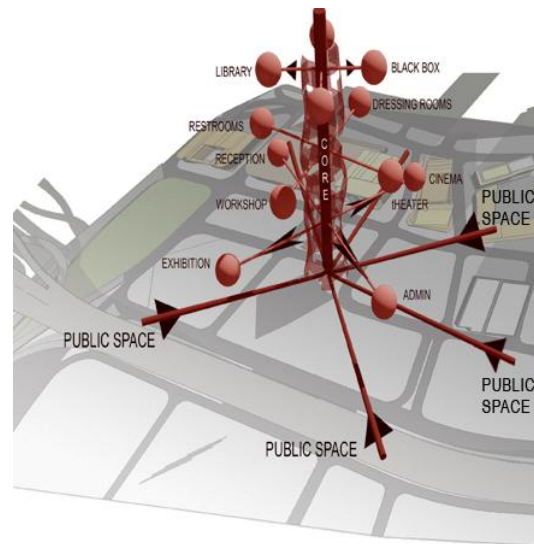


The cedar tree is a resilient symbol of Lebanon. Steadfast and strong, it is a symbol that has permeated the many different eras of Lebanese history. It is representative of a growing organic form. A tree has a form that does not obey conventional boundaries and often breaks through physical barriers in order to thrive. It adapts to its location, surroundings, and weather conditions. It coexists with other organisms. A tree also reacts to human interaction.

The House of Arts and Culture (HAC), as an arts center that will represent all Lebanese people, becomes a similar symbol and, by extension, becomes a living organism displaying many of the same properties of a tree. A tree grows towards its nutrient sources, extending its limbs and roots in specific directions. The HAC's branches will extend to its life force of the public. The tree limbs will extend to public parks, plazas, and pedestrian nodes – places of interaction where Lebanese people connect. The people, as a life force of the building, will provide its needs to sustain and flourish.



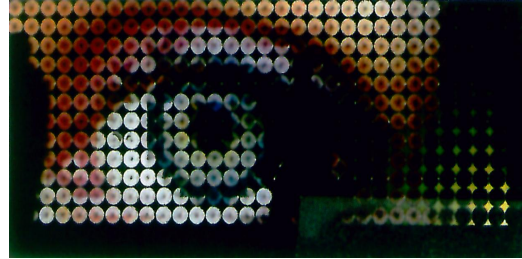
An urban setting, such as that of the HAC, has the ability to connect people to the city, to a place, to a presence. The people of Beirut will not feel compelled to enter a building of which they can only view its stark façade. Viewing the flat façade of a building, from a public space, will not encourage people to enter, identify, or experience the space. On the contrary, it will deter them. However, opening up those points of connection allows the tree limbs to extend their relationship to the city and draw its life force into its space. It will also connect patrons of the HAC to the city beyond its own walls, thereby dissolving any traditional notions of boundaries. It will lend an identity and character to a cultural center and the people of Beirut. It will provide vistas to the people, the city, the terrain - the beauty of Beirut.

By connecting to the city outside the HAC and simultaneously bringing the city into its space, the building has a more symbiotic existence. A symbiotic existence will mimic a tree's existence. It will exist in a mutually beneficial and interdependent manner. As a tree takes in nutrients from the earth, while filling the atmosphere with oxygen, the HAC will thrive from its life force, while providing the city with a newfound pulse and a cultural center. The HAC

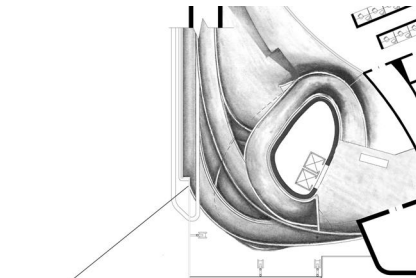
will exist in a harmonious way – adapting, living, breathing, reacting – as a living organism, or more specifically, a tree.

Architecturally, the building form and spatial arrangement allow for an experience connected to its surroundings. The main circulation tower intentionally sits at the northeast corner. This corner is where the social corridor merges with the green spaces and with the pedestrian pathways. The circulation tower, wrapped only in glazing, maintains its visual connection to this major intersection of activity, to the city at its feet and to the water beyond.

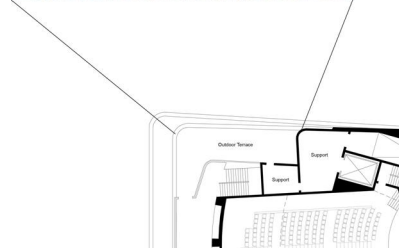
The surface of the tower is a thermal wall. This wall is a constant along every floor plate. It detects changes in temperature caused by the passing of bodies near its surface. Therefore, it reacts specifically to the people who are drawn up onto the ramps of the circulation tower.



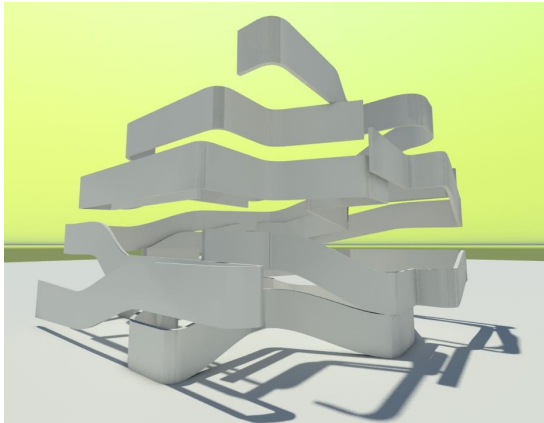
The spatial arrangement of the interior spaces is on a distribution hierarchy of public collective spaces to individual private spaces. Thus after the ground level with the reception and cafes; the next level(s) is that of the exhibition space and the cinema; moving up to the theatre spaces before arriving at the library and roof terraces. Along this path are numerous opportunities, via scattered terraces and openings in the façade, for vistas reminding the viewer of their location within Beirut.



