→LET THERE BE MORE LIGHT. AQUARIUM

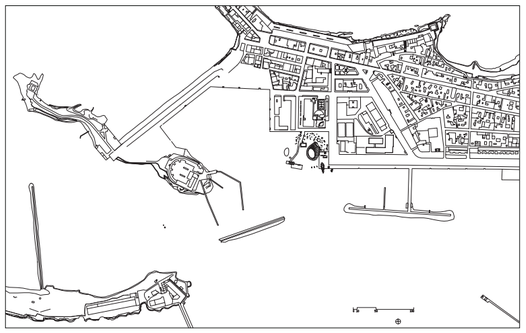
→Antonino Cardillo Architetto

An aquarium is fundamentally a house for fish. If the house cares for its marine inhabitants it will probably also be a good piece of architecture. Such a presupposition is realised in the idea of building tanks, analogous in dimension and shape to the natural habitat, thus becoming pretexts for the elaboration of fluid cavities, modelled by means of curves and NURBS surfaces, a mathematical representation that accurately defines solids and surfaces with free or organic shape. Suspended on the water, denouncing their form to external space, they are moulded, cave-like, for the benefit of the little fishermen's boats.

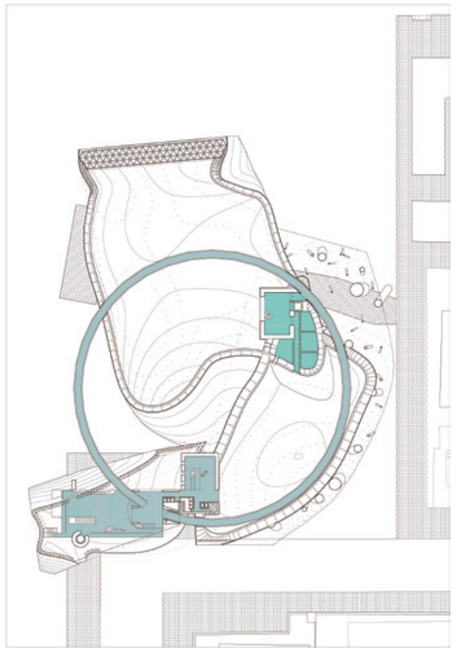
Aiming to be as discreet and respectful as possible to aquatic ecosystems, the visitor experiences the aquarium through a tubular pressurised gallery developing along a circumference. With a diameter of 200 metres and an extension of 800 metres, this creates a continuous walk which crosses the architectural complex from the light and ample Foyer to the fleeting and mysterious aquatic cavities. This system of visitor experience reverses the conventional hierarchy of single tanks and paths, the result of a vision of biological life rigidly subdivided by classes and sectors. Therefore the fishes' aquaria consist of two thirds of the building and man's experience is reduced to a single circular path, relatively small in proportion to the other parts. With the intention of sparking a synergy between experience within marine ecosystems and the outside world where the aquarium is sited, moreover, in the pauses between the principal tanks, the glass walls of the gallery suspended over the Mediterranean at a height of about 20 metres, give ample and luminous views over the archipelago of islets that fade away into the sunset until they condense on the three crusts of the Egadi islands on the horizon.

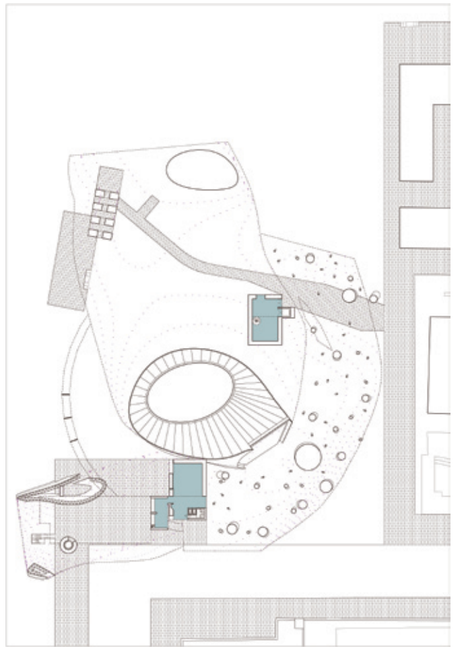
In the circular path beginning and end coincide and so find their “raison d'etre” on the ground floor of the Foyer. Rising 20 metres over the sea, rational and irrational entities are revealed in a closed dialectic.

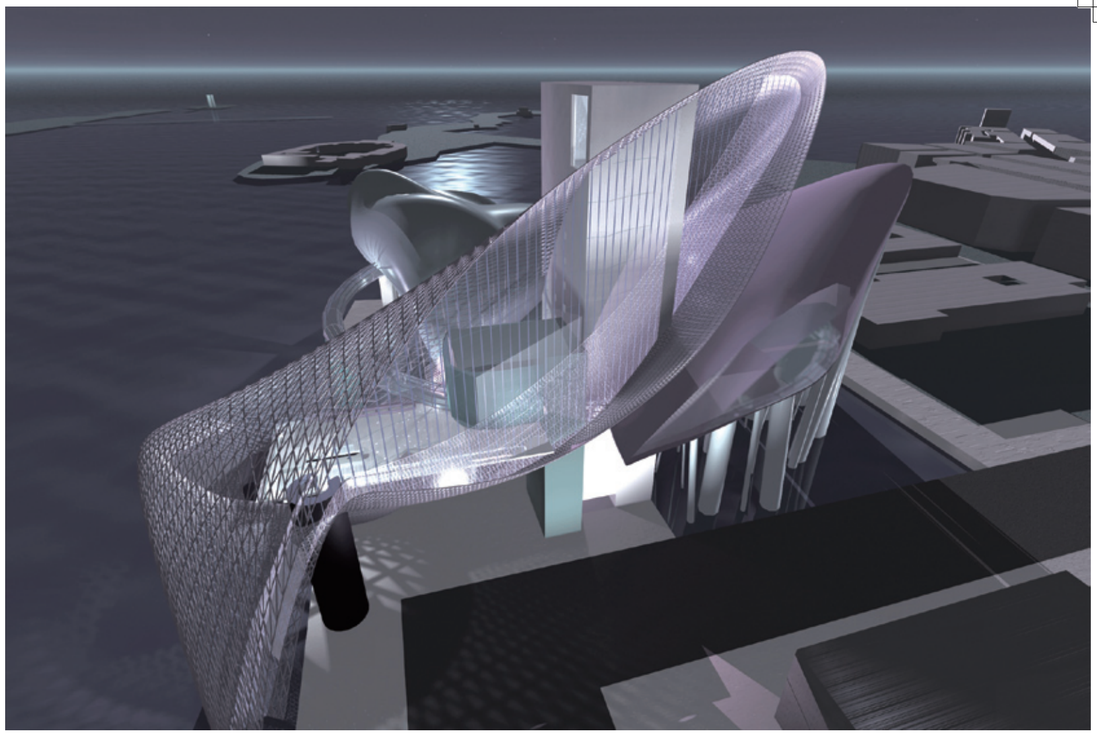
The concept which subtends the composition can be seen as deriving from the American Pavilion by Buckminster Fuller built for the 1967 Montréal Expo: a collection of open buildings enclosed in a geodesic grid structure. It is diverse in its method of shaping and recounting space and therefore in language. Here Fuller's platonic structure is substituted for an indefinable veil extending between the White Tower of the Department of Marine Biology and the sea. Condensed formally and structurally by a system of metal shafts looking like a rigid shell, it envelops the space in an extension of concaves and convexes. Inside there is an almost neoplastic dance of elementary objects. Their presence in the space does not imply a hierarchy, but an invisible network of resonances which make up the architecture. Some of them find their raison detre in recalling the functions of the Foyer: reception, lounge, galleries, shuttle lifts and stairs. Others, like in a vertical village, are true buildings within the building which, in strict succession, present themselves vertiginously on the platform of the Foyer. A recurving surface of green tunnelling envelops the interior of the Cafeteria and Bookshop, extended on two levels and accessible by a small staircase from the Foyer. Lastly, the spaces assigned to scientific study inside the White Tower integrate both entertainment and research.

