

## Every creative power assembles, unifies, and generates Lebanese cultural force

### 1. *Concept and process of the space design*

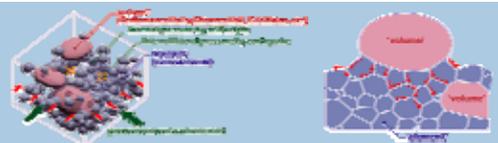


Firstly 1:400 scale structural model is constructed. Large 'volumes'; distinctive spaces in the scheme, such as Large Hall and Small Hall, Reception Hall and Exhibition, are made as spheres which are made of paper clay, and arranged three-dimensionally in an acrylic case. This acrylic case is the building's envelope which frame is constrained by the height and wall restriction by law. Within this envelope, these 'volumes' are laid out to create the best space-relations to each other; how to depict the dynamic scenes in the Reception Hall with foyer for the halls, how to share the backyard function with two halls, how to deploy the natural source, such as sun light and wind, into the envelope... This free layout design without considering floors, beams, and columns, should be the best three dimensional answer for the scheme.

Furthermore numerous spheres; 'elements', which diameters are 3~5m in real scale, are filled in the envelope (acrylic case) to bury the empty space.

By compressing the planes of the envelope, these inner spheres ('volumes' and 'elements') are compressed and transformed their own shapes with keeping certain relationships to each other. As a result, each sphere becomes unique polyhedron, accordingly their arrises are the main structure to support the rectangular solid of the envelope, as a 3D compacted organization. By fulfilling the arrises of the polyhedrons with aspects, diverse spaces are generated.

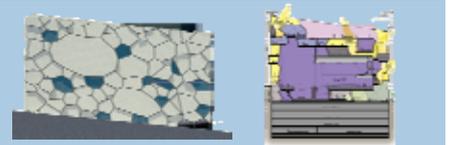
### 2. *3D compaction process* *—create the structure for free space*



1. 3D compaction process mimics every 3D pressure such as self-weight, wind, and earthquake.
2. This process provides 3D structural system resisting any pressure in any direction.
3. Large pressure from the 'volume' deforms 'element' adjusting to the 'volume', generating stable supporting system. Well-spread pressure creates relatively regular 'element', as 'element' goes away from the 'volume'.

4. Each deformed 'element' could be translated into polyhedra space frame system whose members are derived from arrises of 'element'. Each member inherently intersects each other at relatively regular angle of Maralds' angle of 109.28 apart from elements near the 'volume' which take priority of support the 'volume'.
5. This way of creating structure insures us well-compacted soil having various element in size. This means the generated structure is quite stable and has natural form.
6. 3D compaction process is ambitious way of creating the structure suitable for the space free from conventional restriction and the impressive structure with natural stability and robustness.

### 3. *Uniquely generated space and its experience*



There is no concept of 'floor' in this building. Accordingly there is neither flat continuing ceiling nor wall. Walking into this building, unexpected and spectacular scenes without classical elements of architectural structure will appear, and more they are endlessly changing by gradual transformation of the floor, wall and ceiling, organically streaming atriums with sun light and winds brought in. This space experience itself is the very identity of the cultural center.

### 4. *Space layout*



Firstly major 'volumes', such as large and small halls, exhibition room, and reception hall, are arranged in the site.

By using the height difference of the ground between the north and south, main entrance for public and the entrance for public car park are located on the north. The back yard entrance for staff and track yard are located on the south side of the site.

The main hall and sub hall are located in height so that they can share the foyer, and according to the entrance layout, these longitudinal direction are arranged to north-south. Back stage and green rooms are on the south side, and they can be shared by two halls. Exhibition hall is located on the top level, so that the exhibition can employ the sun light and even outside terrace can be a part of the

exhibition.

Secondly, various rooms (except the major functions) are plotted in the 'elements' with the consideration of their purpose, required area, relation to other area. These 'elements' are sometimes fused to provide large areas for certain functions.

Workshops are randomly scattered in common spaces, so that the activities in these workshops can be seen to the public easily. This arrangement makes the workshop as a free living gallery where performers, professionals, and the exhibitors can unify to create avant-garde art. These workshops appear and disappear in different size and contents. Therefore the scene of the public area varies from time to time.

#### 5. **Performance Hall and Second Performance Hall**



Performance Hall is a multi-purpose proscenium theater that has a main stage with acoustic wall and tier seats. This hall provides fundamental functions of proscenium theater, especially focusing on play and ceremony, however this hall can be transform into different theater-style by changing the layout of stage and seats. The stage and seats are not fixed in the theater, but are just placed on the pit(floor). They can be freely arranged as each unit of the stage and seats have a pneumatically actuated caster system, so that few staff can move and arrange them easily. It needs 5 to 6 people to move all of the units, and it takes 5 to 6 hours in total.

Second Performance Hall focuses on flexibility, responding to wide range of performances. 250 seats on the pit(floor) are all movable, and 90 out of 250 seats are rollback type. There are 28 portable panels, which can creates various stage set. In order to meet the optimum reverberant environment for individual stage design, there are pivot walls on the side of the seats and acoustic curtain on the back of the hall. These pivot wall is made of two different acoustic surfaces; one is sound absorbing wall, and the other side is sound reflecting wall. These equipments provide the reverberation time of the hall from 1.1 to 1.6 sec.

**6. *New cultural center  
to embrace various activities***



The concept is how to create a place for coexistence of various authoritative events and civic cultural activities. Performance halls and exhibitions are to be equipped with modern facilities and services as explained, and at the same time this center has several magnetic creative spaces, such as gallery café and scattered workshops in common area, where public and young artists can communicate each other and share culture in various occasions.

**7. *Inner and outer interaction***



Inner space has several voids and top lights which provide winds and sun light from various angle, so people can feel and touch the nature inside the building. The roof of exhibition hall on the top level is partly made of glass window with movable window shade, therefore it is possible to make a open-air exhibition.

Entrance hall is located on the north side of the site, and it faces to the neighbor park. The open space of the entrance hall connects to the urban green promenade. At the north west corner, café is located and several façade 'elements' and 'volumes' nearby are set backed for a gallery. This café and gallery are for public and young artists to show artists' work and communicate with public.

**8. *Façade design  
and the urban context***



Every space of the creativity is connected and fused, constitutes the stream of dynamics, eventually forms one solid unity. Every single artist's activity oozes to the façade, and the whole building appearance expresses the power of art.