

**Three Capitals, Five Hospitals:
A Comparative Study of Early Ottoman and Late
Byzantine Hospitals**

by

Ece Tunca

A Thesis Submitted to the
Graduate School of Social Sciences and Humanities in Partial
Fulfillment of the Requirements for the Degree of

Master of Arts

in

History of Art

Koç University

July 2015

Koç University
Graduate School of Social Sciences and Humanities

This is to certify that I have examined this copy of a master's thesis by

Ece Tunca

and have found that it is complete and satisfactory in all respects, and
that any and all revisions required by the final examining committee
have been made.

Committee Members:

Assoc. Prof. Nina Ergin

Prof. Engin Aky rek

Dr. Miri Shefer-Mossensohn

Statement of Authorship

This thesis contains no material, which has been accepted for any award or any degree or diploma in any university or other institution. It is affirmed by the candidate that, to the best of her knowledge, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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ABSTRACT

Apart from being a distinctive architectural form that reflects the artistic inclinations and traditions of its period, a hospital is a social structure, and it gives significant hints about the society in which it is founded. This thesis scrutinizes early Ottoman (the Yıldırım Bayezid Darüşşifa, the Fatih Darüşşifa, and the Bayezid II Darüşşifa) and late Byzantine hospitals (the Pantokrator Xenon, the Lips Xenon) through a comparative approach, focusing on their social and institutional structures. Since the Byzantine hospitals under study no longer exist, it is not possible to come to a concrete conclusion regarding the comparison of their physical features. However, evidence that might give an idea about their architectural features, decorative programs, as well their spatial designs will be presented since their physical features also say a lot about the hospital founding practices of the two cultures. Since the aim of this study is to investigate certain similarities, differences, and possible interactions, the hospitals chosen for this study include those that operated during the so-called decline period of the Byzantine Empire and the rise of the Ottoman Empire, when the contacts between Islamic and eastern Christian traditions were at their highest. However, instead of presenting Byzantine and Ottoman hospitals as institutions that belonged to two distinct worlds, this thesis aims to contextualize the differences and similarities of their social and institutional structures, as well as their physical features to a certain extent as the outcome of the more than a hundred years of shared history and cultural interactions.

Keywords: Ottoman hospitals, Byzantine hospitals, darüşşifa, xenon, pious foundadtions, philanthropy.

ÖZET

Hastaneler, dönemlerinin hakim mimari yaklaşımlarını ve sanatsal eğilimlerini yansıtan mimari formlar olmalarının yanı sıra, ait oldukları toplum hakkında önemli ipuçları veren sosyal yapılardır. Erken dönem Osmanlı hastaneleri (Yıldırım Bayezid Darüşşifası, Fatih Darüşşifası, II. Bayezid Darüşşifası) ve geç dönem Bizans hastaneleri (Pantokrator Xenon, Lips Xenon) hakkında karşılaştırmalı bir çalışma olan bu tez, bu hastanelerin sosyal ve kurumsal yapılarına odaklanmaktadır. Geç dönem Bizans hastanelerinin günümüze ulaşmamış olması fiziksel özellikler açısından bir karşılaştırmayı imkansız kılmaktadır. Ancak yine de, Bizans ve Osmanlı hastanelerinin mimari ve dekoratif özelliklerine ve mekan düzenlemelerine dair kanıtlar çalışmaya dahil edilmiştir, zira fiziksel özellikler söz konusu iki kültürün hastane kurma pratiklerine dair önemli ipuçları verebilmektedir. Bu çalışma için erken dönem Osmanlı, geç dönem Bizans hastanelerinin seçilmiş olmasının sebebi ise bu hastanelerin, Bizans imparatorluğunun düşüşe geçtiği, Osmanlılar'ın ise bir imparatorluk olarak doğduğu dönem olarak bilinen ve İslam ile doğu Hristiyan dünyası arasındaki karşılaşmaların en yoğun olduğu döneme denk gelmiş olmalarıdır. Bununla birlikte, bu çalışma Bizans ve Osmanlı toplumlarını birbirinden çok farklı iki dünya, söz konusu hastaneleri ise bu iki dünyanın kendilerine has kurumları olarak sunan bir yaklaşımı benimsemez. Bu çalışma, erken dönem Osmanlı ve geç dönem Bizans hastaneleri arasındaki farkları ve benzerlikleri, fiziksel özellikleri ve sosyal yapıları bağlamında, ortak bir tarihin ve asırlara yayılan kültürel etkileşimlerin ürünleri olarak incelemeyi amaçlar.

Anahtar kelimeler: Osmanlı hastaneleri, Bizans hastaneleri, darüşşifa, xenon, vakıf, hayırseverlik.

ACKNOWLEDGEMENTS

My sincere gratitude belongs to my advisor Nina Ergin. I am deeply grateful to her not only for her excellent guidance during my research and writing of this thesis, but also for her encouragement and compassion. Besides my advisor, I would like to thank the rest of my thesis committee, to Engin Akyürek and Miri Shefer-Mossensohn for providing insightful comments and suggestions. If it weren't for their contribution, this thesis would not have been possible. I would also like to thank Suzan Yalman for her valuable comments. I would like to extend my gratitude to my teacher and my friend A. Sinan Güler for his support and encouragement. I am also grateful to İlyas Yalçın who sincerely assisted me during my field trip to Edirne. My family deserves special thanks for being respectful of my 'extraordinary' decisions. I would also like to thank my dearest friend Işıl Saka who also made similar decisions and became a true companion during this process. I am also grateful to my fellow graduates Beyza Uzun and Özge Yıldız whose support I always felt even when we were far from each other. My deepest thanks go to Bora Yalçın who never complained about carrying my heavy books and who simply made my life beautiful with his love and support. Last but not least, I would like to thank Hülya and Müşfik for always cheering me up during my darkest hours.

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INTRODUCTION

The study of hospitals as a distinctive architectural form has generally been neglected in the disciplines of Ottoman and Byzantine architectural history. In contrast to the enormous amount of research on other architectural forms, emphasis on hospital architecture remains lacking. The reason for this neglect may lie in the fact that hospital building has been considered a functional unit of a mosque or monastery complex rather than a distinctive social organism whose physical and social structure gives significant clues about the values of the society in question. Apart from being functional structures, medical institutions reflect the value judgments and the prevailing tradition of the society in which they are established. Thus, whether they were *bimaristans*, *şifahanes*, *dariüşşifas* or *xenons*, these institutions must be evaluated not only based on their architectural layouts or spatial organizations; they must also be considered as organisms attached to the society.

It is a widely accepted fact that Ottoman medicine and hospital founding tradition had their roots in the Arab-Muslim medical tradition. However, as Miri Shefer-Mossensohn nicely puts, Ottoman medicine —thus Ottoman medical institutions— was more than just a local branch of the Arab-Muslim tradition; it was a more localized, more Ottomanized version of the Arab-Muslim tradition, which was the fruition of a wider sociocultural process.¹ Although comparing early Ottoman hospitals with earlier Islamic hospital models (Seljuk, Mamluk, Zangid,

¹ Miri Shefer-Mossensohn, *Ottoman Medicine: Healing and Medical Institutions, 1500-1700*,

and Abbasid) would be quite coherent a choice, I prefer looking at another side of this sociocultural and intellectual process—that is, the Byzantine model.

Apart from folkloristic and religious medicine, Galenic medicine was also a crucial segment of the Ottoman medical system.² Galenic medical theory (Galenic humoralism) was systematized by the Greek physician and philosopher Galen (c. 129-216 CE), and was based on the balance between the four distinct bodily fluids (humors): black bile, yellow bile, phlegm, and blood. Galenic humoralism had been adopted by Byzantine and Arab-Muslim physicians, as well as Ottoman physicians, and was one of the most significant reasons for the parallels between Ottoman and Byzantine medical traditions. Although a comparison of the Ottoman and Byzantine medical systems goes beyond the scope of this thesis, the influence of the Galenic medicine on the hospital founding traditions (both physical features and institutional structure) should be kept in mind. Thus, although an investigation of earlier Islamic elements in early Ottoman hospitals seems like a more plausible option, in this thesis I intend to explore the similarities and differences between Ottoman and Byzantine hospital founding traditions that were under the influence of Galenic medicine, as well as Islam and Christianity. In other words, while the adoption of similar medical theories had an influence on the similarities between Ottoman and Byzantine hospital founding traditions in terms of creating environments that could serve the body balance (by means of architecture, institutional structure, services offered, and the like), did religion contribute to the differences between the two? In my opinion, this is an issue that deserves to be scrutinized.

² Shefer-Mossensohn: 12.

To be more specific, the purpose of this thesis is to present a comparative study of early Ottoman and late Byzantine hospitals. While the early Ottoman hospitals (*dariüşşifas*) will be examined as three case studies of three imperial hospitals, the late Byzantine hospitals, the Pantokrator Xenon and the Lips Xenon will be used as *comparanda*. As for the reasons for choosing ‘late’ Byzantine hospitals, or more specifically, the Pantokrator and the Lips Hospitals, there are two main reasons for my preference:

1- Practical reason: Since a comparison of Ottoman and Byzantine hospitals in general would be too broad a topic for an MA thesis, I had to put a limit on the scope of this study, and present the hospitals under study as case-studies. The issue of source materials was yet another practical reason; since there exist almost no physical sources regarding the Byzantine hospitals, the surviving and translated monastic charters of the Pantokrator and Lips hospitals were of great significance in terms of investigating their institutional structures and tracing clues about their physical features.

2- Historical reason: Late Byzantine hospitals represented the so-called decline period of the Byzantine Empire and coincided with the period when the Ottomans rose on the stage of history as a threat to the Byzantine Empire. This was also a period of intensified interactions between the two cultures, which makes an investigation of the possible interactions between Ottoman and Byzantine hospital founding traditions logical. Also, both of the Byzantine hospitals under study were royal commissions and were founded as part of a larger complex similar to their Ottoman counterparts.

Since the three case studies of early Ottoman hospitals constitute the main focus of this thesis, research on the Yıldırım Bayezid Darüşşifa in Bursa, the Fatih Darüşşifa in İstanbul, and the Bayezid II Darüşşifa in Edirne will make up the major part of this contribution. Among the evidence to be examined are primary sources such as the architectural data for existing structures, archaeological data for the structures that no longer exist or have survived partially, as well as the ground plans, and the endowment deeds. As for secondary sources, research and architectural drawings from the twentieth century and travelers' accounts will be of great use to comprehend these monuments from their construction onwards to their renovation or complete demolition.

The earliest Ottoman hospital, the Yıldırım Bayezid Darüşşifa still exists in its original place. Since the building underwent major restoration in 1991 and most of the parts were rebuilt, earlier twentieth-century surveys will be of great use in order to gain an idea about its original architectural features. For instance, architectural drawings made by Sedat Çetintaş in 1949 show the ruined state of the building.³ As for acquiring knowledge on the social and institutional structure of the hospital, textual analysis of the endowment deeds is indispensable. A long *waqfiyya* written for the Yıldırım Bayezid Mosque Complex is kept in the Museum for Turkish and Islamic Art (TİEM), and the details about the *darüşşifa* are also included in Çetintaş's work. A similar method will be followed for the Bayezid II Darüşşifa in Edirne, which still stands in good condition. Several visual documents are available to show the state of several parts of the building before the final

³ Sedat Çetintaş, *Türk Mimari Anıtları, Osmanlı Devri Bursa'da Murat I ve Bayezid I Binaları* (İstanbul, 1952).

restoration project in 1997. Sedat Çetintaş's architectural drawings are significant documents in terms of showing the state of the building in the 1930s.⁴ Several photographs from the 1960s are also available in Bedi N. Şehsuvaroğlu's archive.⁵ Textual analysis of the endowment deeds, the earliest version of which is kept in the archives of the General Directorate of Foundations, will make a great contribution in terms of understanding the general layout of the sections, the organization within the hospital, as well as its social and institutional structure. As for the third case-study, the Fatih Darüşşifa, architectural evidence is limited since it no longer exists today. The earliest visual document about the architectural layout of the hospital is the ground plan made by the Chief Architect Mustafa Agha as a result of his exploratory survey in 1824, and this document is kept in the Ottoman Archives of the Prime Minister's Office. More than one copy of the endowment deeds crucial for a solid knowledge on the institutional structure is present in the Turkish Republic Prime Ministry Directorate General of Foundations (*Vakıflar Genel Müdürlüğü*), the General Directorate of Land Registry and Cadastre, and the Topkapı Museum Archives. Accounts of Evliya Çelebi will also be employed in order to form an idea about the seventeenth-century situation of the hospital.

Searching for evidence about the Byzantine hospitals constituted the most challenging part of this study. We do not have enough knowledge about the architectural details and the exact location of the Pantokrator Xenon within the monastery complex, since the complex survived only partially without leaving behind any archaeological evidence concerning the hospital. The monastic charter

⁴ Sedat Çetintaş, *Edirne'de Hayreddin Hastanesi'nin Odaları* (Cumhuriyet, 1936).

⁵ Bedi N. Şehsuvaroğlu, "Edirne II. Bayezid Darüşşifası," in *Edirne 600. Fetih Yıldönümü Armağan Kitabı* (Ankara, 1965).

(*typikon*) of the Pantokrator Monastery, which outlines the social functions and institutional structure of the hospital in detail, will make a great contribution to this thesis.⁶ The same applies to the Lips Xenon in terms of evidence on its architectural and spatial organization. Although its monastic charter is not as detailed as that of the Pantokrator Xenon, it includes a considerable amount of information about its social and institutional structure.

