THE HOUSE OF ARTS AND CULTURE, BEIRUT

GENERAL CONCEPT

1. A CLEARLY DEFINED VOLUME

The urban concept envisages a clear geometric volume, which stands assertively on the plot. The perfect square footprint ($55m \times 55m$) is situated towards the Avenue, organizing on the opposite side an urban lobby in direct relation with the green square on the other side of the street.

2. FACADE AS THEATRE CURTAIN

The facade of the building is conceptualized as a transparent theater curtain of columns. This rhythmic composition turns the building into an expressive and recognizable element in the urban texture, viewed from the city or passing by on the Avenue General Fouad Chehab.

3. FILIGREE OF COLUMNS

The juxtaposition of three perimetral layers of columns - different in height and with varied separations in between them - generates a filigree texture of lines, creating moving compositions of shadow and light along all facades during the course of the day.

4. PROTECTED TERRACES

In the warm end enjoyable climate of Beirut the wide spaces behind the colonnades generate cool terraces in direct relation with the interior program. Towards the city these in between spaces are generously wide, while towards the Avenue a more closed composition serves as an acoustical buffer.

5. A DIAGONAL VOID

The diagonal void with its sculptural staircases forms the vertebral connection through the building and permits day light to filter through the whole volume. Its wide galleries accommodate additional program such as lobbies, bars, lounges and waiting areas: a true place of encounter between the House and the visitors.

6. VARIED TYPOLOGY OF SPACES

The inner organization, resulting from the buildings specific section, defined a 'house of rooms': a varied topology of spaces different in size, dimensions, light and materials who make the spatial experience of the building an exciting passage through different atmospheres.

BUILDING PRINCIPLES

NATURAL VENTILATION

The diagonal central void through the building functions as a chimney, creating a natural flow of air through the volume. This flow can be controlled by opening or closing panels in the roof structure. Additional cooling is provided by mechanical systems through the spacious duct located in the service core.

PROTECTION FROM SUN

The volumetry of the building is organized to counter as much as possible direct heating by sunlight. The deep setbacks under the highest level, the different layers of columns and the robust outer walls efficiently protect the interior space from solar radiation and create generous, cool and ventilated terraces.

EFFICIENT VERTICAL CIRCULATION

The public vertical circulation combines a 'slow route' through the sculptural ascending zigzag staircases with a 'fast route' of public elevators, providing an efficient connection between the elements of the program distributed over the five levels of the House.

CONCENTRATION OF SERVICE AREAS

On every floor all the service spaces give access to the freight elevator and service staircases that are concentrated in one single central core and directly connected to a loading and unloading platform at the -1 level.

STRUCTURAL PRINCIPLE

The spans over the diagonal void are absorbed by large walls that function as structural beams. Additionally the spans of the main performance hall are absorbed by interconnected structural frames in the form of inverted U-shapes.

TENSION AND COMPRESSION

A hybrid structure between columns that work on 'compression' (bearing columns) and columns that work on 'tension' (hung from the structural trusses in the upper wall parts) allow the building to have large openings in its facades without additional support.

FLEXIBILITY AND ADAPTABILITY OF THE MAIN HALL

The main theatre hall is conceived as a orthogonal, highly technical, modular space to allow the maximum possible configurations for different types of performances and events. It contains 500 seats at parterre and more than 300 in the surrounding loggias distributed over three levels.

Its basic principles are:

- (1) Pneumatic floor modules of 2,10m by 2.10m adjustable in height
- (2) A technical ceiling between structural trusses along the whole length of the hall
- (3) Backstage on different levels behind stage from level -1 to +1
- (4) Abundant storage, technical and working spaces on level -1
- (5) Direct access to fly galleries, rigging and loading bridges from level +2

OPERA / THEATRE / DANCE

Main stage with direct connections to side and back stages / Stage formed by backdrop, wing curtains and borders along portals / Direction, light and sound control from upper balconies in rear end of the hall / Balconies closest to stage as 'houses' for light / Orchestra pit on lower level in front of stage (if required)

CLASSIC CONCERT

Semi-central position of philharmonic orchestra / Audience at both sides of stage and on all balconies / Convex acoustic panels suspended from technical ceiling for sound reflection / Direct access to stage for performers and director from -1 level

CONGRESS

Grades descending from 0 level to -1 level / Translation boots in balconies at rear end of the hall / Projection screen hanging from fly gallery / Control cabin in rear end balconies / Direct connection to dressing rooms off stage

ROCK / POP

Floor leveled at +0 level for crowd / VIP places in balconies / Towers of speakers on both sides of stage / Black backdrops and side curtains / Light trusses from fly galleries, balconies and technical ceiling / Sound control (and/or recording) from balconies in rear end of the hall / Sound absorbing panels from technical ceiling

THEATER / FILM FESTIVAL

Double temporary acoustic walls (40db performance each) dividing the main space into different areas / Floors with grades in transversal sense / Entrances and projection from opposite loggias / Sound absorbing panels from technical ceiling

SPECIAL EVENTS

Floor leveled at +0 level / Large round tables for banquet / Chandeliers (or special decoration) suspended from ceilings / Central bar or food area in direct connection with service facilities and loading dock at -1 level / Other configurations: catwalk, exhibition hall, culture fair, workshops, etc.