



The plot is borrowed from the city and with a courtyard it is given back. Below the courtyard functions require artificial light are placed and above, the functions that may lead to more social communication and working places are deployed. Extreme attention has been given to reorganize the program to meet those principals. With its courtyard open to all directions house of arts and culture of Beirut aims to appeal to all and not just “the regulars”.

Main sources of inspiration of form are passive sustainability systems and “sharp” close history of Beirut. And a togetherness of the opposites is accepted as an aesthetic input during the design phase. (“monumental gate – extremely non-monumental pavilions and wooden shutters”, “plastic base – analytic courtyard and above plastic forms projected on the spheres of information.” “virtually everlasting, industrial concrete – living and decaying wood”) this project is not the fancy prescription, without forgetting the close history (not even the history) of violence, remembering it with sharpness yet hope and social communication is

sheltered by the courtyard, user-centered architectural articulation, and the humane scale of moving building parts.

To enhance the economic and social sustainability new items to the “leasing office” of the house is introduced: “**gurfah**”s. those **pavilions** are simply gathering places for small groups and can be rented or donated to social and cultural or non-governmental organizations. So the house will house cultural activist groups of the country and this act will find an architectural expression.



gurfah board with its number on it representing the renting organization

Spheres of information are big balloons on which images will be projected or will simply be painted or coated. They are actually 360 x 360 degrees of an “urban canvas”. They are temporary structures to declare important events (e.g. the “week of calligraphy”, “the works of Dali”) Besides it can be even considered as a radical medium of artistic creation. Another reason to adopt such an element is the close environment of the House which will be covered with high rise buildings whose users will look at the house from above. So actually the close contact area between the users and the building has an additional direction which is from up to down. So such big balloons will give us chance to appeal to all directions. And it should be remembered that the residential urban area to the south also topographically higher than the building plot. So also for them to the balloons are appealing.

Passive sustainability features:

The portal of the house is actually a solar chimney. It has a cavity inside through which the exhaust air of the theaters below will be vacuumed. And with its angled wings the portal always meets sharp sun of Beirut, around the portal there is no building part to shade the portal. More the portal is exposed to solar light, more air it will vacuum. And also during the night time this process continues as the portal will act as a thermal mass.

On the southernmost side of the building “trachea” is placed. Actually this trachea is nothing but a developed version of vernacular wind towers (a.k.a badgir or malqaf) of hot and humid climates. Here this wind tower is also enhanced with rain water and solar exposure. The conical roof structure of the trachea is rotated around its origin by the dominant wind. And positive air pressure of the air is faced with the intake part of the conic roof thanks to the sail of roof which stands at the opposite side and again with the same wind a negative air zone is formed between the layers of the sail namely the part where the exhaust air of the

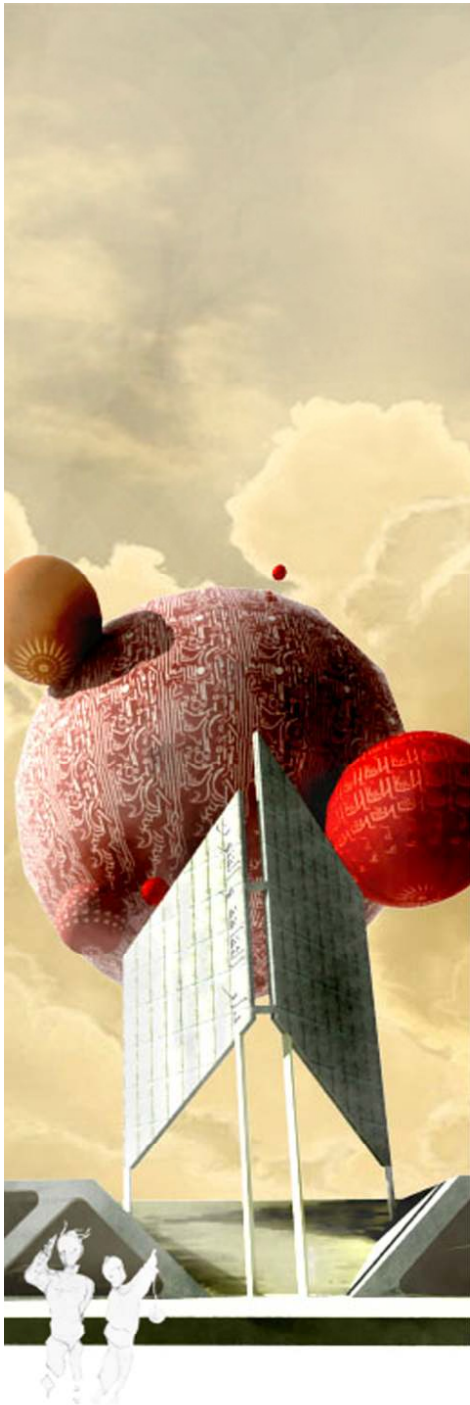
theaters will be vacuumed thanks to the pressure difference formed by the wind. When the fresh air of the wind is taken, a moving air is obtained which will help get rid of humid air near the users of the building but still this air humid itself due to climatic conditions of Beirut. To cope with that dehumidifier chemicals (desiccants) are adopted which will be catching humidity of the fresh air and then will be dried with the hot but dry exhaust air. When there is not enough wind to run the system trachea will act as a solar chimney since it actually has the best position on the plot to gain the maximum solar exposure. The eastern façade of the trachea is glazed to catch the morning sun and the westerns façade is concrete to keep the evening sun during the night as thermal mass.