Unquestionably, the existing literature provides us with essential knowledge on the history of hospitals as an architectural form and is of great use for understanding the basic features of these buildings. This knowledge also enables us to situate these monuments within a chronological and geographical context, which is necessary for drawing out possible connections, similarities and differences among them, taking physical, institutional and social aspects into consideration.

One of the primary publications which is of great use for understanding the physical features of hospital structures built under the Seljuks and Ottomans is Gönül Cantay's book *Anadolu Selçuklu ve Osmanlı Darüşşifaları* (1992). This work gives introductory information about the origins and development of Seljuk and Ottoman hospitals, as well as about their similarities and differences.⁷ What makes this source crucial is the extensive information it contains about the architectural details, together with the foundation and restoration dates as a taxonomic study. Dating these structures, Cantay depends on primary sources such as endowment deeds (*waqfiyya*) and inscription panels. In addition to Cantay's

⁶ *Byzantine Monastic Foundation Documents: A Complete Translation of the Surviving Founders' Typika and Testaments*, John Thomas and Angela Constantinides Hero, editors, with the assistance of Giles Constable (Washington D.C.: Dumbarton Oaks Research Library and Collection, 2000).

⁷ Gönül Cantay, *Anadolu Selçuklu Ve Osmanlı Darüşşifaları* (Atatürk Kültür Dil ve Tarih Yüksek Kurumu, Atatürk Kültür Merkezi, 1992).

book, several earlier publications still maintain their importance in terms of presenting basic information about the architectural structure of *darüşşifas* and their endowment deeds. Ekrem Hakkı Ayverdi's books (1966) on early Ottoman architecture, Ahmet Süheyl Ünver's book (1932) on the Fatih Darüşşifa, and Bedi N. Şehsuvaroğlu's book (1965) on the Bayezid II Darüşşifa are all early, but valuable publications for the context of this thesis.⁸ Nevertheless, one must be cautious about these publications since they do not contain up-to-date information about the current situation of these structures. More recent publications such as *İlk Osmanlı Hastanesi Bursa Yıldırım Darüşşifası* (2006) by Osman Çetin, *Kuruluşundan Günümüze Fatih Külliyesi* (2003) by Fahri Unan, and *Edirne Sultan II. Bayezid Külliyesi* (1988) by Ratip Kazancıgil all present detailed information about the organizational structures of these hospitals, their physical features, and their present-day status.⁹

There has been a growing corpus of publications of high scholarly quality focusing on hospitals as autonomous social structures. Since the major aim of this thesis is to study the social aspect of medical institutions in addition to their formal analysis, these publications will be used as departure point. Miri Shefer-Mossensohn's groundbreaking book *Ottoman Medicine: Healing and Medical Institutions, 1500—1700* (2009) is probably the most comprehensive work written

⁸ E. H. Ayverdi, *Osmanlı Mimarisi'nin İlk Devri 1230-1402* (İstanbul, 1966). A. S. Ünver, *Fatih Darüşşifası: 875 h.-1470 m. = Hôpital Mehmed Fatih: 1470* (İstanbul: Kader matbaası, 1932). Şehsuvaroğlu, *Edirne II. Bayezid Darüşşifası*.

⁹ Osman Çetin, *İlk Osmanlı Hastanesi Bursa Yıldırım Darüşşifası (Bursa Mahkeme Sicillerine Göre)* (İstanbul, 2006). Fahri Unan, *Kuruluşundan Günümüze Fatih Külliyesi*, (Ankara: Türk Tarih Kurumu, 2003). Ratip Kazancıgil, *Edirne Sultan II. Bayezid Külliyesi* (Bizim Ülke Derneği, 1988).

on the history of Ottoman hospitals within the context of social history.¹⁰ As she states in the introduction, Shefer-Mossensohn's main argument is in parallel with the aim of this thesis:

The basic argument of this book is that the ways in which we conceive health and illness, and organize medical care, reflect the society in which we live. Our understanding of medical concepts and institutions as cultural and social constructs enables us to understand the social organization and cultural values that mold them. Hence constructing the medical-health system of the early modern Middle East tells us who these individuals and their communities were, and what their goals and social values were. To understand a human society one needs to decode the ways in which the society perceived health and illness.¹¹

Although most of the publications written on Ottoman hospitals give architectural details as well as their institutional structures based on the endowment deeds, the significance of Shefer-Mossensohn's work lies in the emphasis placed on the perception of medicine and hospital foundations from a broader perspective. Her main goal is to interpret the Ottoman institutions of the early modern period within their medical, social, cultural and economic context, rather than merely offering taxonomy of monuments. Speaking of the social aspect of founding hospitals, Amy Singer's publications on the concept of charity are also of great value in terms of

¹⁰ Miri Shefer-Mossensohn, *Ottoman Medicine: Healing and Medical Institutions, 1500-1700* (SUNY Press, 2009).

¹¹ Ibid., 2-3.

understanding the motives behind the act of establishing pious foundations.¹²

Although Singer focuses on Islamic charity, I believe that these publications will also be useful while discussing the Byzantine concept of charity.

In her recent article, Nina Ergin discusses Ottoman hospital architecture in the Early Modern Period through the lens of multisensory experiences.¹³ Using the “healing by design” principles first raised by C. Robert Horsburgh as a starting point, Ergin examines a number of Early Modern Ottoman hospitals, based on the four qualities of space: *orientation, connection, scale, and symbolic meaning*.¹⁴ Ergin argues that, all these qualities of space “worked together to create a strong sense of comforting familiarity for the typical *dariüşşifa* patient.”¹⁵ Although Ergin’s article is a study about Ottoman hospitals, it is a useful road map for discussing the architectural features and the spatial design of both Ottoman and Byzantine hospitals under study, through an extraordinary approach.

As for the Byzantine hospitals examined in this study, there exists no publication that focuses specifically on the physical features of the Pantokrator Xenon and the Lips Xenon since these structures have disappeared without leaving any archaeological evidence behind. Thus, a number of publications focusing on the monasteries to which these hospitals were attached provide us with the knowledge necessary for tracing the hospital structures in particular. A very recent

¹² Amy Singer. *Charity in Islamic Societies*. Cambridge University Press, 2008. Charity’s Legacies: A Reconsideration of Ottoman Imperial Endowment Making,” *Poverty and Charity in Middle Eastern Contexts*, Albany: State University of New York Press, 2003: 295-299. *Constructing Ottoman Beneficence: An Imperial Soup Kitchen in Jerusalem*, SUNY Press, 2002.

¹³ Nina Ergin, “Healing by Design? A Multi-Sensorial Approach to Early Modern Ottoman Hospital Architecture,” *Turkish Historical Review* 6 (2015): 1-37.

¹⁴ C. Robert Horsburgh, “Healing by Design,” *The New England Journal of Medicine* vol. 333 no:11 (1995 September 14): 735-740.

¹⁵ Ergin, 34.

book edited by Sofia Kotzabassi, *The Pantokrator Monastery in Constantinople* (2013), is one of the most comprehensive studies on the history of the Pantokrator Monastery and includes several useful articles such as “The Foundation of the Pantokrator Monastery in its Urban Setting” by Paul Magdalino and “The Monastery of Pantokrator Between 1204 and 1453” by Sofia Kotzabassi.¹⁶ Robert Ousterhout’s article “Architecture, Art and Komnenian Ideology at the Pantokrator Monastery” is also another significant work that interprets the architectural and decorative features of the Pantokrator Monastery through the context of imperial ideology.¹⁷

Although the number of publications on the physical features of the Byzantine hospitals remains extremely limited due to the lack of archaeological evidence, there have been a growing number of publications on the organizational structure of these hospitals, thanks to the monastic charters having survived in full. A recent anthology of articles by Peregrine Horden, *Hospitals and Healing from Antiquity to the Later Middle Ages* (2008) is also an important publication on the concept of medicine and the history of hospitals.¹⁸ Timothy Miller’s *The Birth of the Hospital in the Byzantine Empire* (1985) is by far one of the most comprehensive studies available on the birth and development of the Byzantine

¹⁶ Sofia Kotzabassi, “The Monastery of Pantokrator Between 1204 and 1453,” in *The Pantokrator Monastery in Constantinople*, ed. Sofia Kotzabassi (Boston-Berlin: De Gruyter, 2013): 57-70. Paul Magdalino, “The Foundation of the Pantokrator Monastery in its Urban Setting,” in *The Pantokrator Monastery in Constantinople*, ed. Sofia Kotzabassi, (Boston-Berlin: De Gruyter, 2013): 33-55.

¹⁷ Robert Ousterhout, “Architecture, Art and Komnenian Ideology at the Pantokrator Monastery,” in *Byzantine Constantinople: Monuments, Topography and Everyday Life*, ed. Nevra Necipoglu (Leiden: Brill, 2001): 133-150.

¹⁸ Peregrine Horden, *Hospitals and Healing from Antiquity to the Later Middle Ages*, Variorum Collected Studies Series (Ashgate: 2008).

hospitals within the context of their social and organizational structure.¹⁹ What makes Miller's book groundbreaking is his main argument that challenges the general view that Byzantine hospitals were far from being institutionalized and well-organized foundations. On one hand, Miller speaks about the Pantokrator Xenon and the Lips Xenon in particular, which makes this source crucial for the present study, since these Byzantine hospitals will be used as *comparanda* for Ottoman hospitals. On the other hand, Miller's argument has received criticism from several scholars such as Vivian Nutton, and I feel the need to reveal an awareness of its restrained reception.²⁰

As stated above, among historians of art and architecture, there has been a tendency to focus on religious or civic monuments other than hospitals. However, it is still possible to find a fairly large number of publications written on Ottoman and Byzantine hospitals and medical practices, if not written by scholars in the fields of art and architectural history. In spite of the fact that Ottoman and Byzantine cultures prevailed over the neighboring lands throughout their history and were involved in cultural interactions, there has been a gap among scholarly publications in terms of investigating Ottoman and Byzantine hospitals through a comparative lens. The aim of this thesis is to fill this gap while raising two major research questions: In what ways were early Ottoman and late Byzantine medical institutions similar to or different from each other? Did Byzantine hospitals influence Ottoman hospitals in terms of their architectural, social and institutional structure? Since I

¹⁹ Timothy S. Miller, *The Birth of the Hospital in the Byzantine Empire*, Rev. ed. (Baltimore: John Hopkins University Press, 1985).

²⁰ Vivian Nutton, "Review of Timothy S. Miller 'The birth of the hospital in the Byzantine Empire', " *Medical History*, 30, 1986: 218-221.

will try to answer these questions within the context of social and cultural history in addition to architectural history, these major questions will bring with them several minor research questions:

- Physical features and spatial design: What determined the physical features of the three Ottoman hospitals in question? Were there any similarities between Byzantine hospitals and these three Ottoman hospitals?
- Institutional structure: To what extent were early Ottoman hospitals institutionalized? What kind of services did these hospitals offer? How was the distribution of tasks organized? Who were the doctors / employees, and how did they work? Do we find any similarities with the Pantokrator Xenon and the Lips Xenon?
- Social structure: Who were the patrons of the Ottoman and Byzantine hospitals in question? In how far was the founding of hospitals as charitable institutions related to religious tradition? Whom did these hospitals serve? Who were the patients, and how were they treated? How were the social structure and values of each society reflected in these hospitals?

It may not be possible to find the exact answers to all of the questions listed above. In the end, while trying to answer these questions, I intend here to present not only a comprehensive source about the early Ottoman hospitals under study, but I also hope to come to a concrete conclusion about the comparison and/or possible interactions of early Ottoman and late Byzantine hospitals in terms of their social and institutional structures, as well as their physical features and spatial designs.

CHAPTER 1

LATE BYZANTINE HOSPITALS: TWO CASE STUDIES FROM CONSTANTINOPLE

1. 1. THE PANTOKRATOR XENON

The Pantokrator Xenon was built as a part of the Pantokrator Monastery, which constituted a multidimensional structure composed of several units with different functions. It would not be wrong to assume that the establishment of the complex was an outcome of a three-faceted ideology. First, the Pantokrator Monastery had such a dominant position in the heart of Constantinople that it reflected the ambition and the imperial ideology of its founders, John II Komnenos and Eirene Komnene.²¹ Moreover, the complex was intended as a charitable institution embracing people from several strata, and it embodied the benevolence of its founders.²² Thirdly, the monastery complex was established to function as the new dynastic mausoleum of the empire, the first after the Church of the Holy Apostles, which had been serving as imperial mausoleum until then.²³

²¹ Vlada Stanković, Albrecht Berger, “The Komnenoi and Constantinople Before the Building of the Pantokrator Complex,” in *The Pantokrator Monastery in Constantinople*, ed. Sofia Kotzabassi (Boston-Berlin: De Gruyter, 2013), 3.

²² Metin and Zeynep Ahunbay refer to literary sources while explaining the philanthropic aspect of the foundation of the complex. According to a poem recited at the consecration ceremony of the triple church and the monastery, and a biography of Irene, the empress wished to help the poor, sick and suffering souls when she founded the complex. Metin Ahunbay, Zeynep Ahunbay, “*Restoration Work at the Zeyrek Camii, 1997-1998*,” in *Byzantine Constantinople: Monuments, Topography and Everyday Life*, ed. N. Necipoğlu (Leiden, 2001), 117.

²³ Stanković and Berger, 3.

