ARCHITECTURE. HISTORY AND PROJECT

CRT/FULL/DAD - Decommissioning or adaptive reuse strategies applied to hospitals in urban areas.

Funded By	Centro Interdipartimentale FULL FONDAZIONE CRT CASSA DI RISPARMIO DI TORINO [P.iva/CF:06655250014] Dipartimento DAD
Supervisor	VIGLIOCCO ELENA - elena.vigliocco@polito.it
Contact	
Context of the research activity	Transferring mega hospital structures in urban areas to more peripheral and accessible sites, because of technological progress applied to medicine, seems today an opportunity. However, are urban hospitals built in the first half of the 20th century not adaptable to the new needs of medicine? Should they only be demolished and replaced by new forms and activities? Can we scale them by imagining a low-intensity care system distributed at a metropolitan scale, even changing the urban form?
	Architecture and the city are the never-fixed products of human needs. As their needs change, societies opportunistically modify the spaces they inhabit, changing urban forms and building typologies. Changes could happen gradually or traumatically. Periods of cuts, changes in ideology or policy, and environmental or cultural understanding of people's needs and expectations have closed old forms of provision, industries shut down, or state functions being removed or moved out of the sector. Though difficult and often controversial, this process of "decommissioning" – stopping a service or an approach to meeting needs and redirecting or saving resources – is usual. Decommissioning and abandonment are also often prompted by reductions in public spending and a need to cut back on services. Given the tight financial context and public spending cuts, this is increasingly common across much of the public sector and tends to come with strong negative connotations. However, decommissioning is a resource when it becomes an opportunity to rethink citizens' needs and design the reuse of those sites that are waiting for a new opportunity, often being confident in their formal and structural vocation. One of the topics that nowadays animates the debate on the city and its architecture concerns the fate of obsolete hospital structures. Personal care facilities and complexes are independent and attractive clusters in urban and metropolitan areas. If the fear of disease initially placed them outside the urban perimeters, 19th-century discoveries in the medical field reconciled the relationship between these places and the city. As it happened in the 80s, with the decommissioning of industrial sites in

Objectives	urban areas, today, buildings and complexes for caring for people in urban areas no longer seem suitable due to their structural obsolescence. The design of new hospitals tries to keep up with the latest developments in medical science, and often, adapting old buildings becomes unsustainable. The problem is that the design and construction of a hospital can take up to twelve years, from project launch to building opening, while technology improves every three years. That makes the design of a hospital obsolete from the moment it starts functioning, which means that it will have to be redesigned, reconfigured, and adjusted. In other words, a hospital is never complete; it is in a permanent state of transformation. Contrary to what one would expect, it is not old hospitals that end up irreconcilably dysfunctional, but the ones built in the last 50 years. Bertrand Goldberg's Prentice Women's Hospital, built in 1971, was vacated in 2011, and three years later, it was torn down. The hospital was an iconic structure in Chicago –a curvilinear tower surmounting a rectangular base– one of the first computer-aided designed buildings in the world. But precisely, its iconicity prevented it from adapting to the changing healthcare needs. The clearly defined tower, where patient rooms were located, was impossible to reconfigure according to new standards. On the other hand, hospitals built in the 19th century, when the current medical theory was in its infancy, have proved to be much more resilient and have many functions today. It is as if the naivety of the architects, who mainly adapted existing typologies of monasteries and palaces, left space for the unforeseen. For 50/60 years now, hospital design, a sophisticated activity in itself, has given rise to the concept of “evidence-based design” because of the scientific/functionalist approach. Hospitals must be as flexible as possible to function appropriately in the long run. In that sense, the architect should aim not so much towards a design object but towards a design strategy in which space is equally considered as time is. By research by design, the research aims to answer the following questions: 1. In the case of hospitals’ obsolescence, which strategies can be adopted for their renovation? 2. Is the hospital’s decommissioning the only option that we have? 3. Can we scale them by imagining a low-intensity care system distributed at a metropolitan scale in “15-minute” cities? 4. Can hospitals be considered urban machines or megastructures that determine an independent city network? 5. Which could be the urban form of the healthy city of the future?

Skills and competencies for the development of the activity	1. Relevant Master’s degree or equivalent research experience in architecture, landscape studies or related fields. 2. Genuine interest in urban morphology. 3. Research experience and familiarity with qualitative/quantitative methods. 4. Strong analytical and critical thinking skills. 5. Good communication and writing skills both in Italian and English. 6. Ability to collaborate across disciplines. 7. Self-motivated, independent, and effective management. 8. 6-month period abroad.