## POLITECNICO DI TORINO SECOND SCHOOL OF ARCHITECTURE Master of Science in Architecture <u>Honors theses</u>

## The grain Hennebique silos in the port of Genoa by Gabriele Scotti

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The grain Hennebique silos in the port of Genoa is a unique testimony to the industrial, architectural and engineering italian history : as in the Renaissance looked immense construction site Brunelleschi dome of Santa Maria del Fiore, the same way, at the turn of the nineteenth and twentieth century, young engineers watched admired the bold work that was hastily raising the area's *superba* waterfront, the emblem of the industrial revolution that was sweeping the overwhelmingly young Italian kingdom, and of which Genoa was one of the most advanced centers. Reading the numerous archival documents, still well preserved, we realize the multitude of characters who, each with its professionalism, took part in the grand enterprise, making the construction of this cathedral devoted to faith industry, today symbolically, abandoned in memory of a glorious past.



To the casual passer who skirts the mighty walls can not escape the deafening silence that surrounds the giant of iron and cement, surrounded by a border between the horns of urban traffic and secure the tranquility of the water, an empty sound where the sensitive soul can still hear the traffic port of the early twentieth century: the perpetual pace of trains, the monotonous rhythm of the hooves of horses dutiful, the screams of grumpy *camalli* bent over their heavy loads, the sirens of ships that announce the arrival of exotic goods, and why not, even the shots of the carpenter's intention to bend the bars of the fledgling technology of reinforced concrete. These would be the noise that accompanied the students and young professionals during visits to the site of the silo in just fifteen months, so the work continued for the first plant, which contributed in no small part, to give a jolt to the history of building techniques in Italy and in Europe.

It 's been more than a century by the great years in which major Italian and European publications reported on their pages photographic images, plans and sections, structural calculations of genoa's grain storage; in the same year the company manufacturers shows the opportunity of carrying such construction reached with the application of new material.



For eighty years the silo, which meanwhile was expanded and modified several times, fulfilled its role, regardless of time passing, proud of its outdated and boldness of his elegant and majestic image that recalls a Renaissance palace rather than a nondescript industrial building.

In the late eighties, with its abandonment, starting twenty years of neglect caused by the inability to relate to contemporary his bulky past: his fate, like that of many other industrial products of the century, is marked by uncertainties administrative design and superficiality, these, too focused on the future intended use of the building and fascinated by the mere external appearance, they forget, however, to study it in its more intimate nature of the industrial machine, confronting him in the section to begin to understand that there are in front of an empty box, but that is to suffer from this that it can give rise to a serious design project, and especially feasible.



Today, the city government and port are again demanding role in deciding the future of a piece of architectural history that led Genoa to be watched with admiration from around the world, this thesis will warn them by yet project plastic, through archival work aims to bring to light the field of concrete silos, nell'augurio that are able to understand the complexity precluding the way for imaginative and creative projects, whose image is rendered inevitably forced to collide with the much more massive reality of concrete.

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