The complex was built at the top of a hill overlooking the Golden Horn ca. 1118-1136 (**Fig. 1, 2**). Taking into consideration the site on which the complex was built, Paul Magdalino points out the possible relation between the Pantokrator Monastery and a ninth-century hospital established by the emperor Theophilos on a hill above Zeugma (modern Unkapanı) next to the Golden Horn.²⁴ Although the long history of the Theophilos Xenon remains a mystery, and it vanished from the sources after the tenth century, its site, which coincides with that of the Pantokrator Monastery, causes reasonable suspicion that the Pantokrator Xenon might have been built as continuation of the hospital of Theophilos. While there exists no statement about the Theophilos Xenon in the monastic charter of the Pantokrator Monastery, Magdalino explains this situation in reference to the common attitude of patrons, who often neglected naming the original founders of the religious institutions that they restored, in order to take all the credit. However, the lack of any obvious ninth-century stratum in the property list of the Pantokrator Monastery points out a very long period of time between the closure of the Theophilos Xenon and the establishment of the Komnenian foundation, which might suggest that the original endowments had been transferred to another foundation.²⁵

Robert Ousterhout roughly divides the construction process of the monastery into three phases: construction of the south church dedicated to Christ Pantokrator; addition of the north church dedicated to Virgin Eleousa; and the middle church dedicated to St. Michael.²⁶ As an ambitious imperial foundation, the

²⁴ Paul Magdalino, *Studies on the History and Topography of Byzantine Constantinople* (Variorum, Ashgate, Aldershot, 2007), 50-52.

²⁵ Ibid., 52.

²⁶ Ousterhout, "Architecture, Art and Komnenian Ideology," 133.

Pantokrator Complex included several units such as accommodations for monks, three churches, which still stand as Zeyrek Mosque, and two philanthropic institutions, one of which was a hospital, the Pantokrator Xenon.²⁷ The complex also served as dynastic mausoleum with its mortuary chapel where John II Komnenos, his wife Irene, and their son Manuel I, as well as several other members of the Palaiologan dynasty would be buried.²⁸

The Latin invasion of 1204 was a turning point in the history of the Pantokrator Monastery, as it was taken over by the Venetians and converted into their administrative headquarters.²⁹ They also used the foundation as a storage place for valuable relics and icons such as that of the Mother of God Hodegetria that they had removed from the Hagia Sophia in 1206.³⁰ During the 57 years of Latin rule, the important hospitals of Constantinople were assigned to the jurisdiction of Western religious orders, which led to their deterioration both in the administration and the services offered. The disruption in the hospital system of Constantinople was of such a degree that neither the earlier hospitals nor the more recent imperial foundations survived, including the Pantokrator Xenon.³¹

Although Byzantine sovereignty was restored over Constantinople after Michael VIII Palaiologos (1259-82) entered the city in 1261, the empire did not return to its previous splendor. However, the emperor and his wife initiated

²⁷ Miller, *The Birth of the Hospital*, 12.

²⁸ Ahunbay, 118.

²⁹ Kotzabassi, 58.

³⁰ R. Gautier, "Le typikon du Christ Sauveur Pantokrator," *Revue des Études Byzantines* 32 (1974), 1-154. "Pantokrator: Typikon of Emperor John II Komnenos for the Monastery of Christ Pantokrator in Constantinople," *Byzantine Monastic Foundation Documents: A Complete Translation of the Surviving Founders*, ed. J. Thomas, A. Constantinides-Hero, Dumbarton Oaks Studies 35 (Washington D.C. 2000), 726.

³¹ Miller, *The Birth*, 192.

activities to restore several institutions in the city. As for the Pantokrator Monastery, we do not know whether the Greek monks who inhabited it were replaced by monks from Western Europe before the restoration of the Byzantine reign; the only information regarding the intervention of Michael VIII in the monastery's administration is that he assigned Theodosios of Villehardouin as the spiritual director of the Pantokrator Monastery, which partially survived. During the reign of Andronikos II Palaiologos (1282–1325), the successor of Michael VIII, the monastery was used as a prison where the son of the Serbian king, Stefan Dečanski, was one of the prisoners together with his two sons, between 1313 and 1320. Andronikos II also restored the function of the monastery as the imperial burial site; several members of the Palaiologian dynasty, including the emperors Manuel II Palaiologos (1391–1425) and John VIII Palaiologos (1425–1448), would be buried here in later periods.³²

The situation of the Pantokrator Monastery deteriorated in the first half of the fifteenth century; its buildings were in ruined condition and housed only six monks. Following the Ottoman conquest of Constantinople in 1453, the triple church was first converted into a center for Muslim education, and then into a mosque by Zeyrek Mehmed Efendi, leading to its present name, Zeyrek Kilise Camii, in 1471.³³

1.1.a. Physical Features

³² Gautier, 726.

³³ Ibid., 727. Ahunbay, 118.

Although we have detailed information about the institutional structure of the Pantokrator Xenon thanks to its monastic charter (*typikon*), its site within the complex, together with the exact ground plan of the Pantokrator Monastery is still a mystery. The archaeological evidence regarding the entire complex is so limited that we only know about the layout of the triple church, which still exists today, and a number of archaeological ruins around this structure.

Based on the monastic charter, Magdalino examines the monastery units in three main groups: units on the site of the main complex, units in other parts of the city and suburbs, and the endowment. The hospital belongs to the main complex, together with the south church dedicated to Christ Pantokrator (main church/*katholikon*), the north church dedicated to Theotokos Eleousa, and the middle church dedicated to Archangel Michael (funerary chapel).³⁴ Although the triple church still stands as the Zeyrek Mosque, there is no evidence regarding the physical features of the hospital.

There are very few architects from the Byzantine period that we know by name. Nikephoros, who oversaw the construction of the Pantokrator Monastery, is one of them.³⁵ Although we know that the existing buildings have undergone several restorations throughout its history, including the Ottoman period, they give us an idea about the building techniques and the decorative program of the original structure. The recessed brick technique is applied in all three phases of the construction, although it tends to be sloppy due to the usage of Late Antique bricks

³⁴ Paul Magdalino, "The Foundation of the Pantokrator Monastery in its Urban Setting," in *The Pantokrator Monastery in Constantinople*, ed. Sofia Kotzabassi (Boston-Berlin: De Gruyter, 2013), 36.

³⁵ Magdalino, "The Foundation of the Pantokrator Monastery," 33.

of different sizes (**Fig. 3**). This irregular wall construction was originally masked by an exterior plaster covering which is no longer visible today.³⁶

Apart from the monastic charter, which is the most comprehensive source about the complex, another important source, which gives significant details about the physical features and the general layout of the hospital, is the inauguration epigram. This epigram, whose first few lines were also written on the wall of the Pantokrator Monastery, and which is preserved in full in the Athens National Library, refers to the serene and healing atmosphere created by the courtyards with their flowers, grass, cypresses, gentle breezes, and waterworks including open channels, hidden pipes, and fountains.³⁷ Since there is no archaeological evidence regarding the hospital, the only way to form an idea about the physical and visual features of the complex is to make inferences from the architectural features of the remaining structures to a certain extent, assuming that the architect of the complex followed a certain stylistic unity.³⁸

1.1.b. Social and Institutional Structure

The fact that one third of the *typikon* of the Pantokrator Monastery is about the hospital might be interpreted as a reflection of John II Komnenos' intention founding his complex as an institution focused on philanthropic activities.

³⁶ R. Ousterhout, Z. Ahunbay, M. Ahunbay, "Study and Restoration of the Zeyrek Camii in Istanbul: First report 1997-1998," *Dumbarton Oaks Papers* 54 (2000), 268-269.

³⁷ The complex had two courtyards: one for the monastic community, one for the philanthropic units. Ibid., 37. Alice-Mary Talbot, "Byzantine Monastic Horticulture: The Textual Evidence," in *Byzantine Garden Culture*, ed. Anthony Littlewood, Henry Maguire, and Joachim Wolschke-Bulmahn, (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2002), 64.

³⁸ The site of the hospital, which is not known and still debatable, will not be discussed here, since it requires comprehensive archaeological investigation and goes beyond the scope of this thesis.

While determining the regulations of his complex in the *typikon*, the emperor went into every single detail concerning the regulations about the organization and the function of the hospital.

The Pantokrator Xenon was designed as a fifty-bed hospital, divided into five main clinics. Patients with wounds or fractures would be treated in the first clinic, which included ten beds. The second clinic with eight beds was reserved for the treatments of the patients with eye diseases, stomach diseases, or any other acute and painful diseases. The third clinic with twelve beds was for female patients, and the two other clinics with ten beds each were set aside for male patients who were moderately ill. There was also an extra bed in each clinic, and six more beds with holes in the middle for patients with severe diseases, who could not move at all. Even regulations about the beds, bedclothes and clothes of the patients can be found in the *typikon*. Accordingly, each bed must have a mat and mattress, a pillow, a coverlet, and two blankets made of goat's hair, in case of cold weather.³⁹ Based on the statements about the distribution of clothes, it can be deduced that many patients in the Pantokrator Xenon were poor, and that the establishment donated clothes to them. Other patients, however, had the means to get at least their own laundry.⁴⁰

As for the organizational structure of the hospital, the duties and responsibilities of the administrative, medical, and auxiliary staff, together with their salaries, are also clearly stated in the *typikon*. The hospital was administered

³⁹ Gautier, 757.

⁴⁰ Georges Androutsos, Marianna Karamanou, Aristomenis Matsaggas, "Les Institutions Hospitalières de Byzance et L'hôpital (Xénon) du Monastère du Christ Sauveur Pantocrator de Constantinople," *Presse Med.* (2012), 72. Gautier, 757.

by an infirmarian (*nosokomos*) and a superintendant (*meizoteros*) who would assist him. Acquisition and dispensation of all the supplies necessary for the operation of the hospital such as food, medicine and fuel were under the control of these two officials.⁴¹ In each clinic, medical service was performed by two physicians (*iatroi*), three certified assistants (*hypourgoi embathmoi*), two auxiliary assistants (*hypourgoi perissoi*), and two orderlies (*hyperetai*). Two physicians were in charge of the women's clinic, together with one female physician (*iatrixina*), four certified female assistants (*hypourgissai embathmoi*), two auxiliary female assistants (*hypourgissai perissai*), and two female orderlies (*hyperetriae*). Additionally, there would be two surgeons and two physicians of internal medicine, in charge of the outpatient clinic. These four physicians would be accompanied by four certified and four auxiliary assistants. Based on the existence of a teacher, we also learn from the *typikon* that medical education was performed within the hospital. Physicians and assistants were organized in two groups that changed each month.⁴² Due to this rotational work schedule, the number of physicians in charge of each clinic was one, and two for the outpatient clinic.⁴³ It was strictly forbidden for the physicians to work outside the hospital and even to perform unpaid service by imperial command on occasional secular excursions.⁴⁴

It is clear in the *typikon* that, a certain hierarchy was established among the medical personnel. The two chief physicians called *protomenitae*, from the clinic of serious diseases, were responsible for the admission of the patients. After the

⁴¹ Ibid., 758. Miller, 17.

⁴² Gautier, 757- 758. Miller, 15.

⁴³ Ibid., 16.

⁴⁴ Gautier, 765.

protomenitae came the two surgeons, who were assigned to the clinic of wounds and fractures. The chief physicians were also subordinated to the *primmikeriori* whose duty was to monitor the performance of the medical staff. There were two *primmikeriori* who rotated in a monthly basis, similar to the rest of the physicians.⁴⁵

The auxiliary staff of the Pantokrator Xenon consisted of one chief pharmacist, three ordained pharmacists, two supernumeraries, one doorkeeper, five laundresses, one keeper of the kettles, two cooks, one groom, one purser, two priests, two lectors, two bakers, four undertakers, one priest for funerals, one cleaner of drains, and one miller. A craftsman in charge of cleaning and sharpening the surgical tools, and a hernia specialist, who were apparently part-time employees, were also included in the salary list.⁴⁶

Although it does not include much evidence about the details of the medical treatment, the *typikon* shows us that the aim was to provide the ideal conditions necessary for the health of body and mind. In addition to the statements it included about the importance of having baths, the *typikon* also regulated the diet of the

⁴⁵ Gautier, 758. Miller: 16. Demetrios J. Constantelos, *Byzantine Philanthropy and Social Welfare* (New Brunswick: Rutgers University Press, 1968), 174.

⁴⁶ Miller, 16. The salaries of the employees were paid in both cash and wheat. *Noumisma* (plural: *noumismata*) was the currency used in the Byzantine Empire. According to the monetary system of the period, the new gold coin with an 87% gold content, was called *hyperpyron noumisma*. Worth 1/3 of an *hyperpyron* was the *trachy aspron*, an electrum coin containing 30% gold and 69% silver. *Modios* (plural: *modioi*) was the unit used to measure dry goods. 1 *modios* = 17.084 liters. *Monasterikos modios* = 13.6 liters. *Annonikos modios* = 12.8 liters. Cécile Morrison, Jean-Claude Cheynet, "Prices and Wages in the Byzantine World," in *The Economic History of Byzantium: From the Seventh through the Fifteenth Century*, ed. Angeliki E. Laiou (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2002), 817. The Voluntaryist Reader, "The Economy of Byzantium, State Intervention and Free Exchange: Part Four-Monetary Developments," accessed May 17, 2015, <http://voluntaryistreader.wordpress.com/2013/03/11/the-economy-of-byzantium-state-intervention-and-free-exchange-part-four-monetary-developments>. See Appendix 1 for the table of salaries as stated in the *typikon*.

patients, which was mostly vegetarian.⁴⁷ For the spiritual well-being of the patients, two chapels, one for men and one for women, were built as a part of the hospital, and each included a priest and a lector. Here, the patients could attend the divine liturgies or confess.⁴⁸

Based on the information in the *typikon*, the Pantokrator Xenon was a highly institutionalized structure, such that it would not be wrong to say that it was a hospital in the modern sense.⁴⁹ However, although the emperor John II Komnenos took into consideration every single detail in terms of creating the ideal health institution, we do not know how long—or if—it operated according to the ideal conditions defined in the *typikon*, until the time it was abrogated. Still, even though we are almost clueless about its location and physical features, the role of the Pantokrator Xenon cannot be denied in terms of helping to understand Byzantine philanthropy and the health system in more general terms, as well as its impact on the development of later Byzantine philanthropic institutions.

