

Cure and care at the cradle of innovation

BY DANIELA ARNAUT

“Illness is the night-side of life”¹ tying one’s up in its own body and weaknesses leading either to curative or care spaces that instead of bringing hope bring to mind loneliness and death.

Even if the tendency is to believe in the efficiency of medical processes, the collective memory of healthcare buildings is related to discomfort. Ill bodies enter a machine where they are homogenized, losing autonomy and privacy. Intimacy is exposed in a public domain. In healthcare buildings the focus is on medical procedure and not on the prostrate body, which is the real origin and dimensional parameter of these spaces.

Healthcare buildings were recognized as therapeutic instruments by the end of the 18th century, matching the cradle of Modernity coated with optimism and the belief in progress and innovation. As Georges Teysot states, the “dream” of Modernity would “merge two genealogies total sanitariness and total technology”. The inheritance of *machines à guerir* comprises the driving forces of Modernity. From the social mission at the root of their existence, to the permanent call for constant renewal, as well as the total engagement with a sustainable future, they are required to reinvent themselves within their existing envelopes.

Health is a primary issue, it allows civilization. The current COVID-19 pandemic, as the actual isolation scenario, gives a clear awareness of the importance of public health systems regarding the role of the existing buildings.

Healthcare buildings draw together high technology, scientific and medical knowledge, research on the human body, and emerging social challenges searching for answers and trying to assure optimal health assistance. These were the reasons behind the design of the Zonnestraal Sanatorium (1925-1931), by Jan Duiker (1890-1935) and Bernard Bijvoet (1889-1979) and which restoration project, by Hubert-Jan Henket (1940-) and Wessel de Jonge (1957-) is at the root of **docomomo** and its foundational Eindhoven Statement (1990).

Healthcare buildings are essential tools for the preservation of civilization, are at the root of Modernity, at the root of **docomomo**, and are paradigmatic buildings where the permanent call for transformation implies a sustainable future. However, interventions mostly lack the support of appropriate architectural knowledge. Considering that most healthcare buildings were built during the 20th century, this raises three topics of research. First, the need to document healthcare buildings. Secondly, from that knowledge create

intervention strategies which should be design together within institutions. Finally, in order to attain a sustainable future, is important to anticipate the 21st century body and illnesses and hopefully contributing to informed actions regarding their reuse. By establishing four main ideas on the architectural value of 20th century healthcare buildings, and by identifying three main paradigms of change on healthcare programs, Paulo Providência addresses exactly these topics regarding the importance of developing a deep knowledge in order to repurpose healthcare buildings within the arising opportunities.

Order was the key principle in achieving the hygienic environment established by the pavilion type of hospital during the 19th century. This curative “wind machine” lost its relevance at the beginning of the 20th century, when medical science and new construction technologies allowed a higher level of efficiency redesigning healthcare architecture. The pavilion hospitals, such as the Edouard Herriot Hospital (1910-1933), in Lyon, by Tony Garnier (1869-1948) would lose their importance as “garden-hospitals”.

The Industrial Revolution created the need to sanitize cities such as the well-known urban plans and models of Georges-Eugène Haussmann (1809-1891) for Paris in 1853, the plan for Barcelona in 1859 by Ildefons Cerdà (1815-1876), and the “garden-city model” (1898) by Ebenezer Howard (1850-1928). Also Frederick Olmstead’s (1822-1903) design for Central Park in New York, at the end of the 19th century, was, like the previous, a social project. But, as Catherine Maumi considers, this landscape architecture project, besides being a sanitary tool had an innovative aim towards Americans’ mental health, reflecting Olmstead position as a landscape architect.

By this time, sanatoriums were conceived as therapeutic models where the body was exposed to therapeutic air and sun. The necessity for hygienic environments, generated pure volumes, white laboratorial ascetic surfaces, expressing simultaneously the experimental character of the new materials and the enthusiasm for a new architectural expression. Philippe Grandvoinnet brings an overview to the origin and development of this new typology as a translation of a medical treatment demonstrating that there is still lacking an overall strategy for the future of sanatoriums.

Standardization combined with X-ray machines and the discovery of bacteria, progressively replaced the pavilion type with compact and vertical solutions. This new typology refers to a generic human body that inhabits an “International Style” of compact buildings regardless of

context and body perception. Standardization of construction recall medical procedures where the concentration of people means a bigger sample to analyze and foster scientific knowledge. The first examples were built in New York at the Columbia-Presbyterian Medical Center (1925-1932), by James Gamble Rogers (1867-1947). In Europe, probably the first was the Beaujon Hospital (1930-1935) by Jean Walter (1883-1957), Urbain Cassan (1890-1979) and Louis Plousey (1880-1936).