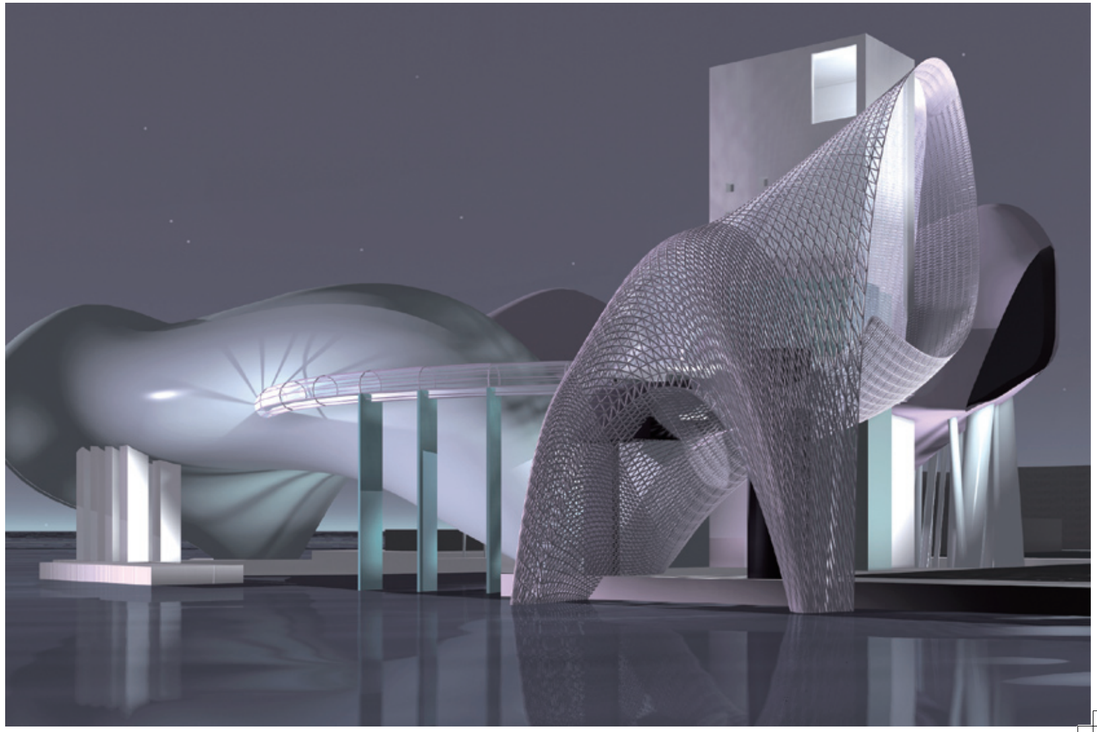


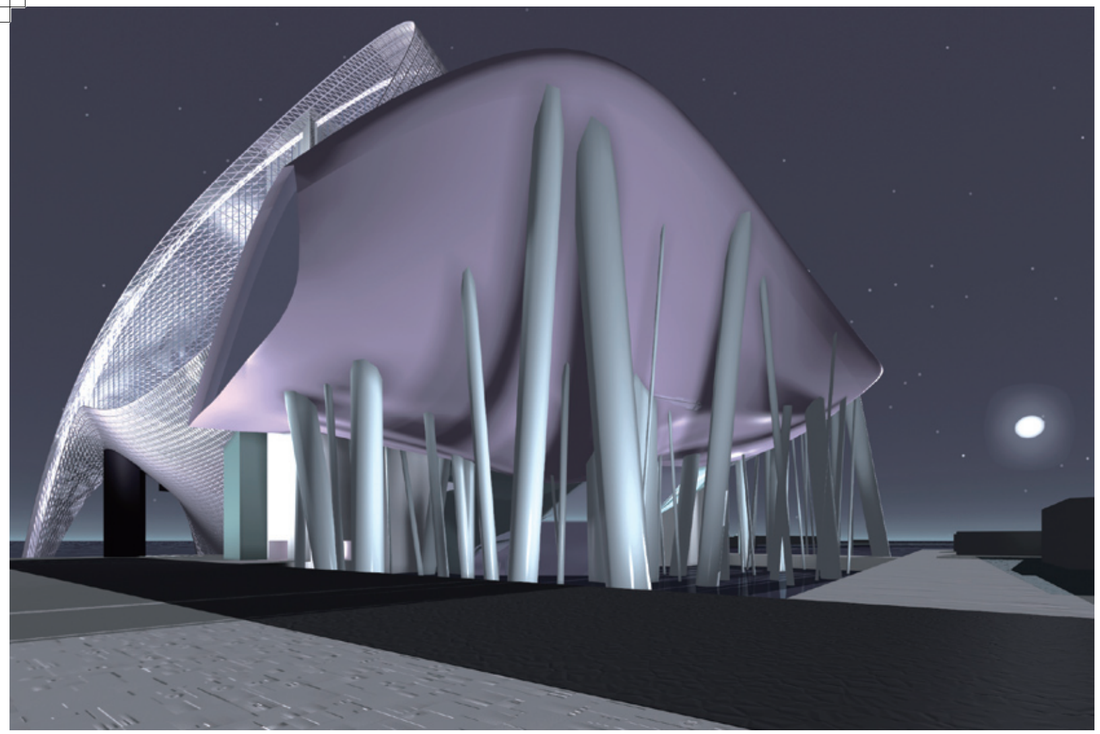
Location: Trapani Harbour, Sicily, Italy
Desing Type: New building in historic place
Building Surface: 9,500 m²
Levels: 15