1.2. THE LIPS XENON

The Lips Xenon was founded by the Empress Theodora, the widow of Michael VIII Palaiologos, towards the end of the thirteenth century, as an addition to the Monastery of Constantine Lips. The monastery was originally a tenth-century structure and later was renovated by the empress with the intent of establishing an imperial mausoleum for the Palaeologian dynasty.⁵⁰

⁴⁷ Gautier, 760. Constantelos, 175.

⁴⁸ Miller, 19.

⁴⁹ Ibid., 20.

⁵⁰ Theodore Macridy, “The Monastery of Lips and the Burials of the Palaeologi,” *Dumbarton Oaks Papers* 18 (1964), 253.

Although the history of the original foundation is not exactly known, it is widely accepted to be founded by the *patrikios* Constantine Lips in June 907.⁵¹ The monastery was located in the Lycus valley, in west-central Constantinople (**Fig. 1**). The *katholikon* of the monastery consisted of two connecting churches: the northern one, which was originally a sixth-century structure and restored by Constantine Lips, and the southern church, built by the Empress Theodora.⁵² In addition to the southern church dedicated to St John the Baptist, which was at the same time a mausoleum for the Palaiologan family, Theodora's foundation also included a twelve-bed hospital.⁵³

Although both of the foundation's churches have survived, almost nothing is known about the history of the monastery prior to its restoration in Palaiologan times.⁵⁴ Theodore Macridy states that the Empress Theodora chose to restore this monastery because of its location close to the Church of the Holy Apostles. Since the imperial mausoleum at the Church of the Holy Apostles had been destroyed during the Latin invasion, the empress wished to found a new imperial mausoleum not far from the old one.⁵⁵ In the middle of the fourteenth century, a perambulatory consisting of two wings was added to Theodora's church to allow for additional

⁵¹ The *Patrikios* (πατρίκιος) was a high-ranking dignitary introduced by Constantine I as an honorific title without specific administrative functions. "Patrikios (πατρίκιος)," *The Oxford Dictionary of Byzantium* 3, (New York – Oxford, 1991), 1600.

⁵² Macridy, 258.

⁵³ A. Cutler, A. Kazhdan, "Lips Monastery," *The Oxford Dictionary of Byzantium* 2 (New York – Oxford, 1991), 1233.

⁵⁴ Alice-Mary Talbot (transl.), "Lips: Typikon of Theodora Palaiologina for the Convent of Lips in Constantinople," *Byzantine Monastic Foundation Documents: A Complete Translation of the Surviving Founders*, J. Thomas, A. Constantinides-Hero, *Dumbarton Oaks Studies* 35 (Washington D.C., 2000), 1254.

⁵⁵ Macridy, 258.

burial sites.⁵⁶ Based on the accounts of an anonymous Russian traveler who visited Constantinople in the second quarter of the fifteenth century, it can be assumed that the Lips convent survived and was being used as imperial mausoleum down to the Ottoman conquest in 1453. As for the hospital, which is known to be attached to the convent, we do not have any evidence regarding its physical features or the story behind its disappearance. The *typikon* informs us only about its existence next to the convent and its organizational structure.

Following the Ottoman conquest of Constantinople, the south church of the monastery was turned into a *masjid* by Alaeddin Ali of the Fenari family, and thereafter known as Fenari İsa Camii. Although the tombs in the south church were removed during the restoration, those in the nave, narthex, and exonarthex of the north church were left.⁵⁷ After the great fire of 1630, the buildings remained in ruined condition prior to the restoration of the *masjid* as a regular mosque, and the north church as a *tekke*, by the Grand Vizier Bayram Pasha in 1636. During this restoration, large-scale changes were made to the exterior architecture of the building, and most of the interior decorative elements were removed. As a result of subsequent fires, which took place in the eighteenth and nineteenth centuries, the building stayed in ruined condition until the 1960s, when it was restored by the Turkish Ministry of Mosques and the American Byzantine Institute (**Fig. 4**).⁵⁸

1.2.a. Physical Features

⁵⁶ Ibid., 267. Talbot, 1255.

⁵⁷ Ibid. Majeska, *Russian Travelers to Constantinople*, 309-312.

⁵⁸ Talbot, 1255.

Unfortunately we do not have any archaeological evidence regarding the physical and visual features of the Lips Xenon. Nor do we have any primary source describing the xenon, other than the *typikon*, which is mostly about its organizational structure. Thus, the only physical evidence is the south church, the Church of St. John the Baptist, which we know was built together with the hospital attached to it. Although the church cannot be considered as evidence for the architectural layout of the hospital, it needs to be mentioned briefly, assuming that a similar pattern was followed in terms of building techniques and decorative elements.

The Church of St. John the Baptist was founded by the Empress Theodora, as a structure attached to the south side of the tenth-century church. Since the empress intended to build a mausoleum similar to the Pantokrator Monastery, which served as the mausoleum of the Komnenoi, it was designed as a large-scale structure compared to the north church.⁵⁹ As for the decoration of the south church, Cyril Mango and Ernest J. W. Hawkins have compared its carved ornament with the standard of excellence set by tenth-century decoration, stating that the sloppily executed ornament and uneven surfaces of the south church reflect an approach different from that of the tenth-century sculptor whose technique was based upon the usage of ruler and compass.⁶⁰ The carved ornaments of the south church are

⁵⁹ Cutler, Kazhdan, 1233. Alice-Mary Talbot, "Building Activity in Constantinople Under Andronikos II: The Role of Women Patrons in the Construction and Restoration of Monasteries," in *Byzantine Constantinople: Monuments, Topography and Everyday Life*, ed. N. Necipoğlu (Leiden, 2001), 337.

⁶⁰ Cyril Mango, Ernest J. W. Hawkins, "Additional Notes, Constantine Lips," *Dumbarton Oaks Papers*, Vol. 18 (1964), 309.

noteworthy in that they reminding of those in the Yildirim Bayezid Darussifa (**Fig. 5, 15, 16**).

1.2.b. Social and Institutional Structure

Although not as detailed as that of the Pantokrator Xenon, the *typikon* of the Lips Monastery gives significant details about the organization of the hospital. This knowledge enables us to form an idea about the organizational structure and the quality of the services offered in Byzantine health institutions during the reign of the Palaiologan dynasty. While the Pantokrator Xenon represents the comprehensive health system of earlier periods, the Lips Xenon is an example of the more modest establishments dating to the period following the reconquest of Constantinople by Michael VIII Palaiologos in 1261.⁶¹

According to the *typikon*, the Lips Xenon was designed as a twelve-bed hospital. Rules about the arrangement of supplies such as mattresses and bedcovers are clearly stated in the *typikon*.⁶² The *typikon* also informs us about the hospital staff and their wages. Although the hospital was founded to serve exclusively female patients, it is notable that no women were included in the staff.⁶³ The overall staff was composed of three physicians, one assistant, one nurse, one head pharmacist, six attendants, two chief druggists, one blood-letter, three servants, one cook, and one laundress.⁶⁴ The Lips Xenon was administered by a *nosokomos* who

⁶¹ Miller, 200.

⁶² Talbot, "Lips: Typikon of Theodora Palaiologina," 1281.

⁶³ Miller explains this situation with the possible influence of Western customs, which caused females to be forced out of hospital careers between 1136 and 1282. Miller, 201.

⁶⁴ Talbot, 1281. See Appendix 2 for the table of wages.

was advised by an accountant. Also, the mother superior of the monastery, assisted by her *oikonomos*, was responsible for the material resources of the hospital. We do not know whether there was a rotational work schedule similar to that at the Pantokrator Xenon. According to Miller, it is likely that the medical staff had a type of shift system in order to spare time for private practice, which was more important at that time than it had been earlier.⁶⁵

Considering the fact that the integrity of the hospital and the other parts of the monastery is emphasized several times in the *typikon* of the Lips Monastery, it can be assumed that the founder attached particular importance to this institution.⁶⁶ Especially the detailed descriptions it included about the organizational structure of the hospital show us that she intended to establish a well-organized institution that resembled the Pantokrator Xenon. As Miller puts it, although the Lips Xenon seems to be radically different from the Pantokrator Xenon at first glance, if we take into consideration the fact that it was a hospital for female patients only, it is more like a small-scale version of the Pantokrator Xenon.⁶⁷

⁶⁵ Miller, 201.

⁶⁶ Talbot, 1280-1281.

⁶⁷ Miller, 201.

CHAPTER 2

THREE CAPITALS, THREE HOSPITALS: HOSPITALS OF A RISING EMPIRE

2.1.THE YILDIRIM BAYEZİD DARÜŞŞİFA IN BURSA

The earliest of the Ottoman hospitals, the Yıldırım Bayezid Darüşşifa, was established in 1399 in Bursa, the first capital of the Ottoman state. It was built as part of the Yıldırım Bayezid Mosque Complex, which was founded by the Ottoman Sultan Bayezid I (Yıldırım, "Thunderbolt;" r. 1389-1402). It is known that Bayezid I used a part of his spoils from the Battle of Nicopolis (1396) for the construction of the complex consisting of a mosque, madrasa, bathhouse, hospice and darüşşifa.⁶⁸

Different from Anatolian Seljuk darüşşifas, the Yıldırım Bayezid Darüşşifa is not an individual building with a significant monumental gate; it is one of the several sections that belonged to a mosque complex whose most prominent part is the mosque itself (**Fig. 6**). The mosque is constructed on the highest point of the sloping estate known as “Şüşteî Garden,” which belonged to Orhan’s *waqf*.⁶⁹ To the northwest, 80 meters away from the mosque, the madrasa was erected; and on the northern side of the madrasa was the tomb (**Fig. 7**). There used to be a hospice to the northeast of the mosque, which no longer exists today. While the bathhouse was

⁶⁸ Ahmet Zeki İzgöer, “Anadolu’daki Osmanlı Darüşşifaları,” *Tarihi Sağlık Kurumlarımız Darüşşifalar*, c. 2, ed. Nil Sarı (İstanbul: Sanovel, 2010). The Battle of Nicopolis took place on 25 September 1396 at Nicopolis, Bulgaria. The battle between the Ottomans and an allied army composed of several European nations such as Hungarian, Bulgarian, Wallachian, French, Burgundian, German, resulted in the Ottomans’ victory.

⁶⁹ Osman Çetin, “Yıldırım Bayezid Darüşşifa, Bursa,” *The şifahanes of philanthropic monuments of the Seljuk and Ottoman Eras*, ed. Abdullah Kılıç (İstanbul: Medical Park, 2012), 191.

on the southwestern side of the mosque, a royal garden palace sat to the north, between the tomb and the hospice. As for the darüşşifa, it is situated to the southwest, approximately 250 meters from the mosque. Additionally, the mosque complex was bordered by an external wall with two gates, one of which was to the north, and the other to the east.⁷⁰

Among the structures of the Yıldırım Bayezid Complex, the only one with an inscription panel over the gate is the tomb (**Fig. 8**).⁷¹ This Arabic inscription is written on a marble panel in *Thuluth* script:

This Garden of Eden belongs to the blessed, the deceased and the absolved, Bayezid Khan, the son of Murad. It is built by Süleyman Khan, the son of Bayezid, the great sultan, the master of the Arab and Iranian rulers. May God render his legacy permanent. *Muharram*, 809.⁷²

To the left of this large inscription panel is another inscription panel. This smaller inscription panel is significant in terms of giving information about the name of the master or architect:

The construction of this blessed *imaret* was made by the humble servant, Ali,

⁷⁰ Cantay, 73.

⁷¹ Ibid., 73. Apart from that of Sultan Bayezid, the tomb houses the sarcophagi of his son İsmâ, his wife and two other women whose names are unknown.

⁷² Turkish translation in Kazım Baykal, *Bursa ve Anıtları* (Bursa, 1950), 211. All translations from Turkish into English are mine, unless noted otherwise. The date *Muharram*, 809 coincides with June, 1406. www.islamicfinder.org. Cantay, 74.

the son of Hüseyin. May God absolve both of them. *Rabī` al-Ākhir*, 809.⁷³

While it is known with certainty that the tomb was built by Süleyman Khan, the son of Bayezid, in 1406, the construction date of the darüşşifa whose *waqf* was established together with that of the madrasa has long been debated. Osman Şevki Uludağ has identified 1400 as the construction date of the darüşşifa depending on the date of the *waqfiyya*, but some scholars have suggested that it was built in 1399 or between 1390 and 1394.⁷⁴ According to Osman Çetin, the date of the *waqfiyya* cannot stand as a clue by itself, and the darüşşifa might have been constructed before the writing of the *waqfiyya*. He also strengthens his statement by pointing to a phrase in the *waqfiyya*, which describes a building constructed together with its outer walls:

...also, he endowed the darüşşifa which had been built on a small hill in the east of Bursa, and which was surrounded by walls...⁷⁵

Throughout its history, the Yıldırım Bayezid Darüşşifa has undergone several restorations. As required by the *waqf* regulations, trustees were responsible for having the *waqf* buildings restored. However, trustees were not able to conduct

⁷³ *Rabī` al-Ākhir*, 809 coincides with September, 1406. www.islamicfinder.org. Although the term *imâret* generally denotes a public soup kitchen, here it is used for referring to the tomb of the sultan. As Gülru Necipoğlu states, the term *imâret* derives from the Arabic ‘*imâra*, and it semantically embodies the concept of improvement by cultivating, building, inhabiting, populating and civilizing. Gülru Necipoğlu, *The Age of Sinan: Architectural Culture in the Ottoman Empire* (London: Reaktion Books, 2005), 71.

