



FOR CENTURIES, THE INNER CIRCUIT OF MILAN'S CANALS WAS THE IMPORTANT WATERWAY CONNECTION BETWEEN THE RIVERS ADDA AND TICINO

MILAN'S "CERCHIA DEI NAVIGLI"

To compensate the lack of a river, Milano - situated in the midst of a plain, from the twelfth to the late nineteenth century built and enhanced a net of waterways (small natural streams, canals, basins, ponds, ditches and springs), up to becoming "le ville d'eau". Mostly thanks to its surrounding "Cerchia dei Navigli" (ring of canals) allowing the development of commerce, transport and agriculture and connecting it to a large and growing area, Milano became a lively and industrious town.

Milano developed as a ring around its original nucleus, enriched with the oldest European system of canals of substantial economic and territorial value.

Today, unfortunately, only few traces of the town of that time are still evident, traces that the inhabitants of Milano continue to love and try to preserve.

You can drive your car along the concentric streets, or go on foot or by bicycle, and search along the "Cerchia dei Navigli" - covered in the thirties of the last century, the precious witnesses of Milan's past.

THE HISTORY OF MILAN'S NAVIGLI

The "Fossa Interna" (inner moat) of Milan, surrounded by an embankment, was realized in the second half of the twelfth century outside the Roman walls, to defend the town from Barbarossa's dread attacks. It was a big excavation, deep and 18 meters wide, filled with clear spring water. Later its water was used to irrigate the fields outside the circle and to produce energy through water wheels, and was regulated by a system of locks. A project to connect the ring of the canals to the rivers Ticino and Adda was then carried out, with the aim even to reach the Adriatic Sea, through the river Po.

Thus the history of Milan's canals began. When it became necessary to transport the marble for the construction of the Duomo from Candoglia (Lake Maggiore) to the building place, a channel was created to connect the Naviglio Grande (beginning downstream Lake Maggiore up to the Darsena of Porta Ticinese in Milano) and the inner moat, which therefore became not only used for irrigation but, since 1338, was also navigable. Coal, wine, meat, fish, wood and marble were transported along the Naviglio Grande up to the dock, while salt, flax, iron, wheat and rice were sent outwards to be sold beyond the Alps.

In the fifteenth century, when trade became increasingly important, the inner moat -later called "Cerchia dei Navigli" by Milan inhabitants, was equipped with locks for navigation to overcome the difference in level inside the Cerchia itself and between it and the Naviglio Grande, reducing the time of interruption for water supply and developing its irrigation and navigation functions. The Cerchia dei Navigli was 5 km long, had 5 locks, and was crossed by 22 bridges.

Especially in the most popular districts of Porta Genova and Porta Romana, between the canal and the walls, warehouses and spaces for entering and leaving goods, as well as storages and working places were established, then reorganized and expanded in the last decades of the sixteenth century.

Just while a continuous expansion of urban and rural suburbs outside the Cerchia was taking place, Leonardo da Vinci designed some improvements of the locks and a new and more functional connection of the Cerchia dei Navigli with the river Ticino, through the Naviglio Grande, and with the river Adda, (from the town of Vaprio up to the internal Laghetto di San Marco), through the Naviglio Martesana. The waterways provided the city with food and iron, in addition to materials for building and craft.

The network of canals was also extended from the Naviglio Grande at Abbiategrasso towards Bereguardo by Francesco Sforza, in order to reach one of his most lavish residences, a huge game reserve. Later it was realized a connection of the Naviglio of Paderno up to Lake Como and various sumptuous villas and summer residences of the rich and aristocratic social classes were built along the banks of the outside canals.

In the sixteenth century, the Spanish administration, in order to facilitate the growing commercial development of the Lombard city, decided to expand the area and to increase the villages around the Cerchia dei Navigli: between 1546 and 1566, they built the Bastioni (ramparts), a fortified new urban frontier in defence of the city. The dense network of new canals made these area much fertile and rich in hydropower, which was essential for any kind of productive activity.

Numerically and economically impoverished at the end of the Spanish domination, in the eighteenth and nineteenth centuries Milan resumed its demographic rise as well as the commercial and urban development, and some important palaces overlooking the Cerchia dei Navigli were built. At the same time, it was however inevitable the worsening of the water quality.

In 1819 the Naviglio Pavese, connecting the Darsena of Porta Ticinese with Pavia and the river Ticino, finally realized the dream to link Milano, besides lakes Maggiore and Como, even with the Adriatic sea: the heart of the canal network, then approximately 150 km long, was always the Cerchia dei Navigli, the oldest navigable canal of the city, surrounded by gardens and orchards.

In the twentieth century the canals in Milan were covered because of the poor hygienic conditions of the water of the Cerchia dei Navigli, which had become a place of open smelly drain, as well as the slow navigation and the need to improve the traffic flow, the transportation of people and goods, the increased presence of trams and cars, and finally the desire to give some relief to the city surrounding it with wide boulevards. The work were performed between 1929 and 1935, greatly changing the traditional appearance of the city.

Milan lost its historic role of transit port from the lakes of Lombardy and the river Po and, at the same time, the work of civil engineering technology, of historical and artistic quality admired throughout Europe, was cancelled.

We can not say whether the campaign for the reopen of the Cerchia dei Navigli of Milan can be a realistic plan. Certainly someone has never stopped dreaming of it.