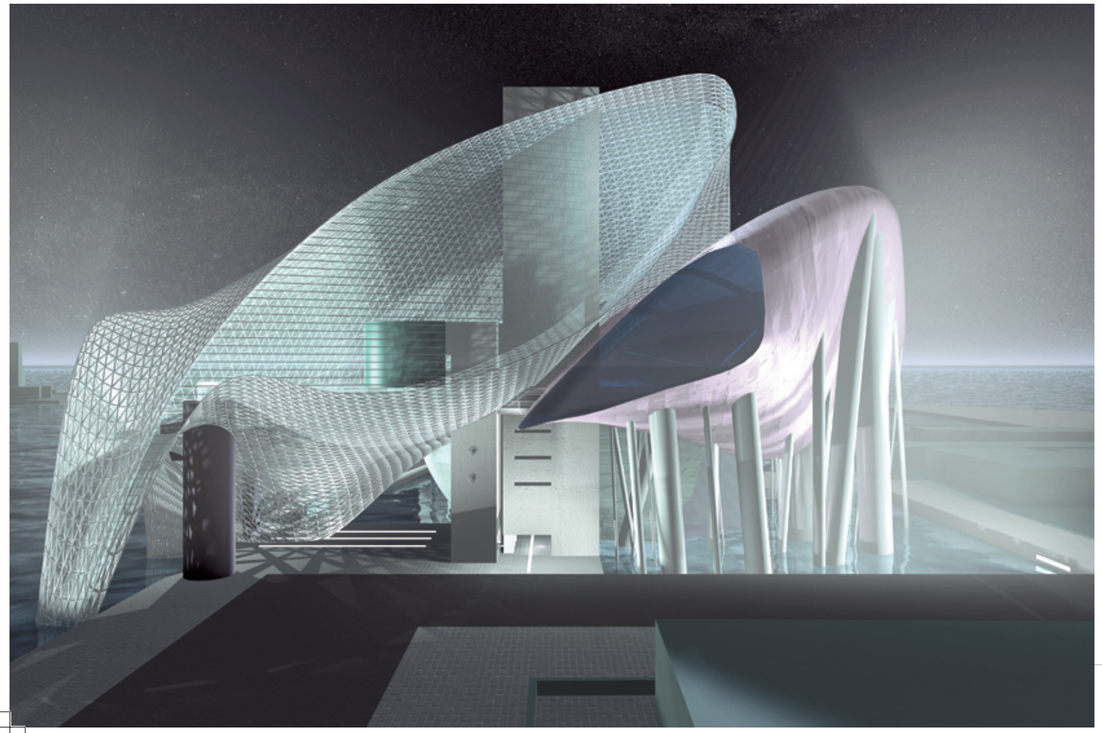


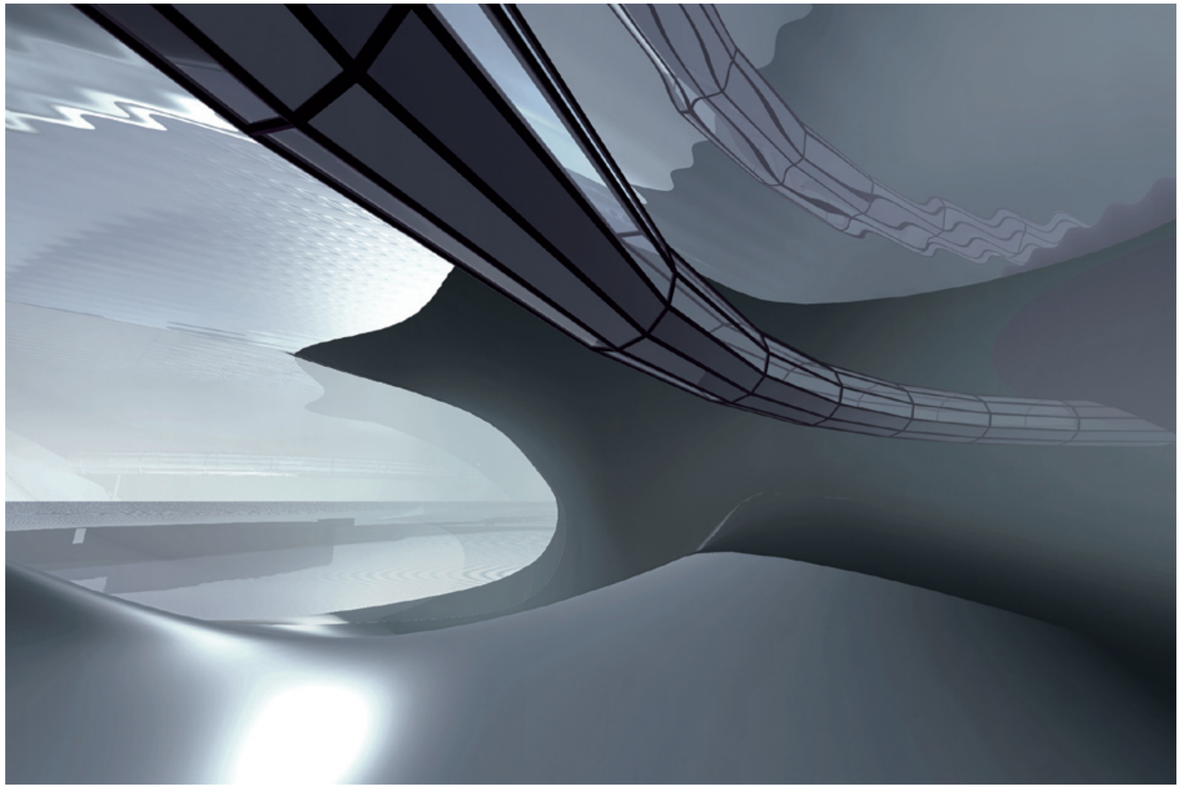


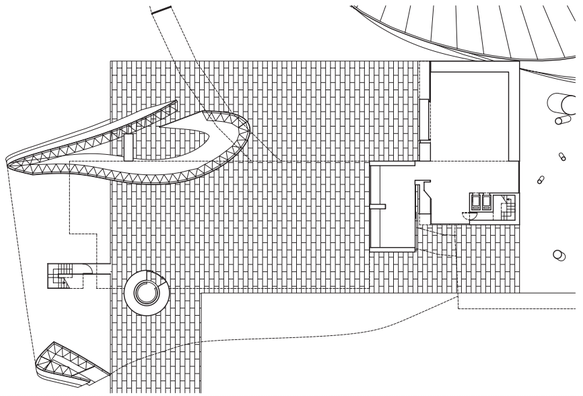


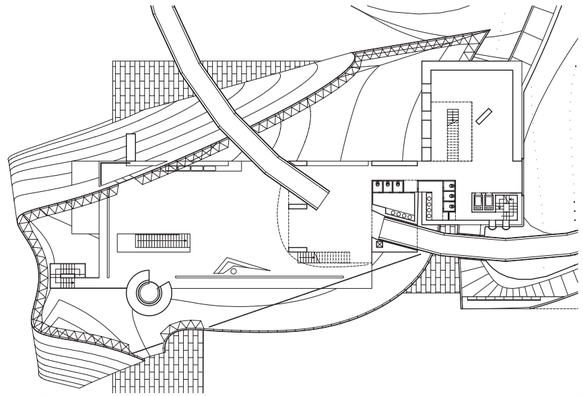


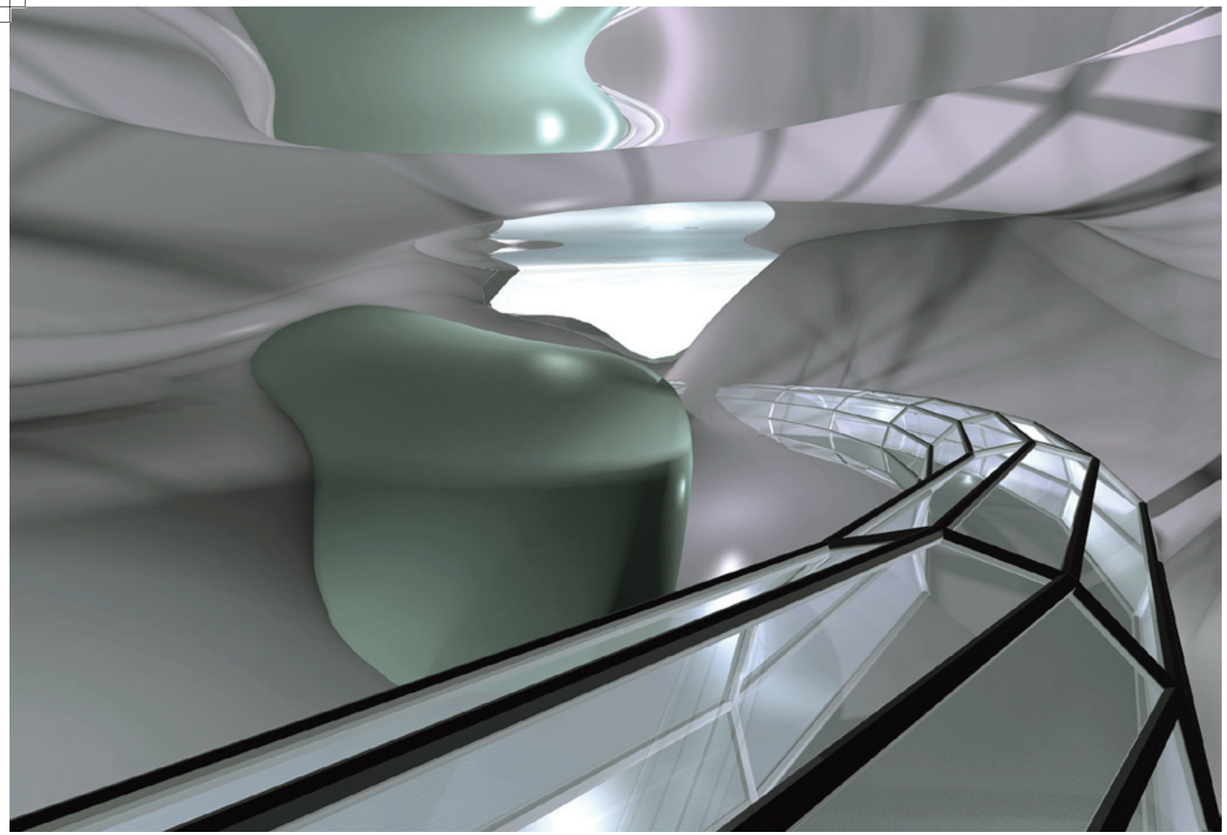


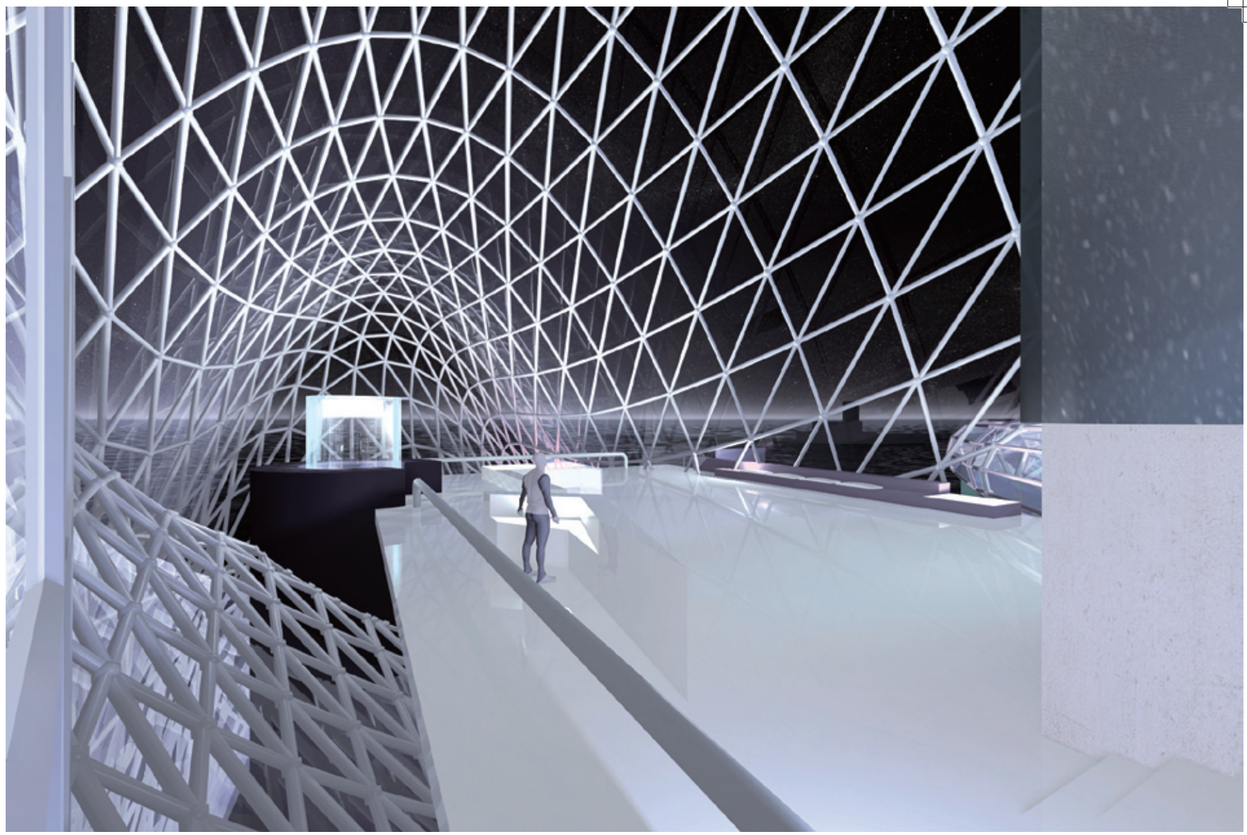


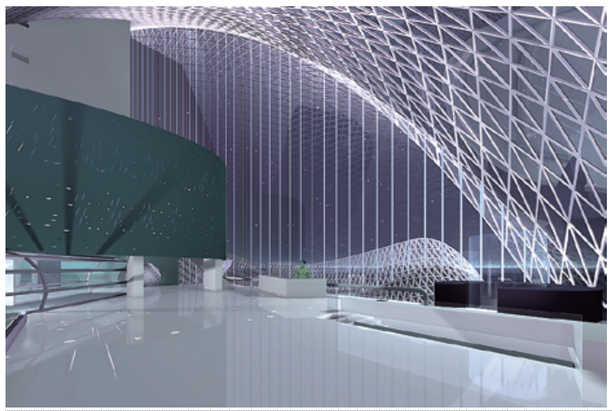


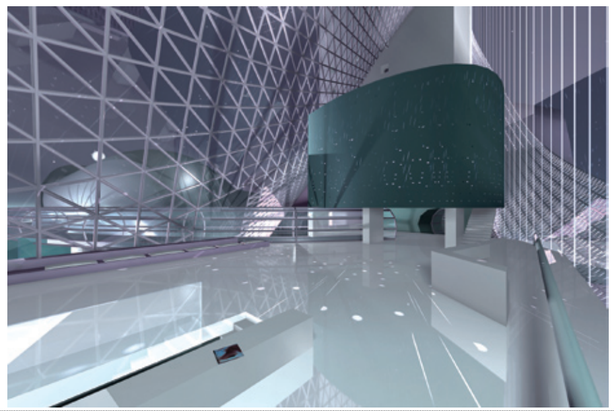


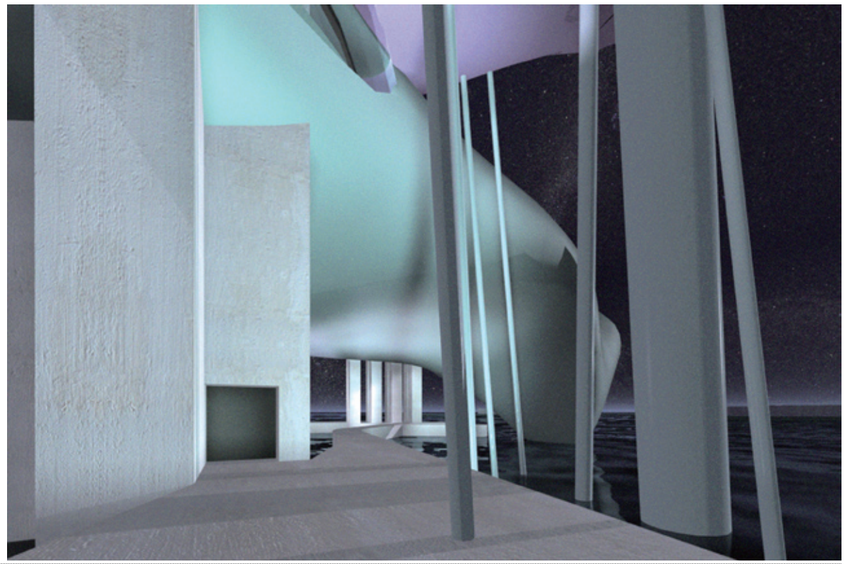












→"CANTO SOSPESO" HOTEL AND OFFICE BUILDINGS

→Antonino Cardillo Architetto

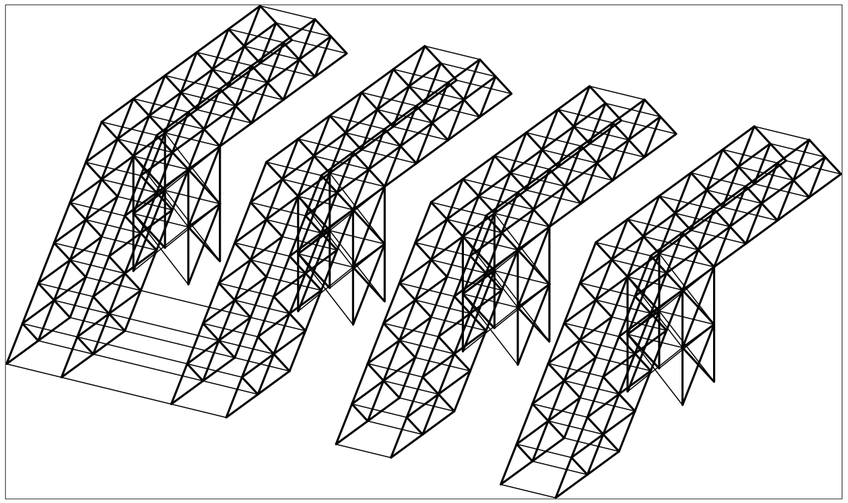
At the end of the "Marina" in the city of Trapani you see unexpected twilights dissolving in the refined profiles of the Egadi Islands. The limpidness of the sky catches the eye. It invites you to cross it, to recognise its innermost potentialities. Penetrating the emptiness and reinventing it, a system of prisms cuts the space of the sky into a virtual three-dimensional pagination. Its surfaces exchange reciprocal refractions, reflections and transparencies. Even though permeable to the soft multi-coloured light of dusk, these condense the space, defining a new rural vision and a new urban reality. At first impression they echo the horizontal skyscrapers of El Lissitzky.