⁷⁴ Osman Şevki Uludağ, *Beşbuçuk Asırlık Türk Tababeti Tarihi* (Ankara, 1991), 88. Bedri Yalman, *Bursa*, (İstanbul, 1977), 11. Baykal, 155.

⁷⁵ Osman Çetin, *İlk Osmanlı Hastanesi Bursa Yıldırım Darüşşifası (Bursa Mahkeme Sicillerine Göre)*, (İstanbul, 2006), 34-35. Ekrem Hakkı Ayverdi, “Yıldırım Bâyezid’in Bursa Vakfiyesi ve Bir İstibdalnâmesi,” *Vakıflar Dergisi*, VIII (Ankara, 1969), 38.

such work as they wished; they were obliged to go to court and obtain permission for these restorations. Following the trustee's application, the *kadı* would appoint a commission of experts headed by an architect. This commission would present a detailed report to the court after inspecting the building concerned, determining the material and supplies together with their prices, and the salaries of the masters and other employees. The *kadı* would then give permission for the restoration, depending on this report. If the money determined in the beginning was not enough for completing the restoration, an additional assessment would take place, and the restoration would be completed. All these processes would be recorded in the court registers. Thus, the most important primary sources for the dates and contents of the restorations to the Yıldırım Bayezid Darüşşifa are the Bursa Court Registers.⁷⁶

The earliest restoration documents, which still exist today are from the sixteenth century. According to a report dated March 1618, the darüşşifa was widely restored on the initiative of the trustee of the Yıldırım *waqf*, Hacı Ahmed bin Mustafa, and under supervision of the architect Mehmed bin Veli. The record of the restoration which took place in 1649 on the initiative of the trustee Rıdvan Ağa and under the supervision of the architect İbrahim bin Abdülğani is significant in that it provides information about the architecture of the darüşşifa. The record's details about the broken rooftiles of the darüşşifa show that the roof of the darüşşifa

⁷⁶ Çetin, 39. There is no doubt that Ottoman Court Registers are one of the most important primary sources regarding the economic, administrative and social history of the Ottoman Empire. These court registers include numerous written documents such as petitions, edicts, legal codes and canonical treatises, and give significant clues about the history of a specific region. Since Bursa is the first capital where the foundations of the Ottoman State were laid, the Bursa Court Registers include the oldest records. The Bursa Court Registers are also significant for ranking right behind the İstanbul Court Registers in terms of quality and quantity. While the oldest book of the Bursa Court Registers bears the record number A 199/808 and dates to between the years 1455 and 1486, the newest book with the record number D 37 dates to 1923. Mefail Hızlı, "Bursa Mahkeme Sicilleri Rehberi" *Uludağ Üniversitesi, İlahiyat Fakültesi*, Cilt: 12, Sayı:1 Bursa, 2003), 367-426.

was covered with rooftiles during that period.⁷⁷ The record about the restoration of 1669 shows that this was one of the most extensive restorations. During this restoration, which took place under the administration of the trustee Ahmed Ağa bin Nasuh and under the supervision of the architect Fazlı Çavuş, 25 out of 27 rooms in the darüşşifa underwent repairs.⁷⁸

Ekrem Hakkı Ayverdi states that there exists no document regarding the status of the darüşşifa after 1755. This might be a clue that the darüşşifa was in a ruined state after this period, but a gravestone from the year 1839, which belongs to a physician, hints that the darüşşifa might have somehow continued operating even then.⁷⁹ After the earthquake of 1855, which destroyed many buildings in Bursa, the darüşşifa remained in ruined condition, although some of the other buildings of the Yıldırım Bayezid Complex were restored.⁸⁰ Osman Şevki Uludağ describes the state of the darüşşifa in 1925 as wretched and miserable. He states that the building was nothing but a heap of rubble and that a few surviving rooms were used as gunpowder magazine at that time.⁸¹

The first excavation project took place between 1944 and 1945 under the supervision of the architect Sedat Çetintaş. Nevertheless, the Yıldırım Bayezid Darüşşifa stayed in its ruined state since no restoration project was executed until 1991 (**Fig. 9**). The darüşşifa underwent large-scale restoration in 1991 on the

⁷⁷ The Bursa Court Registers, B 74/275, 37a. Çetin, 40.

⁷⁸ One can arrive at an opinion about the scale of the restorations based on the money spent. The Bursa Court Registers show that the money spent for the 1618 restoration was 26.699 *akçe*. While 16.150 *akçe* were spent for the 1649 restoration, 12.320 *akçe* were spent for the restoration which took place in 1669. Ibid., 41.

⁷⁹ Ekrem Hakkı Ayverdi, *Osmanlı Mimarisi'nin İlk Devri 1230-1402* (İstanbul, 1966), 457.

⁸⁰ In 1864, the Damat Efendi Mansion next to the İmaret-i İsabey Madrasa was restored as a hospital on the orders of Ahmed Vefik Pasha. This might be a reason for neglecting the Yıldırım Bayezid Darüşşifa during this period. Çetin, 47.

⁸¹ Uludağ, 87.

initiative of the Regional Directorate of Foundations, and was assigned to the *Göz Nurunu Koruma Vakfı*. The building currently operates as the Bursa Yıldırım Darüşşifa Eye Center (**Fig. 10**).⁸²

2.1.a. Physical Features

The Yıldırım Bayezid Darüşşifa, oriented along a north-south axis, is a rectangular building covering an area of 50 x 30 meters. Due to the sloping site on which it was built, it has been planned as a layered structure and this has led to several mistakes and irregularities in the general lay-out (**Fig. 11**).⁸³ Ayverdi states that the irregular wall structure of the building is a clear indication of poor workmanship and has nothing to do with the elaborate walls of the mosque.⁸⁴ Building layered structures was not a common practice in the Ottoman architecture, and architects used to prefer planning their buildings after forming a plain area over the sloping site. They would achieve this by adding a functionless substructure or a caravanserai on the slope, just like the architect Sinan did for the construction of the darüşşifa and madrasa buildings of the Süleymaniye Complex.⁸⁵

The ground plan of the Yıldırım Bayezid Darüşşifa follows the Seljuk pattern and is a variation of the four-iwan madrasa plan (**Fig. 12**). The main gate in the north opens to the central courtyard through a gallery covered with a barrel vault. At the same time, the Yıldırım Bayezid Darüşşifa bears some features

⁸² Çetin, 48.

⁸³ Sedat Çetintaş, *Türk Mimari Anıtları, Osmanlı Devri Bursa'da Murat I ve Bayezid I Binaları* (İstanbul, 1952), 40.

⁸⁴ Ayverdi, 456.

⁸⁵ Çetintaş, 40.

different from its Seljuk predecessors. Whereas the iwans used as classrooms in Seljuk hospitals generally opened onto the central courtyard through an arch, the classroom in the Yıldırım Bayezid Darüşşifa was planned as an enclosed and protruding room with its door and windows opening to the central courtyard.⁸⁶ While this large room was covered with a dome measuring approximately 9.40 x 7.28 meters, other rooms surrounding the courtyard were covered with barrel vaults and measured approximately 3.30 x 3.60 meters.⁸⁷

As stated above, after decades of being left in ruined condition, the darüşşifa underwent a large-scale restoration in 1991, and the building, currently used as an eye hospital, is far from its original state. The findings of Sedat Çetintaş's excavation project, which took place between 1944 and 1945, provide us with the best evidence about the original state of the building (**Fig 13-14**). Enver Hakkı Ayverdi also examined the ruins eighteen years after Çetintaş, and he drew conclusions about the functions of the rooms: according to him, the two rooms in the northwest functioned as the physician's and pharmacist's rooms, and the ones in

⁸⁶ Medical education occupied an important place in Ottoman darüşşifas. Whereas madrasas were of major importance in the higher education system, medical education took place mostly in darüşşifas. Medical education commonly occurred in medieval Islamic hospitals, a feature inherited by the Ottomans. Since the transfer of medical knowledge was underpinned by a master-apprentice system- not too different from modern medical education- darüşşifas were the most convenient places to put this system into practice. In the Early Ottoman Empire, physicians educated in Seljuk medical madrasas were assigned, and with the establishment of the Yıldırım Bayezid Darüşşifa, medical education was also intended for training physicians to be employed in the army. Cantay, 2. A.C. Miller, "Jundi-Shapur, Bimaristans, and the Rise of Academic Medical Centres," *J R Soc Med* 2006; 99, 615-617. Osman Ergin, (ed.), *Muallim M. Cevdet'in Hayatı, Eserleri ve Kütüphanesi* (İstanbul, 1937), 42. Alpaslan Demir, "Konya Şeriyye Sicillerinde Rıza Senedi Örnekleri (1659-1749)," in *Prof. Dr. Enver Konukçu Armağanı* (History Studies, 2012), 33.

⁸⁷ Ibid., 40. Cantay, 75. Ayverdi, 455-458. The depth of the large room measures 7.67 meters on the other side. Ayverdi, 455. According to Çetintaş, the widths of the rooms surrounding the courtyard vary from 3.64 meters to 3.45 meters, but Ayverdi states that this difference is only a few centimeters at most. Çetintaş, 40. Ayverdi, 457.

the northeast must have been used as kitchen and lavatory.⁸⁸

Although the Yıldırım Bayezid Darüşşifa has lost most of its original features due to its abandonment and the large-scale restoration, several decorative motifs on the stone and brick construction have been preserved in their original shape. As for the decorative elements, which are no longer visible, we can reach information about their details from Çetintaş's work. The most significant part regarding the decorative program of the darüşşifa is the main gate, which is elevated about 70 centimeters above ground. The pointed arch of the gate is decorated with a red-and-white-striped pattern, and the pediment above the gate is decorated with checkerboard brickwork. Also the sun disc symbols on either side of the gate draw attention, as they resemble the decorative motifs of their Seljuk predecessors as well as those decorating the south church of the Lips Monastery **(Fig. 5, 15-17)**. One can draw a symbolic connection between these sun motifs, which were figurative versions of the same ornament. These motifs are believed to serve talismanic purposes and represent sovereignty in Central Asian and Seljuk cultures.⁸⁹ Çetintaş explains this resemblance as continuation of tradition rather than an explicit artistic purpose, taking into consideration the practical difficulties of decorating stone and brick constructions.⁹⁰ While the sun disc motifs are placed only over the main gate, the most prominent elements of the decoration of the whole building are several rectangular panels with various patterns which might

⁸⁸ Ayverdi, 458.

⁸⁹ Ali Haydar Bayat, "Sivas ve Divriği Darüşşifalarındaki İnsan Figürleri," *VIII. Türk Tarihi Kongresi*, (Sivas, 2004), 194. Also see the section on the decorative features of the Keykavus Darüşşifa: p. 34- 36.

⁹⁰ Çetintaş, 46.

bear symbolic meanings as well.⁹¹ The plaster fringe-like decoration of the upper part of the classroom walls is also significant (**Fig. 18**). Although some of the decorative motifs have been preserved and restored in their original place, many of them no longer exist (**Fig. 19-20**). For instance, one of the best preserved parts of the darüşşifa is the western wall of the gallery between the main gate and the central courtyard; the rectangular panels inside the niches and the cypress tree motif between the niches have been restored according to their original shape (**Fig. 21-22**).

Although the final restoration project has saved the darüşşifa from its complete disappearance, it would not be wrong to say that it is heavily over-restored. While the overall restoration is quite successful in terms of preserving its surviving parts and decorative elements, the misuse of some sections and the metal constructions along with several other additions incompatible with the general sense of aesthetics overshadow all these valuable details (**Fig. 22-25**). Although I support the idea of conserving historical buildings by means of keeping them functioning, I believe that more extensive measures must be taken in order to protect this monument which is of priceless historic importance for the cultural heritage of Turkey.

2.1.b. Social and Institutional Structure

The original *waqfiyya* of the Yıldırım Bayezid Darüşşifa, written in Arabic, bears the date May 1400 (Ramadan, 802). One of the earliest versions of the

⁹¹ Ibid., 47.

waqfiyya, which is dated to 1450, was discovered by Osman Şevki Uludağ in the Bursa archives. Enver Hakkı Ayverdi has also discovered and published another version dated to May 1674.⁹² Although this institution is referred to as “dârüşşifa” and “mâristan” in the *waqfiyya*, the name “dârüşşifa” is used more frequently in the Bursa Court Registers. In these registers we also come across the names “dârüşşifa,” “bîmârhâne” and “tîmârhâne.”⁹³ The translation of the Yıldırım Bayezid Complex *waqfiyya* concerning the darüşşifa is as follows:

Three physicians will be in charge of the hospital, one of which will be the head physician (*tabib-i evvel*). While the head physician will be paid 12 *dirhams* in cash per day and 20 *mudds* of wheat and 4 *mudds* of rice per year, other physicians’ (*tabib*) daily wages will be 8 *dirhams* in cash and they will receive 15 *mudds* of wheat and 2 *mudds* of rice per year, each.⁹⁴ 1 *dirham* in cash per day and 12 *mudds* of wheat per year will be paid to the two

⁹² Bedi N. Şehsuvaroğlu, Ayşegül Demirhan Erdemir, Gönül Cantay Güreşsever, *Türk Tıp Tarihi* (Bursa: Taş Kitapçılık, 1984), 25. Ekrem Ayverdi, “Yıldırım Bâyezid’in Bursa Vakfiyesi ve Bir İstibdalnâmesi,” *Vakıflar Dergisi*, 3 (1956), 37-46. As stated by Ayverdi, another copy of the *waqfiyya* was kept in the General Directorate of the Foundations archive at that time (Vakfiye-i Rumeli and Anadolu, book number 99, page 168, and Mücedded Anadolu 79, book number 205, page 45). Ayverdi, 37.

