

POLITECNICO DI TORINO
SECOND SCHOOL OF ARCHITECTURE
Master of Science in Architecture
Honors theses

Multipurpose building project in the Osasco (São Paulo) city center

by Barbara Pietrantoni Penno and Stella Saracino

Tutor: Guido Laganà

Co-tutors: Elena Fregonara, Alberto Iacomussi and Delfina Maritano Comoglio

The project is set in Brazil, and precisely in Osasco, one of Sao Paulo's satellite towns. Its objectives are urban centrality and the recovery of local identity through the construction of a multipurpose structure and the conversion of an old factory building, a historical symbol of the town.

Nowadays, following the relocation of heavy industries outside the urban area, Osasco's main characteristics and importance are undergoing change.

The project area, which includes Hervy, an abandoned ceramics factory, is strategic because of its central position but, at the same time, it is cut off from the city by the railway, the central railway station, the Tietè river and by an important north-south road axis; elements that have influenced Osasco's industrial character in the '50s-'60's.

The river is the matrix used to give form to the idea of a "hill-building", with the aim of minimizing visual impact and of preserving the maximum amount of parkland.

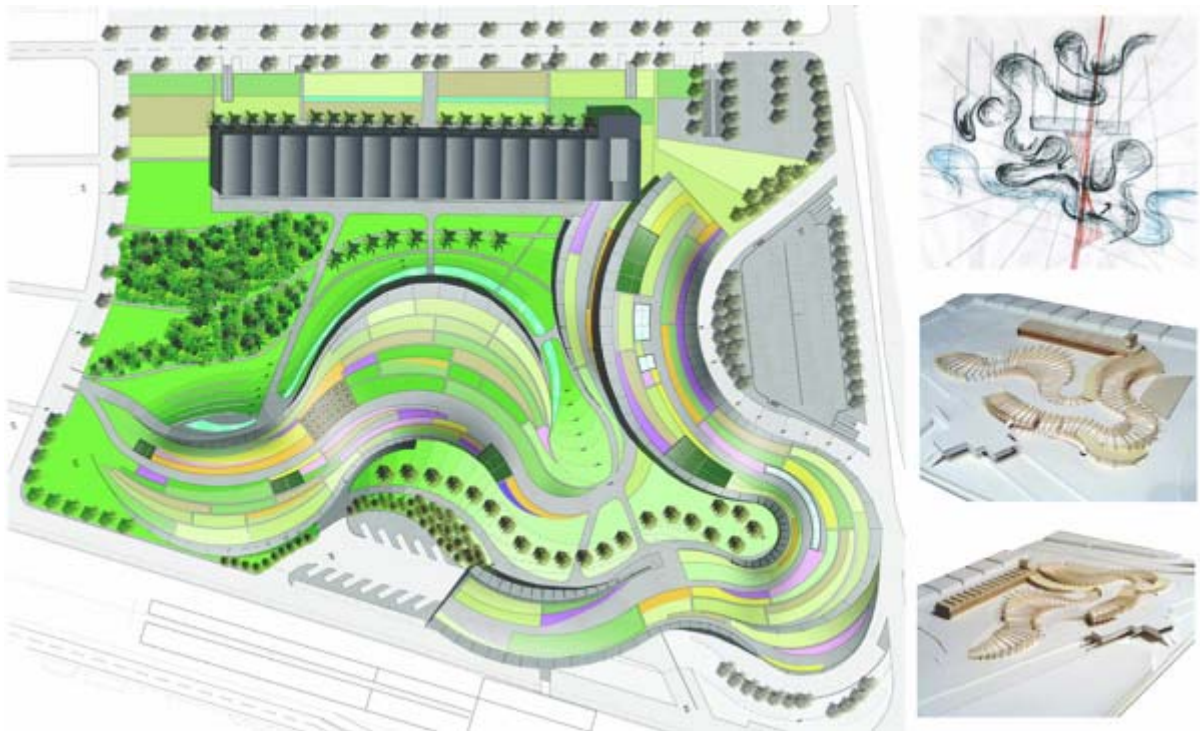
The meanders of Amazonian rivers have been studied mathematically in order to design the project's fluid geometries: as the river hollows out and leaves sediments, so the building grows and fuses with the ground and surrounds the remains of the old Hervy factory building.



The functions of the proposed Center have been chosen on the basis of a Communitarian Impact Analysis that takes into consideration each and every item involved.

The various functions are synergistically linked:

- an integrated station, that includes an interstate bus station and a metropolitan train station, constituting the link between the city center and the project area;
- a shopping mall, on the east side, adjacent to the large thoroughfare that becomes the ideal extension of Avenida Antonio Agù, Osasco's main commercial axis;
- a Congress Center, the actual heart of the project, that includes two large halls for conferences and shows, plus various smaller rooms, and which is linked to the shopping mall by an exhibition area;
- the Head Office of a new Civic Center in the Hervy building; 17.400 square meters grouping all "secretarias", thus far scattered all over town.
- an urban park on the roof tops and surroundings (thanks to the use of Sedum, a pioneer species of plant, that grows easily and does not require thick layers of earth). Its design is inspired by Burle Marx.



All the functions adapt well with the winding, fluid form that always offers different views from both within and outside the building. The main structure is in reinforced concrete, as in all modern Brazilian architecture. The structural grid follows a regular pattern of pillars and beams and is based on the geometry of meanders. It has been studied and verified in detail, particularly its two most critical parts (i.e. greater distance between pillars and the presence of more than one floor), using the 3D software of the Strauss7 programme.

One of the criteria followed, through technologies that allow energy saving with active and passive systems, is that of sustainable construction.

The project thus allows us to identify the signs left by the different experiences, by the persons who believed in it, by the effort, the enthusiasm, the utopia and the reality.



For further information, e-mail:
Barbara Pietrantoni Penno: dolphin.b@gmail.com
Stella Saracino: stella.saracino@email.it