very compact future situation of the area.

**3-Green hair is not enough... Sustainability Revisited.** Sustainability should be divorced from its well-known "trees-on-the-roof" image but understood globally, beyond the usage of removable energies alone. Sustainability must go hand in hand with durability. We provide the design within an environmentally friendly strategy and with the possibility of adaptation to new, future circumstances so The House does not become obsolete and inadequate.

### 3.1-Materials:

- -The House uses ecologically certified and natural materials.
- -The non-fixed interior partitions are made of recyclable materials such as reinforced cardboard, allowing for easy transportation and fixing.
- -The surfaces of the Plaza reuse materials such as shells, broken tiles, etc...
- -The vegetation in the Plaza will be autochthon so we minimize watering needs.

## 3.2-Flexibility in space and time:

- -More than 800 m2 of extra space at the -1 level that may be used in the future for further needs, either as storage or as workshops by replacing some parts of the existing floor with glass.
- -1500 m2 of public space where each function of the building (exhibition, performances, workshops...) can take place outside.
- -1200 m2 of surface for art, advertisements, or projections in the South façade.
- -Over-dimensioned height all over the Grand performance Hall (20 m height) that becomes itself a fly tower and therefore the position of the stage could change in each event allowing the creation of all kinds of configurations.
- -The building places most of the programme horizontally so it may be extended whenever necessary (i.e; the exhibition hall could run through the entrance hall, or the restaurant could be hosting a big banquet in the exhibition hall)

# 3.3-Low consumption of energy

- -Separation of systems according to areas in order to regulate energy needs separately.
- -Closed South and West façade and very open East and North sides.
- -Part of the soil from the excavation will be layered on the roofs. In this way, we strengthen the isolation of the building and simultaneously prevent the emission of CO2 that a truck would generate to transport it away from the site.
- -Double and triple glazing in the northern facade will reduce the loss of heating in winter.

### 3.4-Bioclimatic systems

- -The glass façade of the foyer will act as a chimney where the hot air from all the floors will escape through the top perforations. In winter, when these openings are closed, the air will remain iside.
- -The air will flow horizontally through The House through the numerous openings in the façade, allowing for a quick and complete ventilation of the building and a comfortable feeling. This will be given special attention in rooms where more heat is produced (dance and theatre workshops).
- -The entire programme enjoys natural light through the facade or through patios.

# 3.5-Renewable energy:

- -Solar panels on the roof facing south will help to cover the demand for warm water in the building.
- -Photovoltaic panels in the roof or in the South and West facade will cover a big part of electricity needs.

## 3.6-Economically sustainable:

- -A "100%" adaptability to the future extends the useful life of The House.
- -There is nothing in the construction technique that requires an extra increase in the budget.

- -The way the different programmes are organized allows for a very easy common use of them at all levels.
- -The South façade to the ring could be rented out temporarily to advertisers in order to get extra funding for the activities of the building.
- **4- Icon? Who said icon??** After studying the brief of the competition, it was a pleasant surprise not to encounter the word Icon once. The brief talks about a strong presence, a recognisable character, an exceptional architecture ...but also about banning words such as: rigidity, routine, or static. Icons are rigid and static, and somehow quickly become part of the routine.

The architecture of The House should not impose, restrict, limit, or confine any potential of creativity. It should allow maximum flexibility and it should represent the dynamism of the Art and Culture in Beirut day after day. It should allow for an active and vibrant image.

Let's escape from the conventional icon, from the megalomaniac frozen gesture, and reinvent the way a city and its culture are represented! The House of Arts and Culture cannot be a static depiction of a single moment in time. It must be dynamic, changeable; like a machine, it should reflect transformation.

#### 5-Come into The House.

**5.1-Ladies and gentlemen! The Magic Box and the Active Plinth.** The *Box* is magic because it can host hundreds of different event configurations (Italian, kabuki, No theatre, techno party, mega banquet, exhibitions, conferences, lectures, dance evenings, poetry recitals, fashion shows, concerts, markets, fairs...). The big and the small performance halls, as well as the meeting rooms can be used independently from each other or their division wall can be opened to create a common event that runs in all three areas.

The *Plinth* is active because it hosts all the programmes on two levels, physically and visually connected, in this way allowing for the maximum interaction of the functions inside and the maximum urban relation with the outside. By concentrating the entire programme in two levels, we minimize the use of the elevator so the functions can be continued without interruptions.

**5.2-Extending, annexing, adding, attaching, including...it is all possible.** In order to avoid monofunctional spaces, the distribution of the programme is such that one programme may be extended into the next. For example:1-the restaurant-café of The House is placed next to the lounge area of the exhibition space so both can be enlarged and work together for a big banquet that can be extended into the exhibition hall.2-The exhibition space is connected with the reception hall so the surface area for exhibitions could be increased at a certain point by 50%. 3-The foyer of the performance halls can be opened entirely to the elevated Plaza during the warm months. The big and small performance hall, as well as the meeting rooms, are placed together so on some occasions they may host the same event (see diagrams, Panel 3) resulting in a spectacular configuration. In the warm months, this event could even be continued into the elevated Plaza. 4-The art workshops may continue in the patio at +6m, like an outside exhibition. 5-...

- **5.3-One for all, all for one**. The House can work as one single building with a main entrance hall from where you can take the entrance to each function: exhibition, café, shop, library, performance halls, etc... But it can also work as seven independent elements with direct access from the outside.
- **5.4-Structure**. The structure of the House will be made out of laminated steel profiles.

The structure will be divided into two parts: the box and the northern part of the plinth.

- -The Box is covered with a 2m beamed roof of trusses. Some of the elements of the box will hang from this structural roof. The big and small performance halls and the cinema box will determine the structural grid. The exhibition hall in the plinth is placed under the Grand Performance hall. At the level of the plinth, more pillars are added to share the loads in order to minimize their section in the parking garage. The circulation of the parking lot was carefully designed to work with this grid.
- -The programme of the North part of the plinth is flexible in shape and does not have the structural requirements of the Box. A grid of pillars will accommodate this part.

\*\*About the Magic Box features...

The performance hall of The House in Beirut demands a large number of possible configurations each of different character and with different requirements. None of the existing theatre models can accommodate such a range of events; therefore, we need to look for a new one. We call it The Magic Box. Just a few changes in the traditional box will be enough to make it flexible and much more useful: **A-**Keep the fly tower height all over the room, to liberate the position of the stage: The big performance hall enjoys a free height of 20 metres. In this way, we do no longer distinguish between fly tower stage, and the stalls, as the three of them can be placed in different locations and have different sizes. **B-**lift floor system all over the room, not just the stage. The big and small performance halls use two systems to accommodate the different configurations.

- -Modular lift floor: (used in the big performance hall). The entire floor of the performance hall is divided into 2m wide stripes, parallel to the rows of seats that can be lowered or lifted depending on the event. The system to elevate the stripes is composed of stainless steel columns that rotate using a motor. They are stored below the level of the theatre. The transformation from the Italian configuration, with an inclined floor and orchestra pit, to flat floor space, takes less than 15 minutes.
- -Roll back chairs: (used in the small performance hall and under the balconies of the big hall)

  The seats in the small performance hall can be stored in total or in part in the back of the room depending on the show. This system is also used under the balconies of the main hall parallel to them to allow for catwalk shows, arena configuration, or kabuki theatre.

**C**-Provide the hall with the possibility of enlargement by placing the other rooms in a suitable position around it. The small performance hall and the meeting room are adjacent to the large performance hall and can open into it, thus taking part in the same event.