⁹³ Çetin, 30. Cantay simply defines the darüşşifas as centers where health service is presented to the community. We come across several terms defining these institutions where public health service and medical education was offered, such as *mâristan*, *bîmâristan*, *dârüssihha*, *dârülâfiye*, *dârüttib*. Cantay, 2. According to Ferit Devellioğlu’s Ottoman Turkish dictionary, these terms can be broken down as follows: *dâr*: house, place (Arabic); *şifâ*: recovery, being well (Arabic); *sıhhat*: healthiness (Arabic); *âfiyet*: healthiness, well-being (Arabic); *tıbb*: medicine (Arabic); *dârüşşifâ* / *dârüssihha* / *dârülâfiye*: place of health, place of recovery, hospital; *dârüttıbb*: a medical madrasa established in Bursa during the reign of Sultan Bayezid I; *bîmâr*: sick (Persian); *-istân*: suffix referring to place, land (Persian); *bîmâristan* / *bîmârhâne*: place of the sick, hospital; *mâristan*: hospital (altered from *bîmâristan*); *tîmâr*: wound care, animal care; *tîmârhâne*: mental hospital. Ferit Devellioğlu, *Osmanlıca-Türkçe Ansiklopedik Lugat*, 18th edition, ed. Aydın Sami Güneyçal (Aydın Kitabevi, 2001). Thus all these terms come to refer to places where the sick are taken care of and medical education takes place.

⁹⁴ Although *dirham* was used as a unit of currency by the Seljuks, the Ottomans used it as a unit of mass. Here, *dirham* refers to the amount (weight) of the silver *akçe*. 1 *dirham* = 3,32 g. 1 *mudd* = 180 *dirhams*. Şehsuvaroğlu, 25.

şerbetîyans each, 2 *dirhams* in cash per day and 12 *mudds* of wheat per year to the two *saydalâniyâns*.⁹⁵ Each of the two cooks (*aşçı*) and two bakers (*ekmekçi*) will receive 2 *dirhams* in cash per day and 12 *mudds* of wheat per year. For the catering of the patients, 260 *dirhams* will be paid per day, and ¼ *mudds* of rice and sufficient amount of wheat will be provided each year.⁹⁶

Rather than providing detailed information about the division of labor in the *darüşşifa*, the *waqfiyya* gives clues about the economic situation of the employees. Osman Çetin states that, based on the records in the *waqfiyya*, the wages of the staff are sufficient for that period. According to the Bursa Court Records, one can observe certain amounts of rises and falls throughout the years.⁹⁷

Although we can form an idea about the general structure of the Yıldırım Bayezid *Darüşşifa* and the wages of the employees thanks to the *waqfiyya*, the most important written sources about the details of the division of labor within the whole complex and the *darüşşifa* are the Bursa Court Registers.⁹⁸ Çetin roughly divides the *darüşşifa* employees into three groups: the administrative personnel, the medical personnel, and the auxiliary staff.⁹⁹

The most prominent members of the administrative personnel were the

⁹⁵ *Şerbetîyan* (*şerbetçiyan*) were in charge of preparing syrups using (*şerbet*) medicinal herbs, and *saydalâniyân* refer to the pharmacists. Nuran Yıldırım, “Osmanlı Eczacılığının Gelişme Sürecinde İlaç Hazırlayıp Satan Esnaf ve Sağlıkçılar,” *Osmanlı Bilimi Araştırmaları* XI/1-2 (2009-10), 273-283.

⁹⁶ This amount has been rounded up to 93,600 *dirhams* per year and recorded as such. This shows that types of foodstuffs other than wheat and rice would be bought. Ayverdi, 41.

⁹⁷ Çetin, 102. The Bursa Court Registers, A 29/33, 140b; B 133/348, 38ab. See Appendices 3-5 for the tables of wages in different periods.

⁹⁸ Among the most significant documents are the decrees of assignment, called *berat*. These edicts include detailed information about the name of the person assigned, the nature of the task, the salary and the reason for the assignment. Under normal circumstances, a person assigned to a certain task would usually maintain his duty until the end of his life. Çetin, 86.

⁹⁹ *Ibid.*, 56.

trustee (*mütevelli*) and the revenue collector (*câbî*) who were responsible for the administration of the *waqf* complex as well as the *darüşşifa*. The first trustee of the complex was the founder, Sultan Bayezid I. Although it was noted in the *waqfiyya* that after the sultan's death this task would be transferred to his children, the *waqf* was administered by persons of several ranks, throughout its history.¹⁰⁰ While the trustee had several duties and responsibilities (such as supervising and managing the staff and warning them in case they neglected their duty, regulating their wages, managing the appropriations and expenditures of the *darüşşifa*), the *câbî* was responsible for the revenue collection for the *waqf*.¹⁰¹

The medical personnel of the *darüşşifa* were composed of the head physician, physicians, surgeons, syrup makers, pharmacists and ophthalmologists. The primary task of the head physician (*tabib-i evvel* or *reis-i etibbâ*) was supervising the medical personnel within the *darüşşifa*. He was also responsible for complying with the medical canon called *kavanin-i tubbiye*, and working in collaboration with the trustee.¹⁰² Head physicians also had an assistant physician called the *tabib-i sâni* who was assigned by the head physician. If the head physician died, got dismissed or appointed to another place, the *tabib-i sâni* could

¹⁰⁰ These could be from ranks such as Muslim theologians and scholars (*ulama*), officers of the imperial council (*dergâh-ı âli çavuşu*), provincial governors (*sanjak-bey*), accountants (*defterdar*), commanders-in-chief of the cavalry units (*sipahi ağası*). M. Asım Yediyıldız, *Başlangıcından Günümüze Yıldırım Külliyesi ve Ulucami*, unpublished PhD thesis, HÜSBE (Ankara, 1995), 73. Çetin, 56.

¹⁰¹ Ibid., 57-58.

¹⁰² Since both the trustee and the head physician considered themselves responsible for the *darüşşifa* administration, they would not always work in accordance with each other, and conflicts could take place. As Çetin cites a court record dated 1754, Mehmed Efendi who was in charge as the head physician at that time was admonished for not getting along with the trustee. Çetin, 57- 61. The Bursa Court Registers, B 122/336, 8a.

be promoted to *tabib-i evvel*.¹⁰³ Another prominent group within the medical staff was the surgeons (*cerrah*) whose names are not mentioned in the *waqfiyya*, but who are known to be active within the institution from the early period on. According to the Bursa Court Records, one surgeon was in charge in 1484 and two in 1579 and 1662.¹⁰⁴ The ophthalmologists (*kenhâl*) who were specialized in eye diseases constituted another group of physicians. Although we see that Ottoman hospitals included one or two ophthalmologists in later periods, there is no evidence in the Yıldırım Bayezid *waqfiyya* regarding an assignment right after the establishment of the darüşşifa. The earliest document demonstrating the presence of an ophthalmologist within the Yıldırım Bayezid Darüşşifa is a court record dated 16 June 1525.¹⁰⁵

The pharmacists (*saydalân* or *aşşâb*) and the syrup makers (*şerbetiyan*) responsible for preparing medicines and syrups (*şerbet*) were another important group within the medical staff. Thanks to the *waqfiyya* we know that pharmacists and syrup makers were present within the Yıldırım Bayezid Darüşşifa from its establishment. In earlier periods, all kinds of medicines and syrups used to be prepared by physicians, surgeons or ophthalmologists. As can be deduced from the

¹⁰³ Çetin, 63.

¹⁰⁴ Ibid., 65. The Bursa Court Registers, A 4/4, 46ab; A 138/165, 44b; B 133/384, 38ab. We have a large amount of records regarding surgical interventions thanks to the documents called *rıza senedi* which were obligatory before every surgical operation. These official documents were similar to today's consent forms and would be issued and signed by the patient before witnesses in the court, in order to avoid any accusations against the surgeon in case of the patient's death during or just after the operation. The significance of this practice derives from the fact that, while in Western medical institutions this practice was introduced only in the nineteenth century, the issue of patients' and physicians' rights was already institutionalized in the Ottoman Empire in earlier periods. Demir, 33. Nil Sarı, "Ethical Aspects of Ottoman Surgical Practice," *Türkiye Klinikleri Journal of Medical Ethics-Law and History*, 8 (2000), 9.

¹⁰⁵ Çetin: 68. This document records the story of an ophthalmologist who resigned because his request for a higher salary was declined by the hospital administration, but was rehired because no ophthalmologist with a lower salary could be found. The Bursa Court Registers, A 35/35, 410a.

presence of staff specialized in preparing medicine within the darüşşifa, pharmacy developed as a separate profession at that time.¹⁰⁶

The auxiliary staff within the darüşşifa was mostly composed of the employees who were in charge of the whole complex. Although only a cook (*tabbâh*) and a baker (*habbaz*) are mentioned in the *waqfiyya*, the Bursa Court Registers prove that employees such as clerks in charge of provisions and budget (*vekilharç* and *kâtip*), storage officer (*kilârî*), servant (*kayyım*), doorman (*bevvâb*), *imam* and *gassal* (the person in charge of washing and preparing the deceased), launderer (*câmeşûy*), sweeper (*ferrâş*), meat porter (*hammâl-ı gûşt*), and the officer of purchase (*bâzârî*) counted among the darüşşifa staff in later periods. Since most of these documents are from the sixteenth and seventeenth centuries, we can assume that while in the beginning the darüşşifa personnel consisted of the employees mentioned in the *waqfiyya* and other tasks were performed by the complex staff, the number of employees must have been increased later on.¹⁰⁷

2.2. THE FATİH DARÜŞŞİFA IN İSTANBUL

¹⁰⁶ There used to be an auxiliary staff consisting of employees such as syrup cooks (*tabbah-ı eşribe*), syrup keepers (*hafız-ı eşribe*), herb (medicine) pounder (*edviye-kûp/ecza-kûp*). Yıldırım: 273. It was forbidden to take medicines out of the darüşşifa. Medicines were also distributed free of charge within these endowed institutions. Akdeniz, Nil, *Osmanlılarda Hekim ve Hekimlik Ahlakı*, İstanbul, 1977: 41.

¹⁰⁷ The selection of the *vekilharç* and the *kâtip* was an elaborate process. Since these officers were responsible for purchases and bookkeeping, they were selected from among those known to be honest. Their account books were kept under tight control. Shefer-Mossensohn, Miri. *Ottoman Medicine: Healing and Medical Institutions, 1500-1700*, SUNY Press, 2009: 144. Çetin: 73- 85. The Bursa Court Registers, A 17/16, 172b; B 117/295, 90a; A 42, 14b; C 1/53, 4b; B 133/348, 38ab; A 58/63, 49a; B 133/348, 38ab; A 81/95, 71a; A 58/63, 20b. Based on a court record dated 1518, Çetin states that, in addition to the salaried personnel of the darüşşifa, slaves from the imperial palace were also charged with several task within the darüşşifa. Çetin, 83. Bursa Court Registers, A 25/28, 204a.

When Mehmed II entered Constantinople on 29 May 1453, what he took over was nothing but a ruined city. During the period following the conquest, his major aim was to rebuild the capital of his new empire according to his imperial ideal and an Islamic way of life. Similar to what the original founder of the city, Constantine I, had done, he launched a series of construction activities.

In order to create his new capital city from the ashes of Constantinople, Mehmed II did not feel the need to remove all the traces of former times. Rather, he sought to give new meanings and functions to the existent Byzantine buildings according to the Ottoman lifestyle.¹⁰⁸ Among these converted buildings was a group of structures that included the monasteries along with a guesthouse, a hospice and a hospital around the churches of Hagia Sophia and Pantokrator. Mehmed II had these buildings renovated in order to ensure the continuation of medical services until the establishment of his new endowment, the Fatih Complex.¹⁰⁹

The Fatih Complex, which was built by the architect Atik Sinan between 1463 and 1470, was situated in the heart of the city, and its ground plan based on a symmetrical layout (**Fig. 26**). According to Gülru Necipoğlu, this bilaterally symmetrical, axial layout of the complex built on a vast platform and raised on vaulted substructures was inspired by Italian Renaissance concepts of ideal planning. The Fatih Complex was also the first Ottoman complex incorporating such a large number of dependencies, such as the eight madrasas with eight preparatory schools, an elementary school, a library, a hospital, a hospice, a

¹⁰⁸ Caroline Finkel, *Osman's Dream: The History of the Ottoman Empire* (Basic Books, 2007), 53.