Rain water is collected in a tank right below the trachea. This water has only one opening on the façade of the trachea from where it will evaporate. Evaporating water cools nearby medium but it naturally contributes to the humidity. To catch the coolness of this air but to avoid its humidity the channel of the water tank is separated with a metal barrier which completely isolates air movements and humidity but thanks to its thermal conduction we take advantage of the evaporation of the rain water to cool our fresh air caught by the trachea.

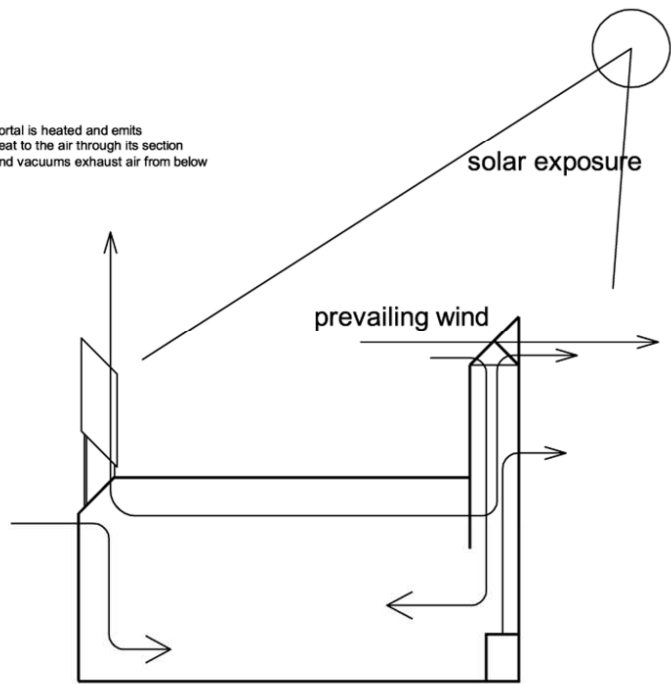
Another measure taken to avoid humidity is wooden shutters and planimetric design of the wings around the courtyard. Wood catches the water particles in air and lowers the humidity, actually that is one of the reasons why vernacular "mashrabiyya" elements are made up of wood. And the corridors of the spaces in the wings are usually deployed along the facades to make an air barrier before the external medium.

Contributing to the solar chimney effect of the portal and the trachea, courtyard is also connected to those two elements. The courtyard will be exposed to the greatest level of sun during summers and noon times and it will help to heat up the air through its section and this heated air will be directed to the portal and the trachea and will be replaced with new cool air from the northern façade where we have a park and vegetation which promises cooler air.

Structural elements of the wings of the courtyard have concrete finials which is left for solar exposure, just like the courtyard and the portal they will heat up the air through their section and will absorb the exhaust air of the wings.



portal is heated and emits heat to the air through its section and vacuums exhaust air from below



fresh air intake from the northern facade, also park nearby contributes to the coolness of the air

