

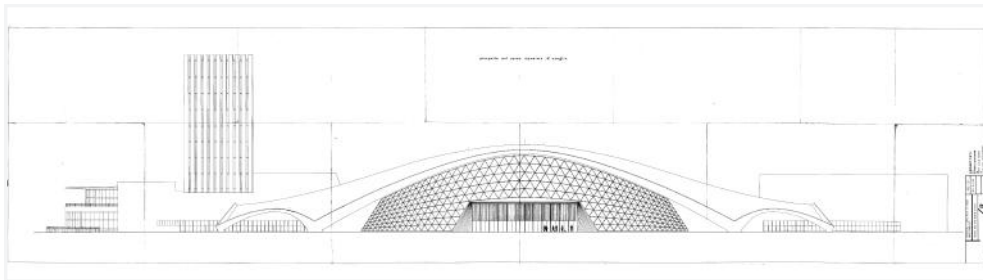
THE ARCHIVE SPEAKS VOLUMES

# MORANDI IN TURIN

# A Pavilion inspired by Futurism

There's something new in the air today, or rather ancient: it's the shiny cars set up in full regalia for the 41st edition of the Auto Show in the Palazzo delle Esposizioni in Turin, which has been making Italians dream about driving since 1900, with the exception of the hiatuses due to the two world wars.

But this parade, bearing the 1959 license plate and shrouded in the November fog, presents a surprise: a new exhibition area designed by one of the leading engineers of the time, Riccardo Morandi, the patron deity of the union between iron and concrete, who with “his” reinforced concrete is contributing to the reconstruction of the country.



The economic miracle which is sweeping Italy, with the national income rising by an average of 7.5 percent per year, is even more tangible in Turin, the capital of the automobile industry in whose streets Fiat 600s and 500s whiz by and the suburbs swell with high-rise apartment buildings welcoming workers from southern Italy (some 67,000 would arrive in the decade between 1960-1970).

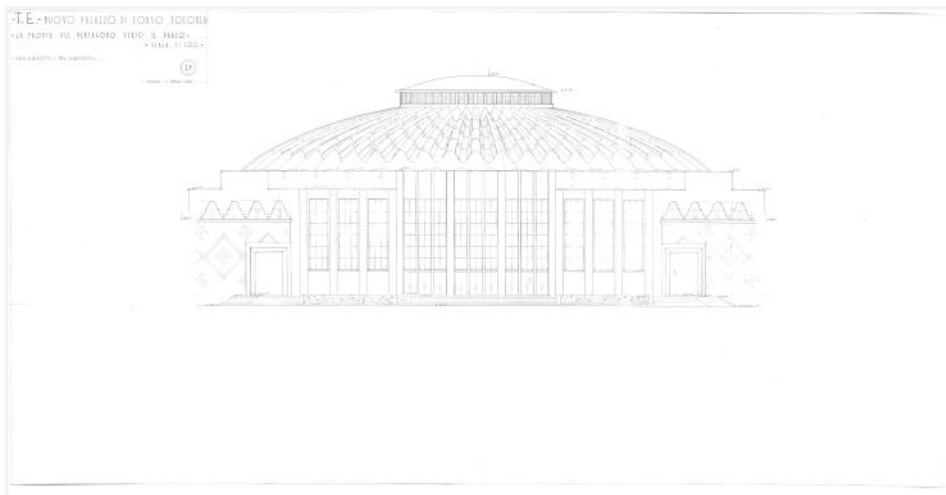
Particularly in the Savoy city, there is a flurry of activity to produce merchandise and ideas to best honor the centennial of the Unification of Italy, which would be celebrated two years later in 1961. Along Valentino Park, chosen as the center of the festivities, is a fervor of buildings of the highest architectural quality including the Palazzo del Lavoro, designed by the other “man of reinforced concrete,” engineer Pier Luigi Nervi, in collaboration with architect



Gio Ponti and Gino Covre, and the Palazzo delle Mostre (now PalaVela), designed by Franco Levi and Annibale and Giorgio Rigotti.

In the wake of this cultural and economic enthusiasm, which showcases the progress achieved by the Piedmontese capital, the Roman engineer Morandi is also involved, whose task is to carve out an underground exhibition pavilion in the Valentino Park on an area that in the early twentieth century had housed the Skaters' Pond and later the Turin Equestrian Society's Galloping Ground.

None of his handiwork should be seen from the outside so as not to compromise the environment and landscape. Everything must be buried, covered, hidden.



For Morandi, the project becomes an opportunity to put his long years of study and experimentation with prestressed concrete to good use, creating an open, suspended space defined only by the positioning of mostly internal forces. In fact, his “underground hall,” known as “Pavilion 5,” consists of a vault with no intermediate supports, made of thin prestressed concrete structures, interwoven among themselves.

The structure, built in six months, is very large (143x69 m) with a height of only 8 m and with 3 distinct rooms: the side galleries included between the connecting rods and the walls and the large hall lit by a series of skylights visible from the play area created in the park above.



A 150-meter underground tunnel, equipped with a moving walkway, is eventually built to connect Morandi's pavilion to Salone B (the first major project that Pier Luigi Nervi carried out for industry in Turin, creating a large exhibition hall built on the pre-existing Palazzo della Moda).

Of Morandi's work, structural engineering historian Tullia Iori writes years later, "In the Underground Pavilion at Turin Expositions, the subtended tie-rod solution reaches its very peak. To the commonplace theory of arches designed by Bonadè Bottino (Fiat's historic engineer), Morandi adds a diamond-shaped weave of very thin, pre-compressed beams attached to the inclined pillars, hinged pendulums whose balance seems uncertain. Hidden, secret in the wall, is the tie rod, on which the stability of the structure depends, appearing to be a futurist-inspired mechanical toy, the perfect setting for an aero-dance."

Even today, it continues to shine underground, in the ways and forms that the passage of time and the transformations it has undergone permit, one of the prestigious works of Italian Rationalism following the Second World War.

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