

PREFACE: STRUCTURE AND CONTENTS OF THIS VOLUME

Exploring the dazzling array of approaches to healthcare and healthcare architecture in the pre-modern era in different societies, as well as the consolidation of hospitals as an independent building typology, this book takes a deep look at how different political, cultural, and scientific contexts shaped hospital designs. Each chapter employs an interdisciplinary, comparative, or new methodological approach to analyze the design and function of healthcare facilities—either a single structure or specialized typologies—in a particular city or region at a given moment in time. The chapters illustrate what constituted health in different places during the pre-modern period and how healthcare architecture responded to scientific and socio-cultural contexts, or, vice versa, how that context influenced its design. Seeking a global history that acknowledges the connections across traditions, the volume demonstrates that the binary of “Western” and “Eastern” medicine is part of the eighteenth- and nineteenth-century construct that disciplined both medical treatment and the various civilizations colonized under this rubric.

Opening with an overview of healthcare facilities from ancient times to the nineteenth century, this volume consists of four parts, each embracing case studies from various regions. The first two parts explain how healthcare facilities evolved under the influence of religious and political settings. Examining the typological development of healthcare facilities, the third part includes chapters on various building types such as houses of charity hospitals, leprosy hostels, and maternity hospitals. These studies demonstrate how hospitals in the pre-modern era evolved within various cultural and social contexts and how their transformations reflected revolutions in the medical sciences. With the first three parts focusing on the typological and contextual development of places of care, the fourth part addresses how architecture, design, and art could lead to more effective care for patients. Chapters in each part are sorted chronologically in order to provide a better understanding of the evolution of places of care across geographies. These studies demonstrate how these places in the pre-modern era evolved within various cultural and social contexts and how their transformations reflected revolutions in the medical sciences.

The first part addresses the complex interplay between religious and cultural settings and the design of healthcare facilities with a series of case studies from Portugal, Belgium, and England. This part opens with a chapter by scholar of hospital history Guenter B. Risse on the development of hospitals in both religious and secular settings. He argues that important pre-modern buildings devoted to caring for sick people disclosed and confirm a range of beliefs about illnesses and strategies to treat them, often influenced by both religious and secular perspectives. As anthropological studies have demonstrated, in ancient and even medieval civilizations, illness was frequently understood within a religious framework, and elaborate doctrines sought to identify supernatural agents capable of curing and protecting people from disease. On the other hand, since sickness is a uniquely personal experience, sufferers also explored non-religious empirical and scientific dimensions of health issues. In this chapter, Risse discusses the binary and somewhat complementary impact of religion and science on the healing process. For as far back as the historical evidence goes, hospitals in all forms have always been inextricably bound up with cultural beliefs.

At the beginning of the fourteenth century, as a response to the dramatic increase in the poor and growing populations in Western Europe and lack of sanitation, several European cities started reforming existing

systems of public health and social welfare, primarily through creating religious and charitable networks. Danielle Abdon's chapter addresses the reformation of healthcare and the appearance and dissemination of a specific architectural typology exclusive to hospitals during the peak of the Portuguese Empire, from the fifteenth to the seventeenth centuries. Characterized by a cruciform design, Portuguese hospitals promoted medical and sanitary innovations, including triage, separation of the sick and poor, isolation, and sewage disposal. Abdon explains the adoption of the cruciform plan as the main prototype for hospitals in a period when the Portuguese monarchy struggled to increase social and sanitary infrastructure. Abdon portrays a different view of Lisbon as the first global metropolis of early modern Europe and a dynamic international center in the early modern world. She argues that the Portuguese importation of an Italian plan for hospitals reflected the monarchy's ambitions of becoming an international hub, while helping to create a shift in hospital architecture from improvised to purposefully designed buildings that incorporated local needs.

The next chapter by Miyako Sugiyama examines the context behind the construction of the Hospital of Our Lady of Potterie, which was founded in the twelfth century in the city of Bruges and provided shelter for travelers and the sick. Sugiyama's analysis focuses on a miraculous statue of the Virgin and Child on the hospital grounds in order to demonstrate relationships between images and audiences in spaces of healing. Sugiyama researches the textual and visual evidence concerning this statue to reconstruct the tripartite relationship between image, audience, and space in order to understand the religious mission of pre-modern hospitals in regard to providing social welfare. In the last chapter of the first section, Ann-Marie Akehurst turns our attention to the shift in healthcare design to a humane approach that gradually foregrounded care over containment through an analysis of the Retreat Asylum, founded by the Quaker group the Religious Society of Friends near the city of York in Britain. This facility was considered a groundbreaking psychiatric institution in the eighteenth century, as its design and program represented a new and humane attitude toward the mentally ill, affording patients dignity by encouraging them to pet animals, engage in social events, and partake in what is now called Occupational Therapy. Consulting archival documents and religious writings, Akehurst analyzes various therapeutic aspects of this asylum, which represents the evolution of early modern hospitals from places of care to spaces limiting the spread of disease and facilitating cure.