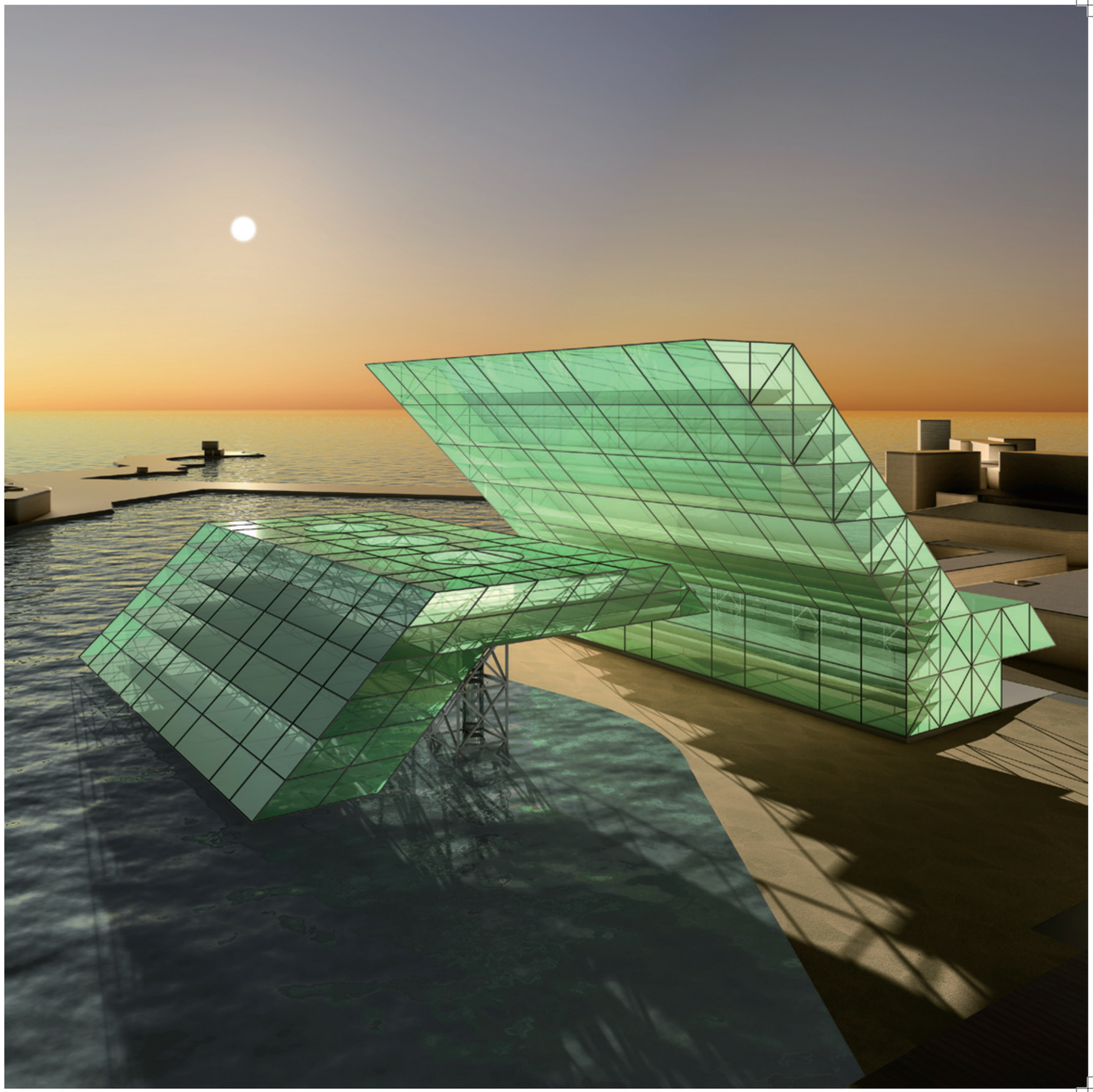
Two linear buildings abandon their vertical columns. Climbing high they are directed according to inclines, inventing a composition characterised by a space enclosed but at the same time eluding its borders. Structurally reciprocal and reactive, the two constructions mutually compensate for the excesses of load: like the arms of a scale, the asymmetric "Wings" of the hotel balance themselves on a quartet of large trellises. Each follows a different direction. One inclines steeply downwards illuminating the surface of the sea, the other hovers horizontal in the space forming an impressive cover on the beach underlying and beginning, equally, a subtle relationship with the office building. This last, extended vertically for a short distance, veers away at a certain point creating an inclined plane at right angles to that of the hotel, thus suggesting a fleeting continuity between beach and sky.