¹⁰⁹ Gülten Dinç, "Fatih Darüşşifası," *Anadolu Selçuklu ve Osmanlı Şefkat Abideleri Şifahaneler: The Şifahanes of Philantropic Monuments of the Seljuk and Ottoman Eras*, ed. Abdullah Kılıç (İstanbul: Medical Park, 2012), 205-206.

guesthouse, a caravanserai, and a bathhouse. The domed mausolea of Mehmed II and his wife Gülbahar Hatun were built in the formal garden in a later period, by Sultan Bayezid II. The foundation inscription written on three panels over the monumental gate of the mosque is significant in terms of emphasizing the restoration of “knowledge and learning” by Mehmed II, who took over the city, which former Muslim rulers had tried to conquer (**Fig. 27**).¹¹⁰ The Arabic inscription in *Thuluth* script, which is carved on the middle panel, reads as follows:

In spite of the vast endeavors they had made, most of the emirs or sultans and some of the caliphs failed at conquering this place, except for Sultan Mehmed Han, the son of Sultan Murad, the son of Sultan Mehmed, the son of Sultan Bayezid, the son of Sultan Orhan, the son of Sultan Osman.¹¹¹

The inscription on the left panel indicates the foundation date of the complex (**Fig. 28**):

May this complex honored by the grace of God live forever, together with its companions and sons. And may God settle them in the highest heavens. Started in Jumada al-Akhira, 867; completed in Rajab, 875.¹¹²

¹¹⁰ Gülru Necipoğlu, 86.

¹¹¹ Database for Ottoman inscriptions www.ottomaninscriptions.com

¹¹² Database for Ottoman inscriptions (www.ottomaninscriptions.com). These dates coincide with March (or February), 1463 and December, 1470. www.islamicfinder.org

The Fatih Darüşşifa, the first Ottoman medical institution established after the conquest of İstanbul, stood on a flat area to the southeast of the mosque. The structure no longer exists today because it was exposed to several natural disasters and later experienced much neglect. The earthquake of 1509 inflicted the first damage on the building. Although it was restored thereafter, it was damaged by further earthquakes in 1747, 1754 and 1766.¹¹³

After a period of abandonment for about 75 years, the first intervention took place on the initiative of the trustee Osman in the 1820s. A letter written by the trustee to the grand vizier is found in the Ottoman Archives of the Prime Minister's Office. In this letter, the trustee requests the restoration of the darüşşifa if possible, or its demolition and the construction of timber houses on its lot.¹¹⁴ As a result of his exploration, the head architect Mustafa reported that the restoration of the darüşşifa would be too costly, and it was decided on the demolition of the building and the disposal of the lot for the construction of timber houses. Although most of the structures were demolished based on this decision, the domed area, which had been previously used as a classroom, was preserved and converted into a masjîd (Demirciler Mescidi).¹¹⁵

Towards the end of the reign of Mahmud II (1789-1839), the craftsmen whose shops were destroyed in the fire of Parmakkapı were settled in the darüşşifa building at the behest of the sultan. The darüşşifa structures were gradually destroyed and in their stead wooden barracks were built by the settlers, which

¹¹³ Adnan Ataç, "The Fatih Darüşşifa," *İstanbul Şifahaneleri = The Magnificent Structures of Philanthropy : The Şifahanes of İstanbul / Karşılıksız Hizmetin Muhteşen Abideleri*, ed. Abdullah Kılıç (İstanbul: Büyükşehir Belediyesi Kültür A. Ş. Yayınları, 2009), 42.

¹¹⁴ Ekrem Hakkı Ayverdi, *Osmanlı Mimarisinde Fatih Devri* (İstanbul, 1973), 393.

¹¹⁵ Ataç, 49.

accelerated the disappearance of the darüşşifa.¹¹⁶ A map published in 1964 by the municipality of İstanbul shows the state of the area in 1875.¹¹⁷ Some wall structures and the Demirciler Mescidi are visible in this map (**Fig. 29**). Also, photographs from the 1930s show the Demirciler Mescidi in a ruined state at that time, and the remaining walls of the darüşşifa together with the houses built over these structures (**Fig. 30-31**).¹¹⁸ After the Çırçır Fire of 1906, the masjid was completely removed, including its substructures during the road works that took place in 1910. Only some pieces from the qibla and the sidewall remained until 1939. In later periods, a large quarter was founded on the lot of the darüşşifa, and one of the streets was named *Eski Şifahane Sokağı* (Old Shifahane Street).¹¹⁹

2.2.a. Physical Features

The Fatih Darüşşifa, oriented along a northwest-southeast axis, is a square building covering an area of 47 x 85 meters.¹²⁰ Since the darüşşifa no longer exists today, we can form an idea about its general layout thanks to the earliest surviving ground plan drawn by the chief architect Mustafa Ağa as an outcome of his exploration in 1824 (**Fig. 32**).¹²¹ Although Evliya Çelebi stated that the darüşşifa had 70 cells and 80 domes, there is no such number of domes and cells in the

¹¹⁶ Gülten Dinç, “Fatih Darüşşifası ve Bugünkü Durumu,” *I. Turkish Medical History Congress, February 17-19, 1988, İstanbul, Kongreye Sunulan Bildiriler* (Ankara: Türk Tarih Kurumu Yayınları, 1992), 202.

¹¹⁷ Doğan Kuban, “Fatih,” *Dünden Bugüne İstanbul Ansiklopedisi III*, (İstanbul: Tarih Vakfı, 1994), 262.

¹¹⁸ Süheyl Ünver, *Fatih Külliyesi ve Zamanı İlim Hayatı* (İstanbul, 1946), 20

¹¹⁹ Ataç, 49. Dinç, 202-203.

¹²⁰ Ataç, 45.

¹²¹ Ekrem Hakkı Ayverdi, *Fatih Devri Mimarisi* (İstanbul, 1953), 159.

ground plan by Mustafa Ağa. According to Mustafa Ağa's drawing, the ground plan is a variation of the four-iwan madrasa plan. There were three rooms on each side of the domed hall and a central courtyard with a fountain, surrounded by sixteen domed porticoes and several rooms behind them.¹²² The protruding hall on the southeastern side of the building opened to the central courtyard through an arch; it was most likely used as classroom and converted into a masjid later on.¹²³ Also, a half dome built on a pentagonal pedestal was attached to the dome on the southeast.¹²⁴

Referring to *Tâc üt-Tevârih* (Crown of Histories) written by Hoca Sadeddin Efendi in 1584, A. Süheyl Ünver states that the darüşşifa had a private bathhouse, which had been built in the 1570s.¹²⁵ Based on Mustafa Ağa's plan, Ekrem Hakkı Ayverdi has also published a more detailed ground plan. Ayverdi draws the rooms in such a manner that they all open to the central courtyard through a door and outwards with two windows each (**Fig. 33**).¹²⁶ Apart from the plans and photographs showing the nineteenth and early twentieth century state of the darüşşifa, one of the most important visual documents from earlier periods is the panorama of İstanbul drawn by Melchior Lorichs in 1559. In this panorama, the Fatih Complex is visible together with its structures including the darüşşifa. A.

¹²² Ünver, 8. Dinç, 199. A. Süheyl Ünver, "Fatih Darüşşifası Planı," *Türk Tıp Tarihi Arkivi*, sayı 21-22 (1943), 26.

¹²³ Cantay, 80- 81.

¹²⁴ Ataç, 45- 46.

¹²⁵ Ibid., 47. Ünver, *Fatih Külliyesi ve Zamanı*, 45. *Tâc üt-Tevârih* (Crown of Histories) is an illustrated manuscript written by Hoca Sadeddin Efendi in 1584. In *Tâc üt-Tevârih*, Hoca Sadeddin Efendi narrates the history of the Ottoman Empire from its rise to the period of Süleyman the Magnificent. Mehmet İpşirli, "Tâcü't-Tevârih," *İslâm Ansiklopedisi*, c.39 (İstanbul: Türkiye Diyanet Vakfı, 2010), 357-359.

¹²⁶ Ayverdi, 127.

Süheyl Ünver has also drawn a sketch of the darüşşifa based on this panorama (Fig. 34-35).¹²⁷

Since the Fatih Darüşşifa no longer exists today and there is not enough visual material regarding its decorative details, we can only form an idea about its decorative features by looking at other intact structures of the Fatih Complex, such as the madrasas and especially the guesthouse (*tabhane*), assuming that all these structures were decorated following a similar style.

There is no clue about the decorative features of the main gate, which usually constitutes the most significant part of earlier Ottoman and Anatolian Seljuk darüşşifas. Taking the main gates of the madrasas and the tabhane as models, one can assume that the darüşşifa had a plainly decorated gate, similar to that of the Yıldırım Bayezid Darüşşifa. The gates of the madrasas and the tabhane are decorated with pointed arches, doorframes with a red-and-white or green-and-white striped pattern and inscription panels between the arches and the doorframes (Fig. 36-37).

Ayverdi states that the madrasas are almost undecorated except for their linear harmony.¹²⁸ However, the most significant decorative elements of the madrasas are the window pediments with geometric glazed brick decoration, although most of these decorative elements no longer exist today. The decorative program of the windows also resembles that of the Yıldırım Bayezid Darüşşifa (Fig. 38-39).

¹²⁷ Ünver, *Fatih Külliyesi ve Zamanı*, 12.

¹²⁸ Ayverdi, 155.

Although we have no clue regarding any similarity with that of the *darüşşifa*, the decorative program of the *tabhane* also needs to be touched upon since it bears significant features, particularly with its columns carrying the pointed arches of the porticoes. While thirteen of these columns are made of green or white marble, three of them are of granite. Half of the capitals are stalactite work and the others so-called *baklava* capitals (**Fig. 40**). Ayverdi dates these columns to the fifteenth century and describes the design of the rectangular piers as a pleasant invention that substitutes the double columns of Arabic and Roman architecture. These rectangular columns are decorated with small mihrab motifs on the facades and hourglass-like reliefs on the edges, which look quite similar to the ones on the main gate of the mosque (**Fig. 28, 41**). This is one last revival of a fading tradition from Bursa.¹²⁹

2.2.b Social and Institutional Structure

There are several versions of the Fatih Complex *waqfiyya*, kept today in the archives of the General Directorate of Foundations, the Topkapı Palace Library, the Ottoman Archives of the Prime Minister's Office, and the Museum of Turkish and Islamic Arts. The earliest version and the only *waqfiyya* carrying the *tughra* of Mehmed II is kept in the Topkapı Palace Library. This Arabic *waqfiyya* was published by Tahsin Öz in 1935.¹³⁰ Another version, currently kept in the archives of the General Directorate of Foundations is written in Turkish, and was published

¹²⁹ Ibid., 157.

¹³⁰ Tahsin Öz., *Zwei Stiftungsurkunden des Sultan Mehmed II. Fatih*, (İstanbul: Alman Âsâr-ı Atika Enstitüsü Yay., Heft 4, fac-similé, 1935). Fahri Unan, *Kuruluşundan Günümüze Fatih Külliyesi* (Ankara: Türk Tarih Kurumu, 2003), 34-35.

by the same institution in 1938. This version was written in the period of Murad III and is a translation of the above-mentioned *waqfiyya*.¹³¹ Süheyl Ünver has also published another version, written in Turkish.¹³²

According to the following statements in the *waqfiyya*, one can assume that, although the *darüşşifa* was an Islamic institution, it provided public service to patients regardless of religion:

The *darüşşifa* has been founded for the sick who need medicine, and the imaret for the guests and travelers.

And I devoted the imaret and the *darüşşifa* to the Muslim society together with all the people of God.¹³³

The *waqfiyya* also gives significant details about the staff, their wages and the division of labor within the institution. The qualities expected from the physicians are stated as follows:

Physicians should be able to find out the character of the illness checking the pulse of the patient; they should have extensive knowledge about anatomy,

¹³¹ The archives of the General Directorate of Foundations, 28. Anadolu Vakfiye Defteri, page: 27-51 (Fatih Mehmed II Vakfiyeleri). Unan, 34.

¹³² Topkapı Palace Archive, D. 3882. Süheyl Ünver, “Fatih Külliyesi’ne Ait Diğer Mühim Bir Vesika,” *Vakıflar Dergisi*, 1 (Ankara, 1938), 39-46.

¹³³ *Dârüşşifâ sû-i mîzâca müptelâ olmakla muhtâc-ı ilâç olan marîz-i alîl ve imaret-i Sultaniye âmme-i müşâfirîn ve ebnâ-i sebîl için vakf-ı celîleleridir. Ve İmâret ve Dârüşşifâ’yı âmme-i ehl-i İslâm belki kâffe-i ibâd-ı Rabbü’l-enâm için vakfeyledim.* Halim Baki. Kunter, “Fatih Darüşşifası,” *Diyanet İşleri Başkanlığı Dergisi* (Ankara, 1962), 142-147.

medicine and *Kānûn-ı Şifâ*, the renowned work of İbn-i Sînâ, and should be highly experienced, approved experts.¹³⁴

It is pointed out that ophthalmologists should be good at diagnosis and treatment, the surgeon should be a master, and the pharmacist experienced. The examination of the patients is also described in the *waqfiyya*:

Physicians should closely examine the patients twice a day, taking every single detail into consideration, and investigating the reasons of their diseases. They should do their best to give the patients the best service in order to cure them with the most appropriate medicine and modern treatment methods.¹³⁵

What is noteworthy here is that the system of the doctor's medical visit twice a day applied at that time is very similar to contemporary practice. In addition to the qualifications expected from the physicians, the behavioral codes expected from the medical staff are also clearly stated:

¹³⁴ *Vâkıf-ı ahvâl-i nabz-ı marîz, ilm-i teşrihte sâhib-i ilm-i arîz, fenn-i tıb ve kânûn-ı şifâda faik iki tabîb-i Mücerrrib-i hâzık*. Kunter, 145. The archives of the General Directorate of Foundations, no.2114, p: 250.