The second part of this volume includes the study of medieval, early modern, and colonial cases from the Middle East, Africa, Europe, and Australia to highlight the development of healthcare facilities as an integral part of the empire-building process. In the first chapter of this section, Richard McClary argues that hospitals served as important symbols of royal charity in the Islamic world in the twelfth and thirteenth centuries, inspiring rulers to build majestic places of healing for the benefit of their subjects. McClary looks at the design of three hospitals in Damascus (Syria), Sivas (Turkey), and Cairo (Egypt) to explore the Sultan's patronage and its impact on the construction of facilities in the medieval Islamic world. The next chapter, by Johanna Heinrichs, elucidates the connection between public health concerns and urban development in Rome in the late fifteenth century. Coming to power in a Rome that had suffered a century of population loss and neglect, Pope Sixtus IV was determined to revitalize the city's infrastructure and its flagging reputation. In this chapter, Heinrichs argues that Sixtus IV's project of urban restoration should be understood not simply as papal benevolence but explicitly as medical care, given his self-ascribed role as the "bearer of health."

What makes European powers more relevant in the debate over hospital design is the role that they played in establishing and constructing new hospitals, beyond their national boundaries and in their colonies. The next chapter by Eugénia Rodrigues explores the development of military hospitals in Mozambique Island,

the capital of colonial *Portuguese* East Africa prior to 1898. By analyzing public health policies set by the administration and their impact on the configuration of the hospitals, Rodrigues explains how the Portuguese constructed military hospitals in buildings that were adapted for the purpose or were planned from scratch. She addresses the progressive transformation of the hospital established by the Portuguese Crown on Mozambique Island in the early sixteenth century, as well as the role played by the hospital run by the Santa Casa da Misericórdia during the eighteenth century. In expanding the discussion on European colonies, the last chapter in this part, by Julie Willis, reveals the use of similar colonial policies by the British and their envoys in Australia during the eighteenth and nineteenth centuries. Willis illustrates the difficulties of creating a functioning medical infrastructure during the British colonization (1788–1850) of Australia. While the early Australian hospitals were treated as shelters in which only the most basic medical care was provided, the design of colonial hospitals drew upon the typology of the military field hospital and, more often, that of military barracks.

The chapters in the third Part of this volume analyze the development of various typologies of places of care in different geographies, including Portugal, China, Japan, and the United States. This part is opened by Joana de Pinho's discussion on the formation of Misericórdias (charity hospitals) in the city of Lisbon in 1498 and their spread throughout Portugal in the sixteenth century. She explains the crucial role that Misericórdias played in the Portuguese healthcare system, both for their territorial coverage and institutional role in assisting the poor and the sick. By fulfilling their charitable purposes, namely welcoming the poor and the sick, celebrating liturgy, and burying the dead, the Misericórdias were either constructed as new buildings or housed in preexisting autonomous spaces. By studying examples of this prevalent typology, Pinho presents a lucid understanding of their architecture and design characteristics and sheds light on their authorship, patronage, and use.

In other parts of the world and far from Portugal, healing occurred in a wide range of locations and places that were not necessarily designed as hospitals or healthcare facilities. In the next chapter, Ying Zhang discusses the use of houses in providing a physical space for regulating bodily conditions for both men and women in early modern China. She examines sixteenth- and seventeenth-century vernacular documents in order to illustrate heterogeneous healing techniques that occurred in the home, the use of artifacts, and social relations in regard to these practices in a domestic setting. Zhang also addresses how the home constitutes a meaningful healing space, how the material setting of the domestic space shapes the choice of healing methods and the meanings of healthcare, and how the practice of self-treatment informs the social identity of the practitioner. In another study of healthcare facilities in East Asia, Susan L. Burns explores the spread of leprosy hostels in early modern Japan as the result of increasing public health concerns over disease. Drawing upon textual and visual sources and modern architectural site reports, Burns demonstrates how these institutions emerged and how they functioned over the course of Japan's long pre-modern period, stretching from the thirteenth to the end of the eighteenth century. These pre-modern leprosy hostels differed fundamentally from modern institutions of care and confinement, as they were not founded to control infection, nor to treat or even care for those with the disease, but to address both spiritual and physical health through facilitating the salvation of leprosy sufferers and those who offered them compassion. Burns explains the reflections of this approach in the architectural style of monastic dormitories and temple complexes that were repurposed as leprosy hostels.

