**A Story of Architectural Heritage: From Ancient Ca’ Granda Hospital to a Faculty of Medicine**

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**Historical Background**

The Ca’ Granda, in other words, Ospedale Maggiore, is the most significant work of architect Antonio Averlino (also known as Filarete, 1401-1470). It was built with the original function of hospital, while nowadays it serves as an educational building (University Headquarters). The first stone of Ca’ Granda was laid on April 12, 1456, it was built to be especially for the poor on the initiative of the Duke of Milan Francesco Sforza, to provide the city with a single large hospital for the admission and care of the sick (1), which had previously been housed in various houses scattered around (2). Although it took over four centuries to be completed due to a series of interruptions linked to the lack of funds, the hospital began to function in 1472 (3). The construction completed in 1605 to carry out its function as the largest hospital in the city of Milan until 1939. In 1939, the patients were transferred to the new headquarters built in Niguarda. After the bombing of the center of Milan by British and American planes, especially the raids that took place on the nights from August 15 to 17, 1943, the structure was severely damaged, with entire wings of the complex destroyed. The damage was repaired at the end of the war by recovering as much of the original material as possible. The restoration continued until 1885 with the renovation of the courtyard of the Farmacia and the Bagni (4).

Since 1958, it is home of the Facoltà di Medicina e Chirurgia of Università degli Studi di Milano (Faculty of Medicine and Surgery of the University of Milan). In 2005, the hospital was united with two institutes into a single organization that, since 2010, is called IRCCS Ca’ Granda Ospedale Maggiore Policlinico (Scientific Institute for Research and Health Care).

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**The Approach between Health and Landscape Architectural Design**

Ca’ Granda was not thought in an isolated way from surrounding, it has a strong connection with urban blue and green infrastructures. Its system used a running water system. Navigli canal has been played a big role in emergence of socioeconomic structures, policies, and cultures since they started to be built. In addition, canals are evident for the history of technological development. The line and waterproofing of the water channel, the engineering structures of the line with reference to comparative structural features in other areas of architecture and technology, the development of the sophistication of constructional methods are clear. Secondly, with the canals, there is an extensive tangible network of infrastructure: buildings, and urban form in Milan. In this case, it was referring to a boundary between inner and outer part of the city instead of walls and the Ca’Granda was built at the outer part. It had its direct link with the cemetery complex Rotonda della Besane, which was built between 1686 - 1773 as a part of Ca’ Granda due to problems of space in the crypt of the hospital that was insufficient to host the deceased people (5).

A pollution-free water supply was important, which also required a non-polluting wastewater drainage system. The distribution, organization and building of this healthy service in the city was centered on its water supply. Ca’Granda could be regarded as a model for the supply of good-quality water and wastewater disposal without polluting the city (6).

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**Hints from then to now**

Water has served and sustained communities in the past. People have benefited from it for the development of cities. The diverse systems of the past are needed to be preserved and reused besides new systems. Policymaking and design work together to build on traditional knowledge and skills as imagining how it helps to develop sustainable futures for cities, landscapes, and water networks (7).

Both Ca’Granda and Rotonda, at those times were built in the outer part of the city with concerns to control infectious diseases. In the crypt of the hospital, there were about 150 thousand corpses deposited between 1637 and 1693 (8) since it was built big enough. During the plague in 17 century, the Lazaretto (19) which served especially for people who suffer from this contagion, was also located in the outer part.

The Ca’Granda, both as an architectural and cultural heritage, is extraordinarily rich, which is extremely meaningful not just for the history of health assistance and care in Lombardy during the last millennium, but for social, art, economic, and landscape history (10). From a social perspective, together with natural elements, Ca’Granda was a preliminary example. These elements improve the environment, public health, and quality of life in general. People who interact with nature more may have better mental health. Specifically, in or near hospitals, they improve the conditions of both side people in relation to each other, and this relationship is only visible when they gather around or as in the recent case of Covid-19, this situation has been attracted more attention for the wellbeing of all inhabitants.

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