

PROMETEO

1983 – 1984 Venice and Milan, Italy

Preceded by a project for the IRCAM (the Institute of Contemporary Music and Sound Research) in Paris during the 1970s, this project was the brainchild of Luigi Nono, who in May of 1983 engaged Renzo Piano to design a “musical space” for an opera that he was working on at the time: “Prometeo”.

The music that Luigi Nono had composed for the opera *Prometeo* was intended to surround the spectator, arising from various locations and with alternating points of origin using the traditional sounds of the voices themselves, while simultaneously manipulating them with sophisticated electronic equipment.

This gave rise to the need for a space that would allow for a new relationship to be established between the audience and the musical performance: the idea was to revolutionize the layout of a traditional theatre or concert hall.

This ‘musical space’ was designed as if it were to be a gigantic lute, a wooden musical instrument of enormous proportions capable of containing the entire musical performance within, as well as the audience. The music generated inside would naturally cause this colossal soundboard to vibrate, along with the musicians and the audience, who would literally be incorporated within the resonant body.

The ‘instrument’ was built inside the sixteenth century Venetian church of San Lorenzo, with which an important relationship was established in terms of acoustics and staging. In fact, the sound emitted from the sounding board would reflect off the walls of the church itself.

The audience of 400 people was seated at the centre of the space, surrounded by a musical scenario never seen as a whole, but only perceived in its entirety through the music itself: the musicians and singers were spread all around at different heights, and some of them even moved about during the performance.

The music had to interact with the space, and arise from various points.

The idea was to design an object that would combine the stage, the set, the orchestra pit and the sounding board into a single element.

Due to its acoustic properties, wood was selected as the base material (as it is fire retardant and provides for exceptional design flexibility).

Given the size of the structure, a number of shipbuilding techniques were adopted.

The “sounding board” was comprised of an enormous skeleton made out of laminated wood ‘keels’. Manufactured using the consolidated technology of structural laminated wood, each individual ‘keel’ was made up of a series of horizontal elements (with the length of the base module equal to 3.60 metres), curved connecting elements between the ends of the keels and the vertical elements (with a radius of 1.60 meter) and vertical cantilever ‘masts’ at the points where the curves were inserted.

The walls of the “sounding board” were comprised of a series of interchangeable panels in laminated wood: in certain cases, the absence of the panels resulted in gaps through which the sound would come out and be deflected by the church’s architectural elements. By altering the configuration of the fills and voids, the musical instrument could be ‘tuned’ in such a way so as to obtain the desired acoustic output.

Supported by metal uprights, the structure rested approximately 3 metres above the floor of the church itself. With the use of special loudspeakers, this space helped to increase the circular dynamic of the sound, even beneath the floor upon which the audience was seated.

The world premiere was organized by Milan’s La Scala theatre and was held at the deconsecrated church San Lorenzo, in Venice, on September 14, 1984, in collaboration with the Venice Biennale’s Festival of contemporary music.

One year later, the La Scala theatre had the entire structure dismantled and moved to Milan, where it was readapted for additional performances to be held inside an industrial warehouse belonging to the company Ansaldo, which has since been abandoned.

Thanks to Vittorio Pozzati, the structure is currently stored in a warehouse in Cavenago Brianza.