# A-Architecture:

# **1-General Considerations**

# 1.1. Local connections: (Beirut, Vertical Soug, and material)

Our proposal for the House of Arts and Culture of Beirut, tries to generate a project taking into account a series of basic considerations.

The identity of the House should be associated to a solid local identity. For that purpose, the building, not only takes material elements from the urban fabric and from the Lebanese landscape as an identity foundation, but also takes in consideration the history of how the arts have been developed in Beirut, and understands the importance of the free enterprise that Beirut has always had in this sector.

The architectural organization of the new structure will be a booster for the movement of free creativity. In that sense, the new structure created, will generate a piece of public space all across the building, where the most public pieces of program are located and linked. This part of the program will absorb the open vertical circulation of the building and will enhance the relations and interaction amongst program and people. We call this space the vertical Souq, in the sense that it is a place where activity, the circulation, the interaction, the voyeurs, the people that act, are all mixed.

The house will be an active and productive place: it will not only be a place for performances and exhibitions but it will encourage creativity in a process that will influence the minds and society.

# 1.2 Institutional qualities: (volumetric strategy. vertical house)

The building accepts the responsibility of being the leading place in arts and culture in the capital city of Lebanon. The building wants to have a notable presence in the city. To that effect our volumetric strategy has been to organise the program vertically to make the building highly visible. But the vertical organization has other advantages:

-The house will not only give the opportunity of enjoying the art and events that take place inside, but allows for the enjoyment of varying vantage points over the city thus asking the inhabitants to view their city differently as the exhibitions and performances will undoubtedly be doing. -It liberates public floor that can host events and exhibitions in the series of open spaces.

1.3. Technical considerations

Another important part of the previous considerations has been the technical ones, which will allow us to build a building with optimum characteristics for developing its functions as urban cultural centre within adequate resources in terms of economic investments and maintenance.

# 2-Shell Concept and Space Layout and configuration

### 2.1. Boxes and voids/ Functional distribution

The shell concept is directly related to the functional distribution. We've taken all the different parts of the program and we've classified them in two types:

**<u>1-Cultural Boxes</u>**: these are the parts of the program that need to be enclosed, and have a high level of differentiation from the other parts of the program, in terms of acoustic , privacy, natural light and solar control..

In these types of rooms, the circulation and the way the space is used controlled to a greater extent. Their function is specific and thus their form responds to their function.

They are: large performance hall, small performance hall, movie theatre, meeting rooms, changing rooms, work shops, national cinematheque, offices, and miscellaneous space.

<u>2-Relation Voids</u>: These are the elements of the program that are more readily connected with the circulation of the building. In some instances the form is allowed a certain freedom depending on the relating spaces and opportunities to provide areas for cultural expression. These are the spaces where the interaction amongst the House's visitors and staff will be most intense.

These spaces have there own function but at the same time are versatile and could be used for different events. These spaces can look outside and can also be seen from outside, emulating the feeling of audience and stage thus bringing activity and richness through interaction to the façade. They are: the lobby, the foyer, the cafeteria, the lounge of the exhibition spaces.

The documentation centre and the exhibition spaces, belong to the typology "voids". However, they have a higher level of control and separation from the public circulation: The library, can be seen from the public circulation, but the entry is controlled.

The exhibition space is visually separated from the public circulation, its entry is controlled and it's blind to the exterior, except when desired. However, its operable walls would allow the space openness to the public circulation and to the natural light if the exhibition called for such an expression. The exhibition space is structured in two adjoining levels, introducing spatial richness and enabling clear segregation into two or four exhibition areas simultaneously. However the two levels belong to the same space so it doesn't lose the entity of unity in the case of a single exhibition requiring the entire space.

The system for the functional distribution is the following:

The **Boxes are** piled vertically in a way that a serious of voids in between the boxes is created. These voids are connected creating a vertical spiral that will allocate the parts of the program called **Relation voids**.

The relation voids are organized in a way that is going to create a polarity between the two most intense public spaces: the Lobby and the Cafeteria. They will be in the extremes of the section to ensure the public activity along the section of the building.

The <u>spiral of voids</u> is where the public activity is encouraged. It contains its own program but also absorbs and utilises the open circulation of the building, the open spaces the relaxation areas and the entrances to the <u>boxes</u>.

These are connected via mechanical stairs, line of sight and purpose and sense of welcome journey on the part of the visitor

# **3-Structural Concept**

The structure of the building has been designed in order to provide maximum flexibility of use, and an impression of lightness and spaciousness in the interior spaces.

In order to achieve these effects, we've tried to minimize the presence of structure with in the functional spaces.

The building has been structured in two load bearing elements:

1 The central core: The lifts and the fire fighting stairs are contained on a core that has concrete walls and which dimensions are  $22,5m \times 7,5m$ . This will be the only vertical piece of structure that goes centrally through the building.

2 The façade: the envelope of the building is composed by two layers of polycarbonate that allocate in between a series of multiple steel columns. The density in number of columns was based on reducing the size of each individual column thus creating a denser, wrapping aesthetic of the façade. This also has the benefit of allowing the structure to disappear as an element of the functional spaces.

# **4-Vertical circulation**

The vertical circulation of the building consists on:

1-A central core that contains: four public lifts, two fire fighting double stairs, a large goods lift for the performance halls and the exhibition space, and a smaller goods lift to service the bars and rooftop cafeteria.

2- A set of mechanical stairs that constitute the open route along the ascendant public space.

### 5-External envelope and façade

The façade is conceived as a skin that on wrapping the vertical piling of boxes, enclose the "empty" spaces or voids among them.

The materiality of the building is shown in two elements. One: the material that wraps each of the boxes. Two: the material that wraps the whole building.

For the boxes the building is clad using a local stone, like limestone, which besides connecting the building with the local identity has further advantages: durability, local trades, low embodied energy reducing the ecological cost of the building, and high thermal inertia allowing accumulating cold and heat and reducing the energy consume.

For the envelope of the whole building we'd like to study the possibilities of a plastic like polycarbonate. It's important that this envelope has a transparent and translucent quality so the concept of the building can be sensed from the exterior and the spiral voids of public space that go through the building, constituting an added character to the building less familiar to the historical regional architecture.

We believe in the achievements that the plastic industry is obtaining nowadays, and we would like to take advantage of the possibilities of a material that's extremely resistant, is 10 times cheaper than glass and 10 times lighter, furthermore reducing the structural loads on the building. Two panels of plastic cover the multiple columns and create the effect of a veil that filters the light and resembles the effect of the threads of the looms.

Images advertising the current and future happenings of the House, can be projected from the inside and the façade will reflect them to the exterior world, particularly that of the major link road.

# 6. Exterior public spaces:

We've treated the exterior spaces as a preamble of the interior public space. We want to make it part of the House allowing exterior events that are related to the Theatre or to the Lobby. The building is located close next to the road Avenue du General Fouad Chehab, so the public space is to the opposite side of the major road and connects to both the existing and future public urban squares and also connecting and feeding off the existing tree lined streets leading into the entrance. Rue Mar Mansour also provides a major visual link to the main foyer from Rue Bechara el Khoury.

The service area is to the west sharing the service road wit hthe future high rise tower and to the east there is a pedestrian road that links to the current CBD centre along with the future pedestrian underpass bringing foot traffic to the future market areas and gallery spaces encouraging casual interaction with the Lebanese public.