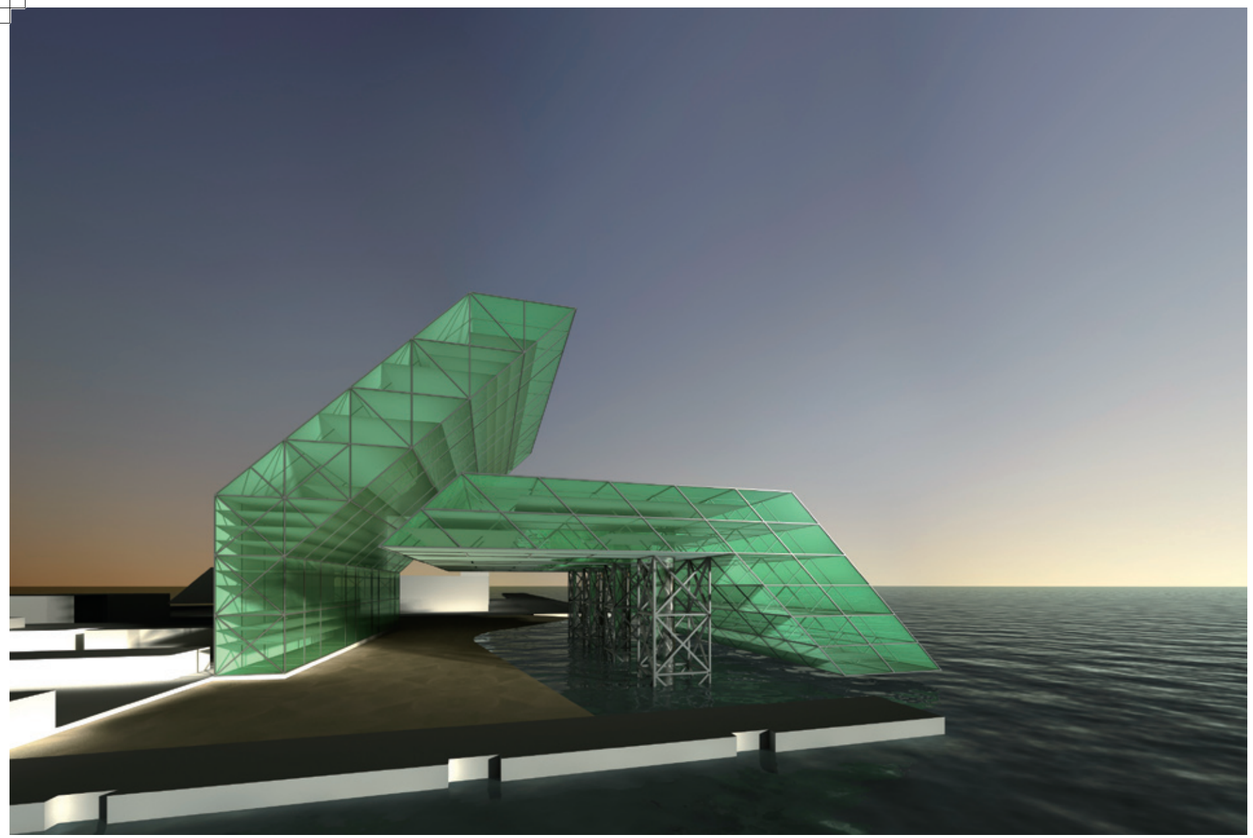
Each block has distinct accesses. That of the hotel is invisible from the outside. The building has no points of contact with the ground and hovers over the sea on giant stilts. Access is gained by way of an underwater passage, a logical continuation of that of the Marina. From this underground space, completed by a car park, four glass cylinders emerge, inside each trellis, the elevators, coming out of the water and crossing the full height of the covered urban space, reach the reception area in the high flat wing of the hotel.

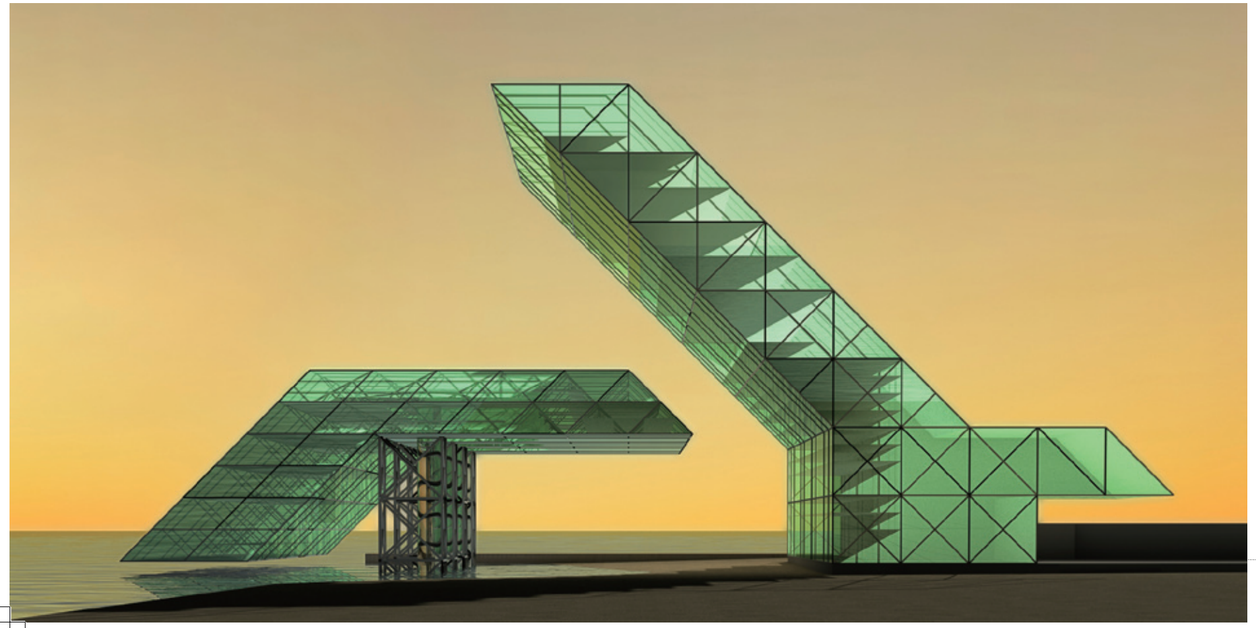
Built on the resistance of a shaft under traction, the spatial orchestration of the structural web takes to the extreme the potentialities of steel used in a state of traction, allowing the use of slender shafts. In this way the volumes appear elegant, already designed by the thin steel web and articulated within by the syncopated narrative of the multiple levels of the 20 storeys.

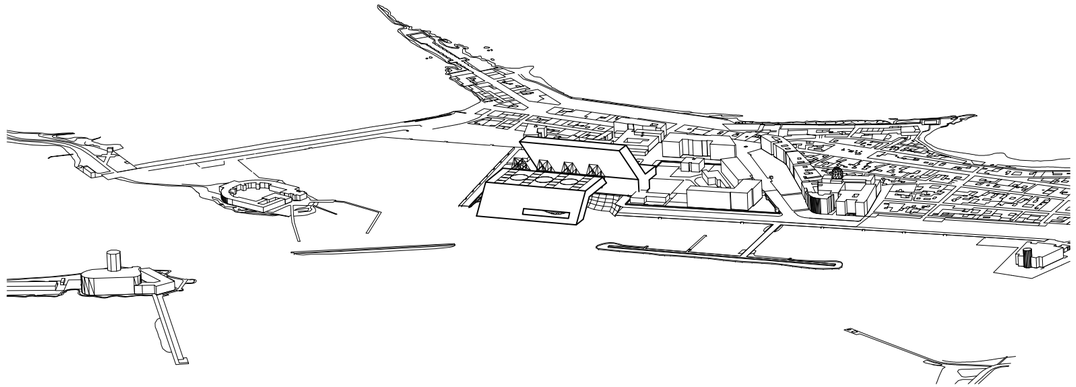
Location: Trapani Harbour, Sicily, Italy
Desing Type: new building in historic place
Building Surface: 7.000 m^2
Levels: 20

