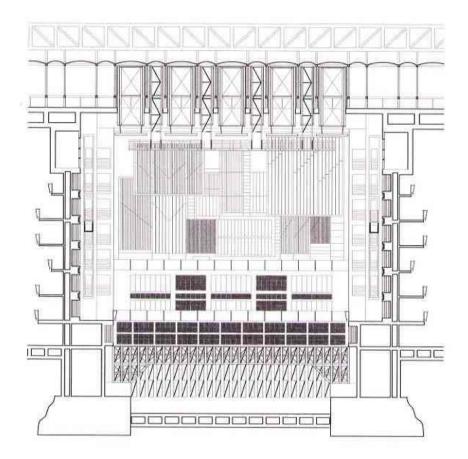
POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE Degree in Architecture Honors theses

Theater: a Moving Machine. A Project Contribute

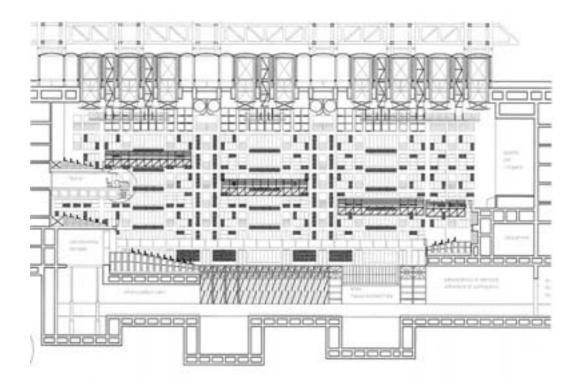
by Fabrizio Massimino Tutor: Sergio Santiano

The whole idea arises from the question of how a modern musical and theatrical center should be in order to satisfy an ever increasing demand for polyfunctional spaces. The project is realized with an experimental cultural cell which permits all scenic forms and all possible scene-auditorium relationships, allowing the reconstruction of traditional architectural structures but at the same time permitting the most modern experiments in music and theater.

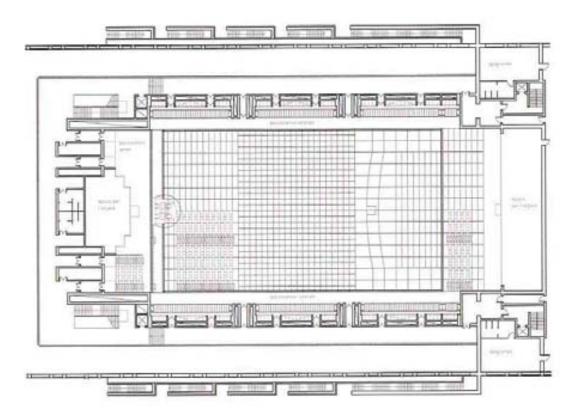


A versatile structure was imagined, capable of not interfering with its presence with the contents or messages played in the scene; something which can be defined a "soft architecture", serviceable ,adaptable and mobile not only partially: a neutral space, because neutrality and mobility are synonymous. Based on the idea of overcoming the opposition between auditorium and scene, we have tried to confer to

the space all the modern technological flexibility, which has been realized in a sole auditorium where the stage extends the scenic technology to the area of the audience, transforming the theaters' own parts into manoevrable objects and new elements of theatrical language. A space-forming volume is thus created, completely transformable in a planimetric as well as volumetric sense. We have tried to realize this space as if it was as an electronic circuit with a series of components and subcomponents, free from a traditional compositional logic. Such a total flexibility in space must necessarily be followed by a careful valuation of the acoustic properties. Our aim has been in the direction of researching the means to reconstruct the reverberating of sound and the volumes proper of every kind of historic musical creation and of the experimentations of contemporary musical research.



The potentials of acoustic and volumetric plasticity of the auditorium subordinately to the represented music are achieved thanks to the total transformability of the telescopic acoustic ceiling and of the whole level of the pit, besides from the presence of a matrix of aerial bridges, of self-propelled gangways and of metallicroll-up shutters which roll up around cylinders. After a careful analysis of the same, we have chosen to abound in the usage of commercial Quadratic Residue Diffuser (QRD), in order to have an ensueing absolute acoustic fidelity, with a complete and guaranteed variability according to the requirements we have forseen: wide band and wide angle diffractals, tridimensional diffuser and revolving elements (RPG Diffusor System, Inc), achievement of Manfred Schroeder and by now a reality in many auditoriums around the world. Not less important for the reconstruction of ten centuries of occidental music are the two great organs opposite to each other which occupy the short sides of the auditorium.



The first one, thought in relation to the work of J.S.Bach, results from the fusion of the different registers which he used, while the second one, homage to the history and tradition of the italian organ school, represents in the registers the fusion of the best organs of our country, from the XV century until today, and is destined to the execution of musical pieces spanning from Frescobaldi to Franck up to the XX century composers. To conclude our work has given birth to a space which may be compared to a net-labyrinth or rizoma. Inside each road may cross another...it has no center, no outskirts because it's potentially infinite. It's structurable, but not definitely structured.

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