A visitor to the HAC would be drawn in along the ground plane at the main entry which is located off of the main pedestrian corridor and public node. The exterior treatments are continued into the main reception hall and outdoor café so as to dissolve any border between outside and inside. The internal spaces are organic and enclosures are often skewed thereby, removing rigid form and barriers. Public spaces, such as the restaurant and exhibit space, are continued across multiple floors to encourage the free flow of people throughout the building.

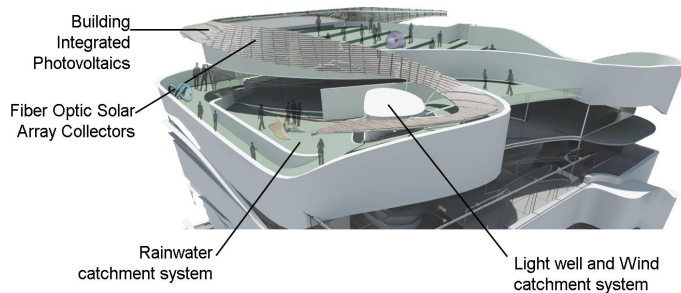


The concept of a symbiotic existence will continue internally. The building design will integrate several passive and technological means of reducing the negative impact of the building on its surroundings. The building's orientation and corresponding façade design blocks excessive heat gain on the south face while allowing light penetration on the north face. The building form morphs on the west side to create louvers for shading, which prevents heat gain in the afternoon hours. The ribbon form, which undulates around the perimeter of the building, pulls away from adjacent layers to allow light infiltration into deeper interior spaces, reducing the need for artificial lighting systems. The core tower also behaves like a light well to illuminate the circulation ramps and the adjacent spaces. Where or when illumination is required fiber optic day light luminaries and efficient LED lighting are installed.



Similar to the layers of tree branches, this form, along with the wind catchment system in the circulation tower, also allows natural ventilation of all public spaces. The passive cooling system also mimics a tree and its root system by drawing water up from the earth into the limbs of the building. The building utilizes a chilled ceiling beam system by way of groundwater pumped up from boreholes. The excess water is stored for greywater usage throughout the building. The roof terraces provide exterior spaces for visitors to inhabit, but also integrate a rainwater catchment system and fiber optic solar array collectors integrated into a shading device. The rainwater system can help to irrigate the various terraces scattered on different levels or it can feed into the greywater system of the building.

The roof level shading device passively cools the building along the collection of solar energy. The use of these collectors will reduce the need to plug into an unstable energy source in Beirut.

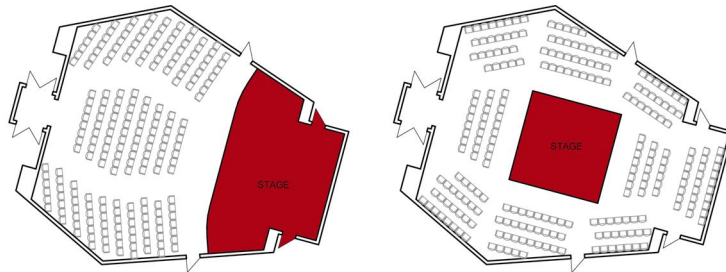


Although the natural ventilation and employment of passive systems greatly reduces the impact of the building upon the environment, it does not help address the humidity issues of a coastal climate. For this reason the performance halls, cinema, and a few other spaces must be conditioned zones. Both zones of spaces can utilize either the dehumidification or desiccant wheel filtration systems. By employing a dehumidifier in the central air supply the

humidity levels of the naturally ventilated spaces are reduced. The conditioned zones must utilize the desiccant wheel systems with separate desiccants in the performance halls and cinema and other such spaces.

Flexibility and adaptability of the interior, by way of layering functions and uses, will pervade the various spaces and levels of the building. Circulation pathways will move a visitor through various experiences while maintaining a relationship to the city; exhibition spaces for media art will turn into fashion runways for design art; performance spaces will turn into lecture halls; and reception areas will turn into community coterie spaces. The exhibition space is furnished with nooks

within which the flexible and transformable exhibition walls can fold. This allows for various configurations of the exhibition walls and the ability to have an open floor for runways setups or large-scale



AN EXAMPLE OF TWO DIFFERENT CONFIGURATIONS FOR THE SMALL PERFORMANCE HALL

installations. The large and small performance halls are designed with a level base floor to allow for convertible seat and stage configurations. Such flexibility will permit a variety of performance types for different audience sizes. This built in adaptability will permit the artists of the HAC to operate in a variety of expressive styles while allowing the visitor a potential array of experiences.

The House of Arts and Culture will be a unique place harmoniously coexisting in its environment, a space of free expression for artists, and a destination for international visitors. Rooted in its city, it will fill a cultural void for a generation that needs a place for articulation and demonstration. It dissolves rigid barriers while keeping the art of its youth within the boundaries of Beirut. The HAC is a place where generations and cultures can operate on the same wavelength, intermingling and interacting. It is a place that is progressive in its initiative and its building technology. Rather than look to its past, it takes a steadfast symbol and moves forward in time.