After WWII (1939-1945) the body started to be seen as an integrated entity of body, mind and social context as it can be read in the World Health Organization (WHO) constitution foundation from 1948. The abstract, standardized body is replaced by an individual being that inhabits a humanized space conceived from the relationship to the context and the true expression of materials. Comfort takes its place in healthcare buildings as part of the efficiency demand. In order to achieve higher efficiency and flexibility, new buildings divide diverse functions into diverse volumes, leaving the compact model, as in the 1952 design by Óscar Niemeyer (1907-2012), Hélio Uchoa (1913-1971) and landscape architect Burle Marx (1909-1994) for the Sul América Hospital. Donato Severo discusses the France-USA Memorial Hospital of Saint-Lô (1948-1965) by Paul Nelson (1895-1979), where architecture is a humanist tool for physical and psychological comfort echoed in the use of colors, the greenish ovoid surgical rooms, or the art inclusion.

Cor Wagennar establishes the chronology of the roots of hospitals from the 18th century to the *Breitfuss* type built after the WWII stressing the links between medicine and Modernism. The author questions the relationship between hospitals and the ill body, discussing the role of architecture in the healing process and how to use extant valuable buildings.

In Paimio Sanatorium (1929-1933), by Alvar Aalto (1898-1976) comfort guides all the building's design integrating the specificity of the ill body, "[t]he ordinary room is a room for a vertical person: a patient's room is a room for a horizontal human being, and colors, lighting, heating, and so on must be designed with this in mind".² Aalto understood the long stay and the necessity of allowing patients to escape their own bodies through architecture. Charles Giraudet reveals the work of Isadore Rosenfield, an architect who, like Aalto, considered the patient at the core when designing the Goldwater Hospital (1939). In an inspiring essay, Giraudet underlines the architect's determination to design a therapeutic instrument. Equally significant is Rosenfield's questioning of the program and the assumption that the architect was the only professional able to synthesize the social context and health conceptions within architecture.

From this overall view one can assume that efficiency and comfort, where order and hygiene are at its basis, are the main parameters of healthcare buildings' architecture. The digital revolution is introducing new conceptions of comfort regarding healthcare. From monitoring ourselves, to online medical appointments, curative and care spaces are becoming highly specific and generic simultaneously. The existing buildings are a dual body with functional areas similar to a tailor-made suit for a close-fitting system and at

the same time with rational, neutral areas. On the other hand, the concepts of obsolescence and transitoriness are clearly related to healthcare buildings such for sanatoriums or psychiatric hospitals, which lost their relevance from an era prior to the availability of drug treatments.

Every period of history has its own typical illnesses, depression and burnout are the 21st century illness derived from hyperactivity and professional exigence.³ Borasi and Zardini call for the challenging comprehension of the quicksand under one's feet regarding bodies, health and the uncertain contemporary world, calling attention to architecture and urbanism as a means for reflection on a sustainable future. In this context, Colomina and Wigley describe modern architecture as a movement opposing bacteria, built as a medical procedure to recover, and demonstrating how hyper cleanliness and isolation environments transform the human microbiome leading to illnesses. In an inspiring and unsettling discourse, the authors call for a wider understanding and integration of bacteria as part of the world we live in and push for a reconsideration of the concepts of shelter and care.

If the invention of curative space was intertwined with societal changes that introduced order and hygiene, what will be the role of the existing hospitals towards a society that is inventing a new order based on digital transformation? The COVID-19 pandemic is a thought-provoking laboratory on this question. If curative space was at the cradle of modernity, is the reuse of curative space at the cradle of the future? Can sanatoriums be reinvented as a paradigmatic typology for the 21st diseases such as psychological burnout, or as isolation locations for situations such as pandemics? What are the right intervention strategies for buildings in use?

It is clear that curative and care spaces have a long path in order to be understood. Besides sanatoriums, it is difficult to find good examples of rehabilitation or protective measures, that's why this issue brings a philosophical approach about the future, health, and the relationship of the body to the city and architecture. The hope is that this **docomomo** *Journal* issue can be one of the steps for further discussion and research.⁴

Notes

- 1 Susan Sontag, *Illness as a Metaphor*, New York, Farrar, Straus and Giroux, 1978, 3.
- 2 Nina Heikkonen, (ed.), *Paimio Sanatorium Conservation Management Plan*, Finland, Alvar Aalto Foundation Helsinki, 2016, 48.
- 3 Byung-Chul Han, *A sociedade do cansaço*, Relógio de Água, 2014. (Mudigkeitsgesellschaft, Matthes & Seitz Berlin Verlag, Berlin, 2010).
- 4 In 2017, in Portugal, a research grant was awarded by the Portuguese National Fund to study healthcare facilities built in Portugal in the 20th century: *Cure and Care_ the rehabilitation* (FCT-PTDC/ATPAQI/2577/2014). The current **docomomo** International Chair, Ana Tostões, is the Principal Investigator of that study hosted by IST-CITUA.

Daniela Arnaut

Architect and Assistant Guest Professor of Architectural Design Studio since 2009 at Técnico, Lisbon University. PhD candidate at the same university regarding 20th century Portuguese healthcare architecture. In 2016 she was the Executive Coordinator of the International Workshop of the 14th *International docomomo Conference*, in Lisbon, where she was co-session chair for "The Modern healthcare architecture: obsolescence and transformation".