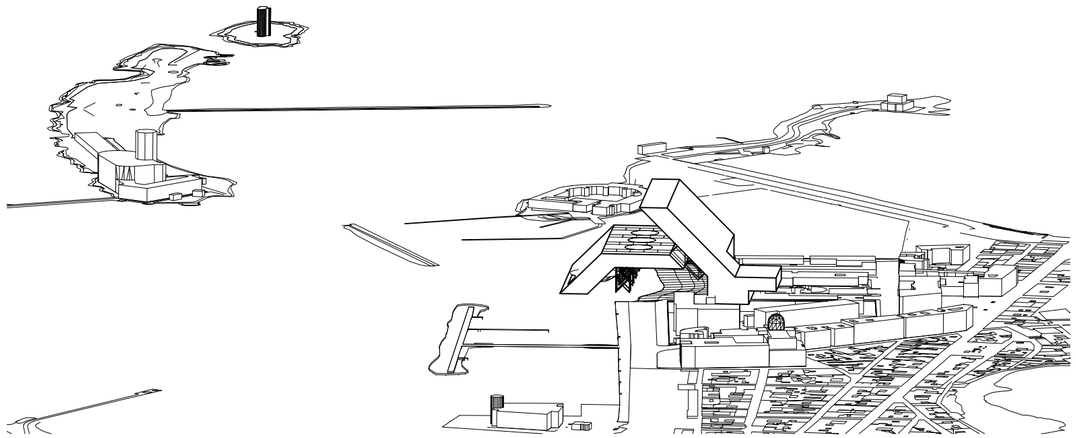


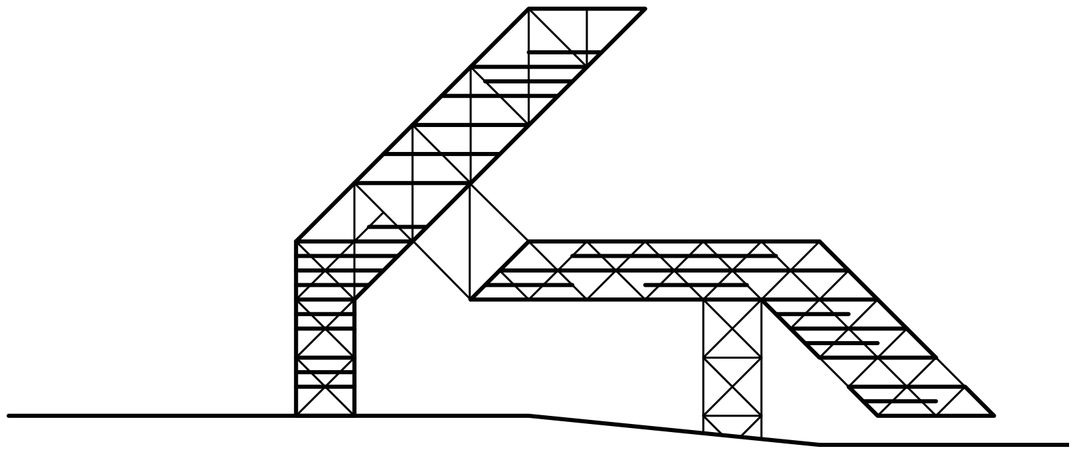








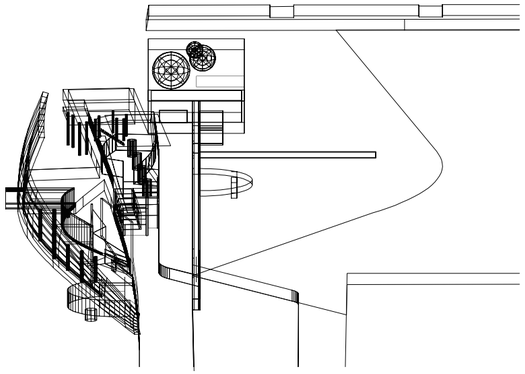


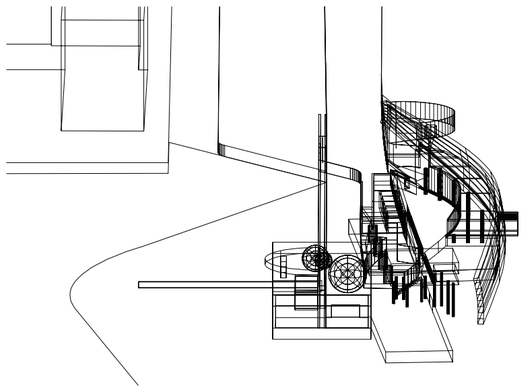


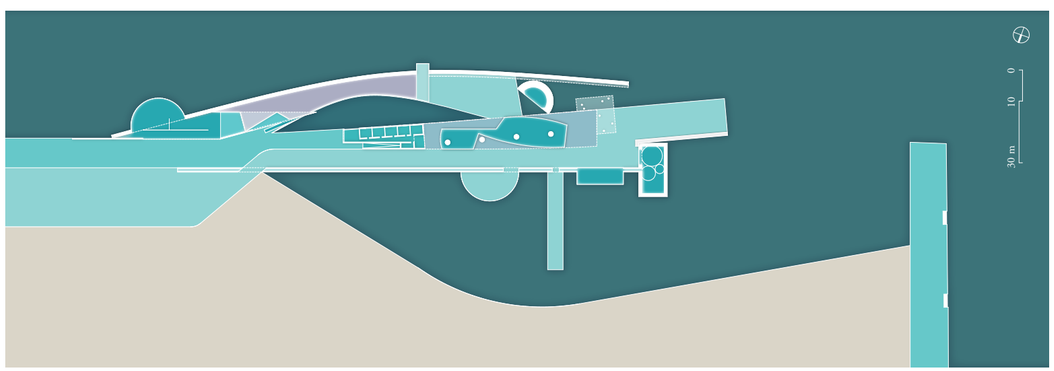
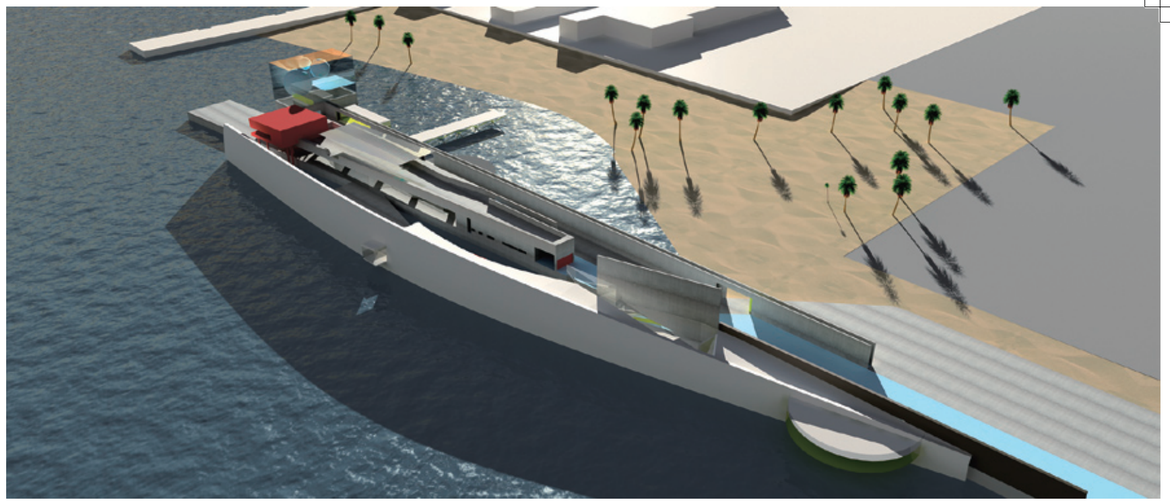
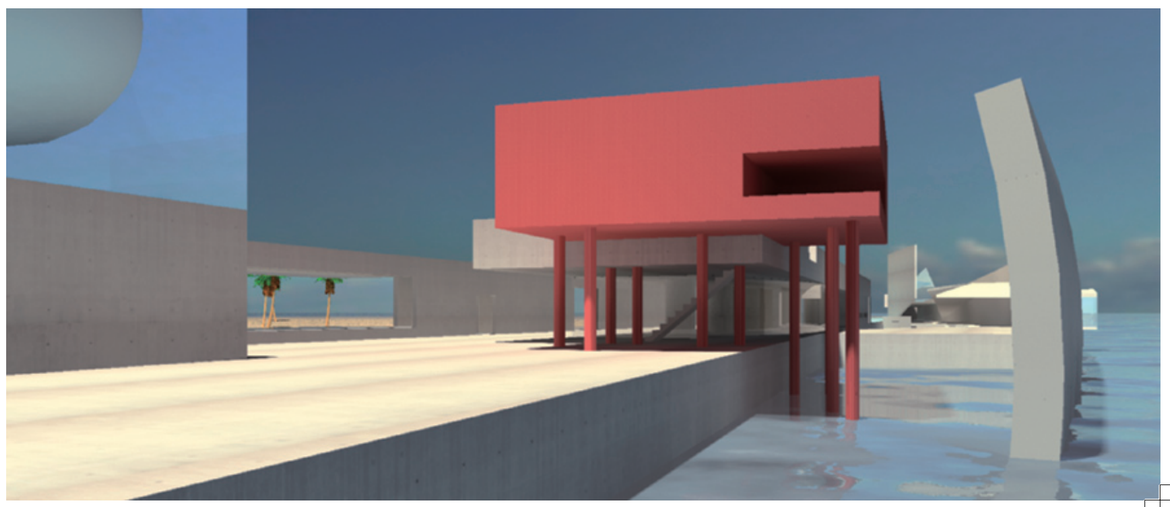
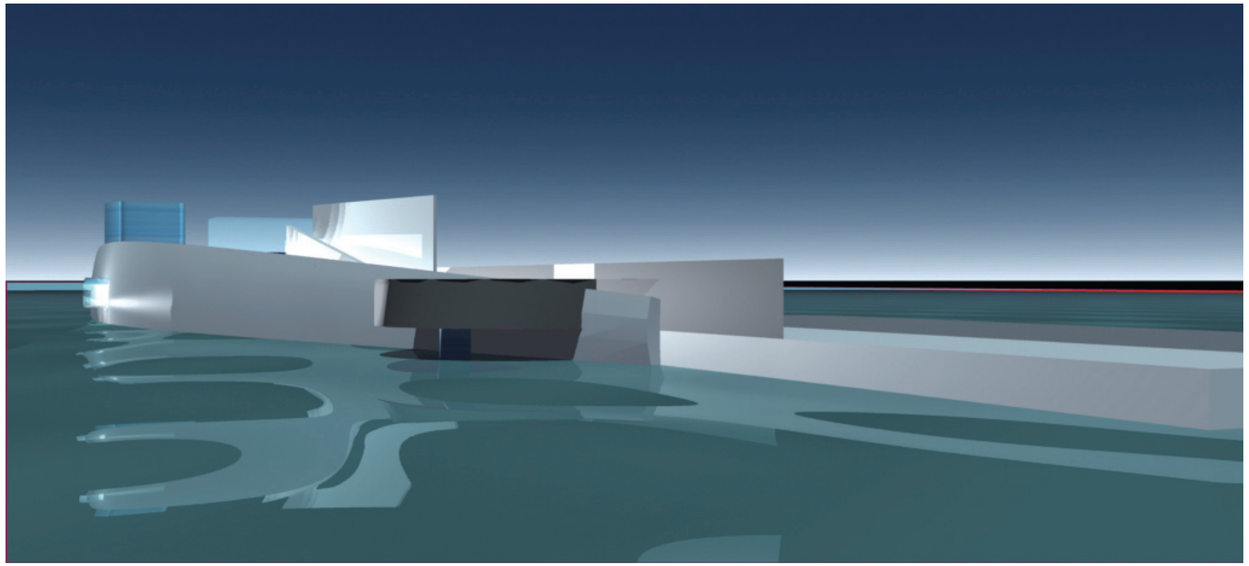
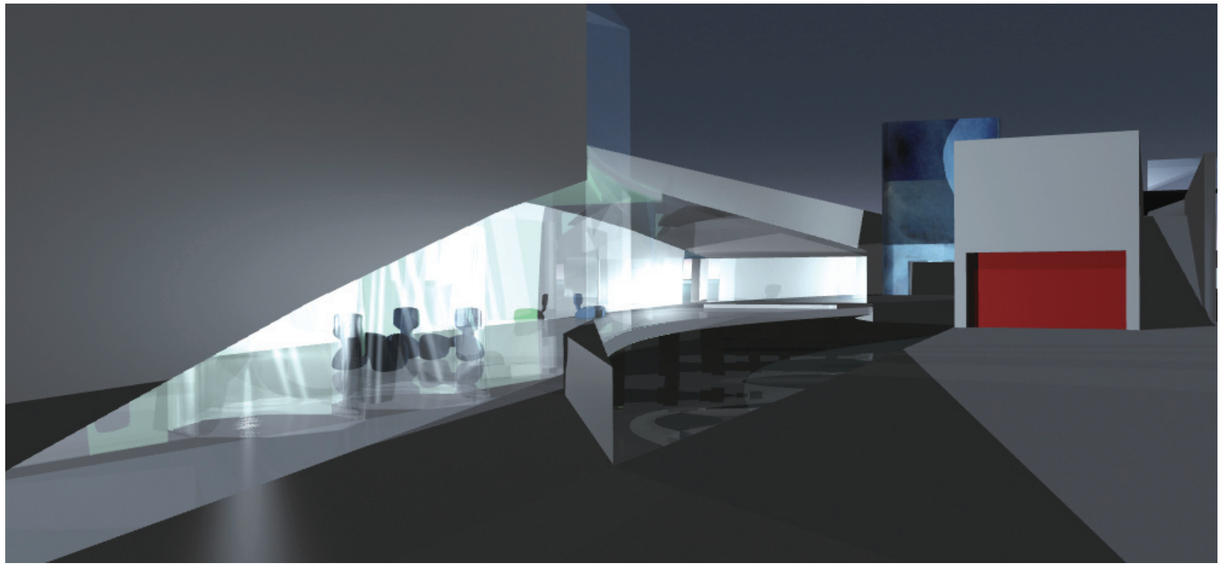