The next chapter by Jhennifer Amundson explores the formation of another healthcare typology, the first maternity hospitals in the United States. While traditional home-birth survived longer in Western Europe, the institution of maternity hospitals in the United States started in the early nineteenth century. This establishment was motivated by charitable impulses, increased professional specialization, and the desire for social improvement. Due to concerns for the well-being of mother and child, giving birth at home was preferred over hospitals, which were only utilized by women who could not afford to arrange for home

births. Amundson considers two case studies, the Preston Retreat (Philadelphia, 1830s) and the New-York Asylum for Lying-In Women (New York, 1823), to demonstrate how the design of these buildings responded to medical findings in medicine and public health.

The last part of this book consists of essays that address the impact of architecture and design on the healing process, the impact of design on the patients' experience, the interaction between their environment and their recovery, and the effectiveness of hospital design. After the medieval era, many hospitals in Italy provided various types of care that included treating the sick, caring for foundling children, distributing alms, and housing pilgrims and poor travelers. Maggie Bell's chapter studies one such hospital, the Santa Maria della Scala, a sprawling complex founded in Siena in the eleventh century. Investigating eight fifteenth-century monumental frescoes from the pilgrim's hall (*pellegrinaio*) depicting the mythologized history of Santa Maria della Scala and scenes of daily activities, she clarifies how the architecture of Scala was central to the hospital's institutional identity and self-image. She also identifies the role of the frescoes within fifteenth-century discourses on architecture and medicine. Bell proposes that these frescoes present a visual argument for the relationship between architectural enterprise and individual and public health and medicine.

The next chapter by Kim Sexton provides an in-depth study of the design of the Uterus House, originally built in the 1520s by the Nascentori, a family of glassmakers, for their business and residence in Bologna. This residence, which is a typical sixteenth-century *palazzetto*, is located in the heart of Bologna's busy market area and housed a private academy. Galli, the star scientist and surgeon in charge of this private academy in the eighteenth century, commissioned Bolognese sculptors and modelers to make about two hundred obstetrical wood, clay, wax, and papier-mâché models and devices with moving parts. Sexton examines the residence's transformation into an illustrious school and laboratory where midwives of both sexes gathered for the latest in experimental- and demonstration-based lessons. She also clarifies how the design of this academy responded to specific contextual issues, which were related to the social, medical, and cultural roles of private academies in Bologna and beyond. Contemporaneous to the powerful government in Renaissance Italy, the Ottomans' patronage of charity structures and the increasing need for both public and military healthcare resulted in the mass construction of hospitals across their empire. Nina Macaraig's chapter argues how these hospitals provided spatial qualities and sensory experiences to enhance the care of a variety of patients. She uses historical source material, such as endowment deeds, to explore the effectiveness of the Ottomans' user-centered and prescriptive approach to design by exploring how these buildings appealed to the senses, promoted well-being, and assisted in the therapeutic process.

This volume concludes with Stuart Bill Leslie's chapter, which narrates the history of the Baltimore-based Johns Hopkins Hospital, one of the best-known and most highly ranked medical centers in the world. With roots in the Pennsylvania Hospital (1751), American public hospitals were administered as charitable institutions for the worthy poor, with little input from physicians. Leslie studies the transformation of the Johns Hopkins medical school into a fully modern hospital to highlight a major shift in the American attitude toward medical care. He concludes that Johns Hopkins Medicine's greatest contribution—both medical and architectural—would not be any single innovation but rather the flexibility to adapt, improve, improvise, and combine best practice from many sources and disseminate those ideas widely.

As evident, the primary concern of this volume is not to provide an encyclopedic history of hospitals in the pre-modern age, but to propose a cohesive and comprehensive set of essays on the formation and development of spaces of care in various continents. The goal is to feature the contextual, formal, and spatial complexities of these spaces through a non-dichotomous perspective. Therefore, rather than constituting itself as a reference, this volume aims to highlight interesting and exciting aspects of health and architecture, and even challenge our perceptions of hospital history through a series of studies from various fields ranging from urban planning to architecture and art.

Preface: Structure and Contents of this volume

Connectedly, the current book questions the relationship and overlaps between health, context, and architecture. While our understanding of pre-modern hospitals is limited, especially in non-Western contexts, the records are sufficient to give us an understanding of human beings' achievements and efforts to create healthy and salutogenic spaces. While contemporary hospitals seem to be highly uniform and rigidly organized, the places of care in the pre-modern era tend to be the result of local or regional efforts to heal and cure people, reflecting a more humane approach to design and architecture. While the phenomenon of the modern hospital is often regarded as a Western invention, this book highlights the contributions of various civilizations and cultures to the development of the idea of places of care and healing in any form and function.