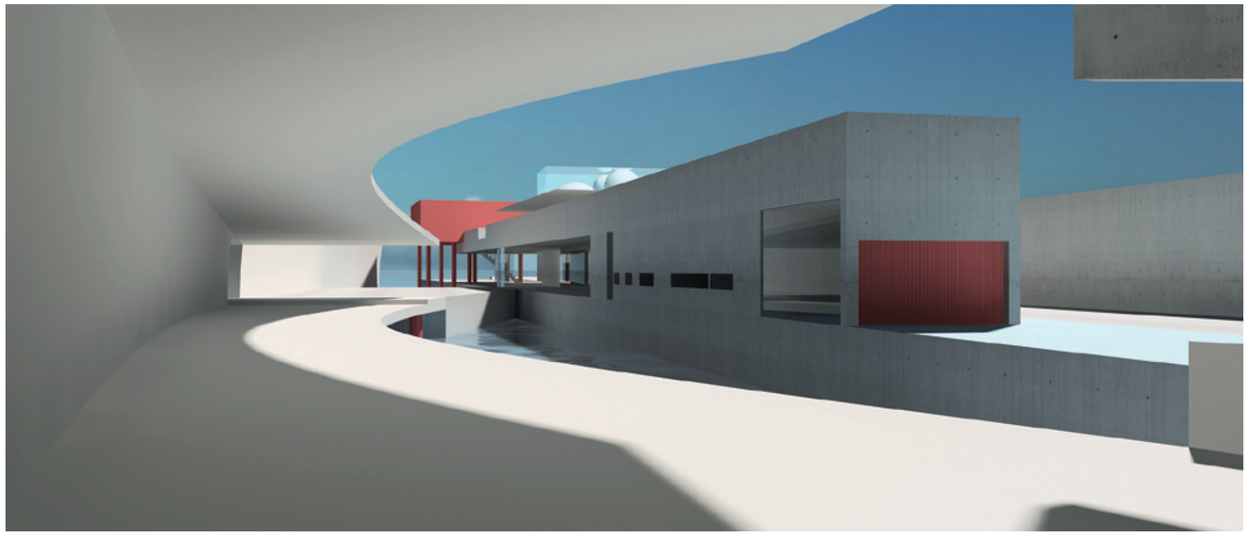
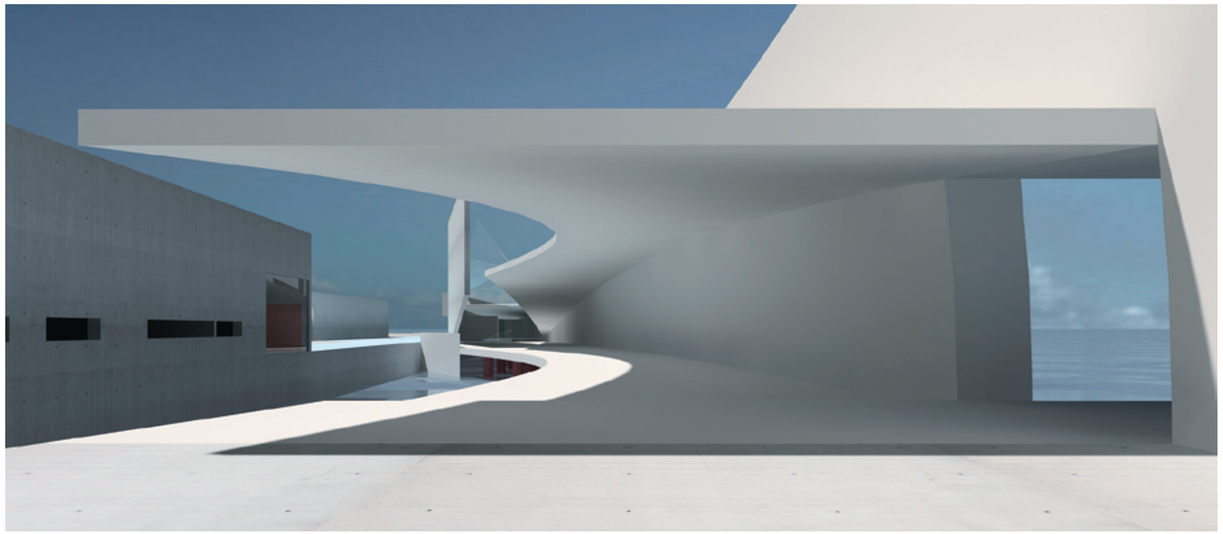
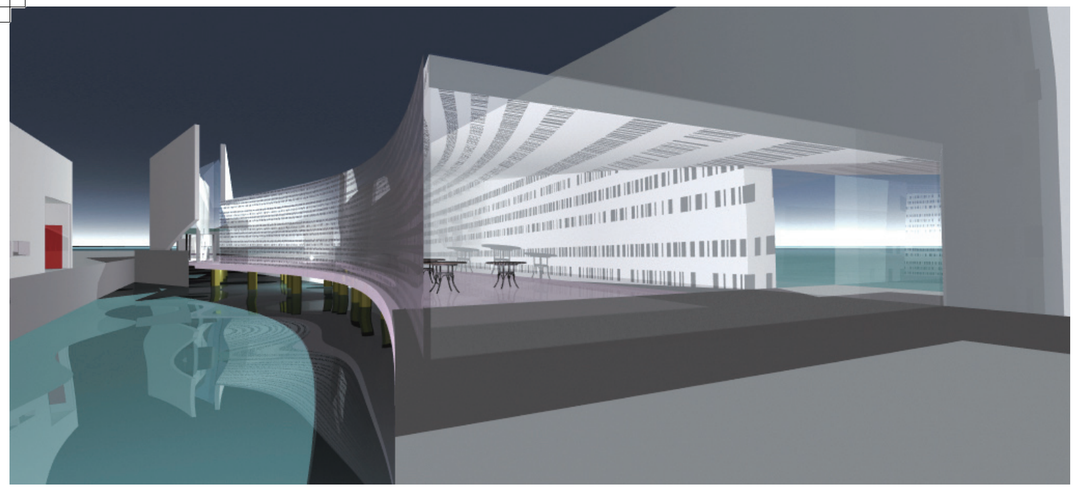
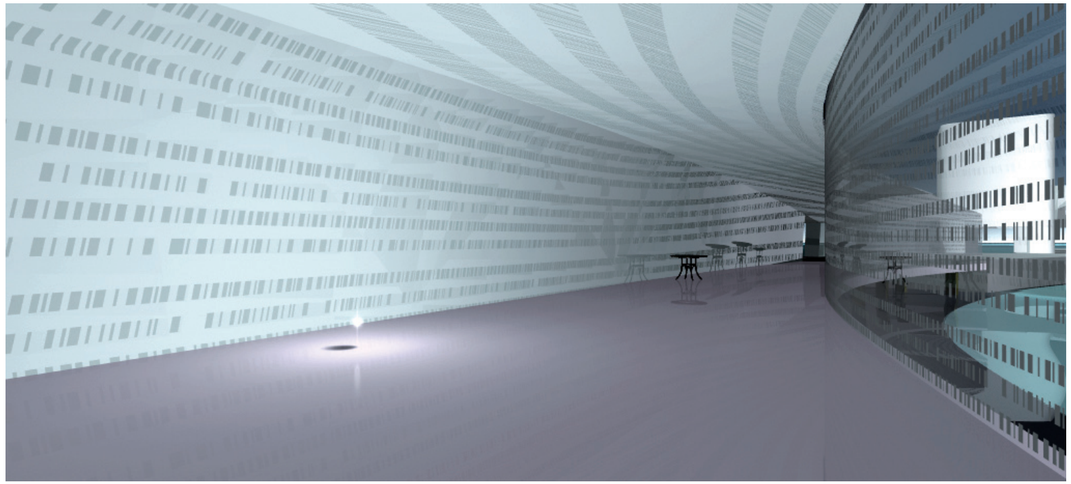
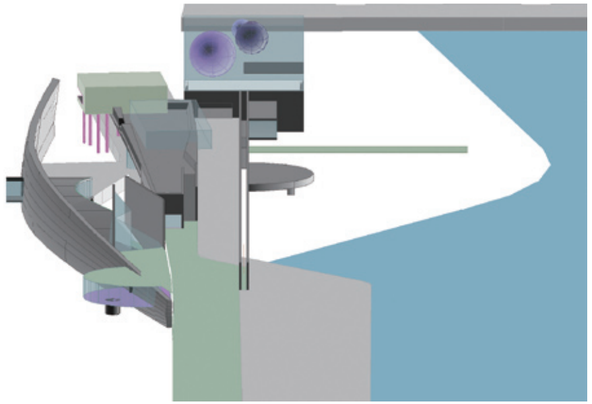
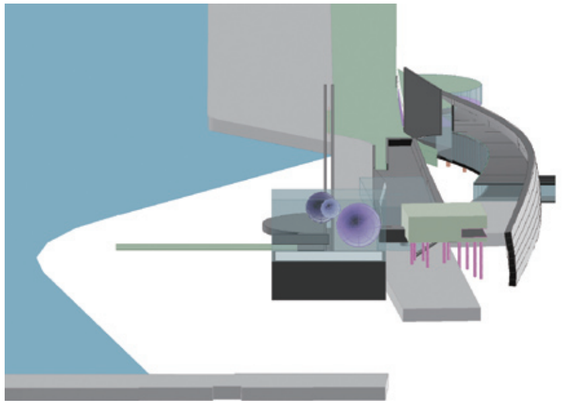
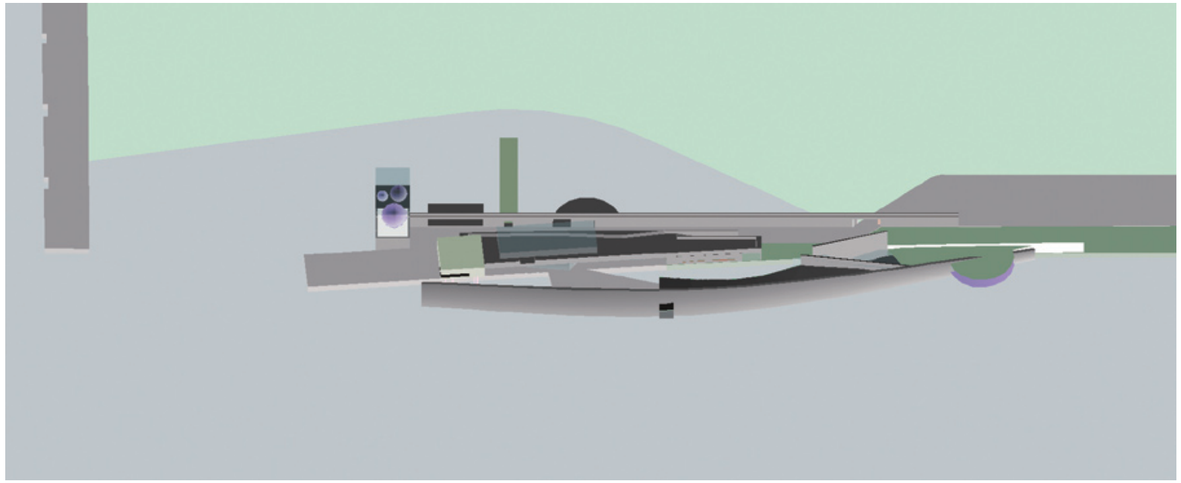
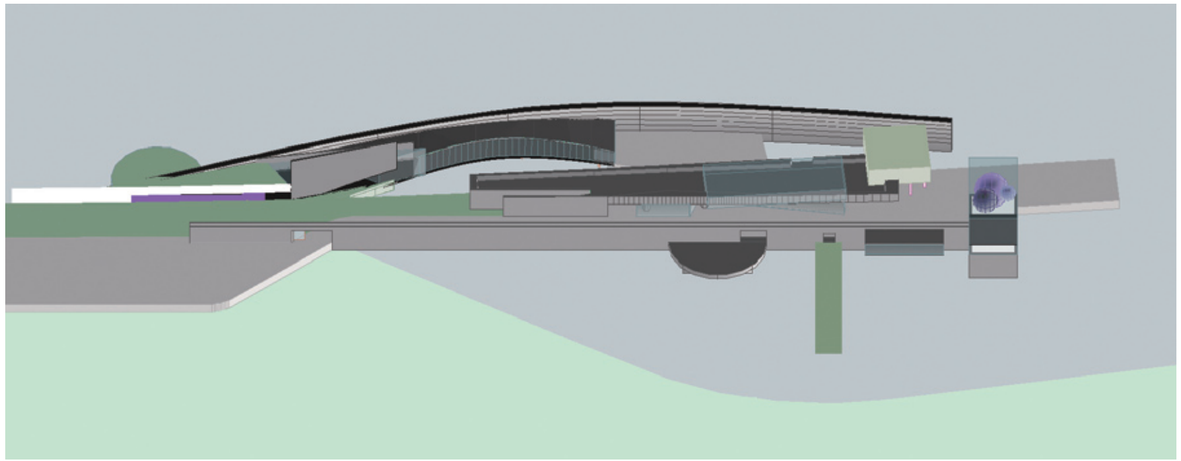
→ECHOES ENTERTAINMENT CENTRE

→Antonino Cardillo Architetto

"The only thing that consoles us in our misery is amusement, but this is the greatest of our miseries." (Blaise Pascal, Pensées, Paris 1660)
Having to be at least in intention a lasting phenomenon, architecture "puts up with" entertainment. Entertainment is ephemeral, mutable, and a building that tries to fix the shape of a space in time is destined almost always to fail. Is an architecture of amusement possible then? Probably not, because it is difficult to surpass its own time unless it incorporates such a strong subliminal content for it to become significant in itself, able then to transcend the function for which such architecture was born, transforming the same function into a pretext. Entertainment certainly influences actions and thoughts. It is a form of social control. A responsible architecture can ignore these difficult presuppositions only with difficulty.
The architectonic complex is born out of the City and from the urban road system grows its intricate sequence of multiple pathways, whose development on the sea structures the diverse forms of the composition.
These designs which curve following the wind, in the same way as the medieval streets of the cities of the sea, structure and condition the form of the buildings so as to realise the functional content of the complex. Pub, restaurant, bar, bookshop, discothèque, terrace and stage appear distinguishable but interconnected according to an "urban" poetry that makes a complex stratification of signs: bow-windows, wharves, a glass tower, several paper spheres, a complex polyhedron, a jetty for small boats, a red house on stilts, the capsized hull of a large vessel, successions of sharp triangular skylights, a long straight grey wall, a soft curving beach. Each form, however, appears transfigured and its being in the complex renders it something else, acquiring for it new meanings. Each part resonates in another constructing a stratified reality, as in an ancient village where life and time leave tracks on the ground.







Location: Trapani, Italy
Architect: Antonino Cardillo
Desing Type: new building in historic place
Built Area: 6000 m^2
Levels: 2