¹³⁵ *Her biri külle yevmin ikişer defa Dârüşşifâ'da derd-i bîdevâ-yı kazâdan hasta hatır ve Dârüşşifâ-i mekârim-i Pâdişâhîden izâle-i emrâz edecek habb-i şifâ bahş-i atıyyâta müterakkip ve muntazır, derd-ü mend-ü muhtaç ve arzûmend-i devâ ve ilâç olan merzâ-yi müslimîni tefakkud ile tekayyüd edip kütüb-i tayyibe-i tibbiyede beyân olunan ilâc-ı münâsibi ile muâlece etmekte sa'y-ı belîga ve min-gayr-i müsâhele edâ-yi hizmet-i lâzimesinde cehd-i bi-dirîğ eyleyüp...* Ibid., 145. The archives of the General Directorate of Foundations, no.2114, p: 250.

The medical staff taking care of the patients should be experienced and of good manners; they should not be lazy, indolent or weary of work; they should not turn a deaf ear to the requests and needs of the patients; they should inquire after the patients' health, treat them nicely and comfort them. They should make their beds, change and wash their clothes, keep their rooms clean, and refresh them with cold water if needed.¹³⁶

The *waqfiyya* gives detailed information about the wages of the darüşşifa staff. In one of the earliest versions published by A. Süheyl Ünver, the number of employees and their wages are different from later ones.¹³⁷ For instance, although one physician and one surgeon were in charge according to one version, in later versions, a second physician was included in the staff.¹³⁸ Thus, some regulations must have been adjusted according to the needs of later periods.¹³⁹

The Fatih Darüşşifa was an autonomous institution whose needs were fulfilled by the administration of the complex. The head of the court physicians (*re'isü'l-etibbâ-yı hassa*), who was responsible for the assignment and the supervision of the

¹³⁶ *Umûr-dîde ve kâr-âzmûde, acz-ü keselden hâlî, hizmet-i merzâyı inkârdan tab'-ı âlî kimesneler merzânîn hizmetine ta'yîn oluna, tâ ki âteşdân-ı kazâ vü kaderde suhte-hâtır ve şerbethâne-i eltâf-ı sultâniyeden kâse-i âb-ı hayât-ı iltifâta muntazır olan merzânın ağdiye ve eşribesini ihrâz ve purşîş-i hâtır-ı mâriz hemîşe tekrar ve bast-ı fûrûş ve gasl-i siyap ve kens-i menâzil ve reşş-i mâ-i bârid etmekle gubâr-ı hâtır-ı marîzi zâil edip bunun emsâli kayyım ve ferraş hizmetlerini teâtî edip...* Kunter, 146.

¹³⁷ The Museum of Turkish and Islamic Arts Archive no. 2202. The archives of the General Directorate of Foundations, no.2114.

¹³⁸ A. Süheyl Ünver, "Fatih Külliyesi'nin İlk Vakfiyesine Göre Fatih Darüşşifası," *Türk Tıp Tarihi Arkivi*, V/17 (İstanbul: 1940), 14. Ünver, "Fatih Külliyesi'ne Ait," 40.

¹³⁹ Ünver, *Fatih Külliyesi ve Zamanı*, 67. In addition to the several versions of the *waqfiyya*, we can gain information about the institutional structure, distribution of tasks, assignments, and changes in the number and wages of the staff thanks to other written sources such as *muhasabe ve tahrir defterleri* (accounting and cadastral record books), *vezâif defterleri* (books of duties), and *mühimme defterleri* (registers of important matters of state). Unan, 34-37. See Appendices 6, 7 for the tables of staff and wages.

medical staff such as the physicians, surgeons, and ophthalmologists, held the highest-ranking position regarding the administration of the darüşşifa. Although the *waqfiyya* from the foundation period shows that a governor (*nâzır*) had been assigned for the administration, this task was transferred to the head physician (*re'isü'l-etibbâ/ser-tabîb*) later on. The overall structure of the Fatih Darürüşşifa was maintained with minor changes until the nineteenth century when it completely went out of function. While some fluctuation in the number of employees did take place, wages stayed almost stable for centuries.¹⁴⁰

Although the medical staff consisted of a physician and a surgeon when the darüşşifa was founded, a second physician and an ophthalmologist (*kenhâl*) were assigned in later periods.¹⁴¹ As for the auxiliary staff, while in the beginning it was composed of a clerk in charge of provisions (*vekilharç*), two servants (*kayyım*), two cooks (*tabbâh*), a clerk in charge of budget (*kâtib*), and a storage officer (*kilârî*), several employees such as doormen (*bevvâb*), launderers (*came-şûy*), sweepers (*ferraş*), officers in charge of the cellar (*emin-i mahzen*), renovator-cum-odd-job-men (*mâni'ün-nukûş*), bathroom cleaners (*âbrîzî*) and gardeners (*bâğbân*) were incorporated into the institution in later periods. As for the pharmacists responsible for the preparation of medicines such as syrups (*eşribe*), pills (*akrâs*) and pastes (*ma'acîn*), the employees assigned for this job were called drug pounder (*edviye-kûb*) and syrup maker (*eşribe-kûb*).¹⁴²

¹⁴⁰ According to Unan, wages were a pittance for that period. Unan, 281. The budget allocated to the darüşşifa was fixed as 200 akçe per day for centuries. Ünver, *Fatih Külliyesi ve*, 93.

¹⁴¹ Unan, 274- 275.

¹⁴² Ibid., 276.

The issue of medical education within the darüşşifa has long been a point of contention. In an account book dated to 1489-1490, seven people are recorded under the name of physician.¹⁴³ These employees not mentioned in the *waqfiyya* were actually the interns who would be recorded as apprentices to the physicians (*şâkirdân-ı etibbâ*) after the sixteenth century.¹⁴⁴ Although A. Süheyl Ünver stated that medical education was given in the Fatih Darüşşifa, using documents such as the refectory records as evidence, scholars such as Aydın Sayılı and A. Adnan Adıvar claim that, although it is likely that medical education was performed in the darüşşifa, the documents presented by Ünver on their own do not provide definite proof for this statement. Nevertheless, Ayten Altıntaş has brought forward stronger arguments based on nine documents called *ruûs*, proving the assignment of medical students to the Fatih Darüşşifa. Fahri Unan also states that, although there was no formal medical education within the darüşşifa since there are no records regarding lessons, classrooms or any expenses for education, the existence of interns working and being paid in the darüşşifa cannot be denied. Thus, these apprentice physicians must have been employed here in order to improve their practical knowledge under the supervision of the physicians, after receiving their theoretical training in the medical madrasa.¹⁴⁵

¹⁴³ Ö. Lütfi Barkan, *Fatih İmaretı 1489-90 Yılları Muhasebe Bilançoları*, İÜİFM, XXII/1-2 (İstanbul, 1963), 297- 341. Unan, 275.

¹⁴⁴ *Ibid.*, 276.

¹⁴⁵ Ünver, *Fatih Darüşşifası: 875 h.-1470 m.*, 9. Aydın Sayılı, "Bizde Tıp Eğitimi Üzerine," *Belleten* XXXV sayı 138 (Ankara: Türk Tarih Kurumu, 1971), 229-234. A. Adnan Adıvar, *Osmanlı Türklerinde İlim* (İstanbul, 1982), 46. Ayten Altıntaş, "Süheyl Ünver Haklıydı, Fatih Darüşşifası'nda Tıp Eğitimi Yapılıyordu," *IV. Türk Tıp Tarihi Kongresi, Kongreye Sunulan Bildiriler, İstanbul, 18-20 Eylül, 1996*, (Ankara: Türk Tarih Kurumu Basımevi, 2000), 65-74. Ayten Altıntaş, "Fatih Darüşşifası'nda Tıp Eğitimi Yapılıyor muydu?" *Tarih ve Toplum* 27, no.161 (May 1997), 291-295. Unan, 285-286.

From its foundation, the Fatih Darüşşifa offered two kinds of medical service: outpatient treatment, and inpatient treatment. In both cases, the darüşşifa served the public, as clearly stated in the *waqfiyya*.¹⁴⁶ Evliya Çelebi also points out the public service offered in the darüşşifa:

Whoever falls sick, they take him to the hospital and treat him with the appropriate drugs.

Musicians and singers were assigned for the treatment of mental patients.

Women and non-Muslim were treated in a separate section.¹⁴⁷

Although one can assume that musical therapy was being performed in the Fatih Darüşşifa, given the statements of Evliya Çelebi, there is no record in the *waqfiyya* regarding the employment of musicians within the darüşşifa.¹⁴⁸ The knowledge about the therapeutic effect of music was taken over from ancient times. It had an important place in Arab-Muslim and Byzantine traditions, and the Ottomans continued this tradition as well. Nevertheless, music could draw reactions from religious circles since it was considered so powerful that it could grow to magical or demonic proportions.¹⁴⁹ Thus musical therapy cannot be expected to be included in the Fatih Complex with its strong emphasis on orthodox education, neither in the formal medical education, nor in the *waqfiyya*. However, one should

¹⁴⁶ Kunter, 142-147.

¹⁴⁷ Original text in Turkish: *Âyende ve revendegândan bir âdem hasta olsa bîmarhâneye götürüp ana hizmet iderler; münâsib edviye ile tedâvi iderler. Def'-i cünûn için mutribân ve hânendegân ta'yîn edilmiştir. Avretler ve kefereler için başka bir köşede tîmarhânesi vardır.* Evliya Çelebi Seyahatnamesi, I: 321. Ünver, *Fatih Darüşşifası*: 875 h., 8. Unan, 279-280.

¹⁴⁸ Ibid., 280.

¹⁴⁹ Shefer-Mossensohn, *Ottoman Medicine: Healing and*, 69-76.

keep in mind the possibility of informal and unregistered contribution of musicians to the treatment process from time to time.

The Fatih Darüşşifa was a highly institutionalized structure, which was founded based on a concept that now appears to be much ahead of its time. It provided public service to people from all strata of society for almost three and a half centuries. Written documents about the functioning of the darüşşifa and the services offered also provide us with valuable information about the development of the Ottoman healthcare system. However, like every institution founded as an ideal of its period, the Fatih Darüşşifa also went into decline and became obsolete.¹⁵⁰

2.3. THE BAYEZİD II DARÜŞŞİFA IN EDİRNE

The Bayezid II Darüşşifa was founded as a part of the Bayezid II Complex, which was also known as *Yeni İmaret* (The New Imaret) between 1484 and 1488. There has been a debate about the architect of the complex since there is no definite clue about his identity. Although according to Bedi N. Şehsuvaroğlu and Gönül Cantay, the Bayezid II Complex was built by the chief architect Hayreddin, but Rıfkı Melül Meriç and Ratip Kazancıgil state that the architect of the complex was Ya'kub Şah bin Sultan Şah.¹⁵¹ While the complex of Sultan Mehmed II was the

¹⁵⁰ Ataç, 57- 58.

¹⁵¹ Şehsuvaroğlu, *Edirne II. Bayezid Darüşşifası*, 258. Cantay, 83. Ratip Kazancıgil, *Edirne Sultan II. Bayezid Külliyesi* (Bizim Ülke Derneği, 1988),13-16. Each scholar makes his statements depending on several documents regarding the identity of the architect. These documents will not be examined here since a discussion about the complex's architect will go beyond the scope of this thesis.

embodiment of his imperial idea, the Bayezid II Complex reflects its founder's values of piety and benevolence.

Nurettin Heybeli states that the purpose of the complex's foundation was to establish a hospital in Edirne, and that the other units of the complex played a complementary role in the hospital's socio-cultural, religious and financial development.¹⁵² In earlier examples, the *darüşşifa* was only a unit incorporated into the complex, with the most prominent structure being the mosque, but here we come across a new concept: the establishment of a health institution creating its own social environment similar to those in later periods. In *Tâc'üt Tevârih*, Hoca Sadeddin Efendi also puts emphasis on the foundation of the *darüşşifa* while narrating Sultan Bayezid II's visit to Edirne in 1484:

Sultan Bayezid II moved to Edirne from İstanbul on 1 March 1484 (4 *Rebiyülahir* 889) with the intent of conducting a holy war. The sultan graced the city of Edirne with his presence and bestowed on his people vast endowments and favors. At first, this former capital city was in need of a hospital since it witnessed extensive trade activities and hosted a wide range of visitors. The righteous sultan aspired to founding a unique hospital in this captivating city. Furthermore, he considered adorning the city with pious endowments such as a mosque, madrasa and a guesthouse a binding duty. Thus, he ordered that the construction start immediately. After detailed

¹⁵² Nurettin Heybeli, "Sultan Bayezid II Külliyesi: One of the Earliest Medical Schools Founded in 1488," *Clinical Orthopaedics and Related Research (CORR)*, 467 (2009), 2458-2459.

examinations, the foundation stone laying ceremony of the complex took place in the presence of the sultan on 25 May 1484 (26 *Rebiyülahir* 889).¹⁵³

However, in spite of the emphasis placed on the darüşşifa, the central position of the mosque is maintained within the overall plan of the complex, which according to Aptullah Kuran derives from the geometric order of the Fatih Complex, as that order sets the tone for sixteenth-century Ottoman classicism (**Fig. 42, 43**).¹⁵⁴ The design of the Bayezid II Complex was an outcome of a triple grouping, consisting of several units such as a darüşşifa, mosque, medical madrasa (*medrese-i etibba*), guesthouse (*tabhâne*), hospice, bathhouse, mill, bridge, water wheel, and a primary school (*sıbyan mektebi*).¹⁵⁵

The monumental gate of the Bayezid II Mosque strongly reminds of that of the Fatih Mosque in terms of its *muqarnas* decoration and the doorframe with a striped pattern, together with the three inscription panels it bears (**Fig. 44**). The inscription panel over the gate is significant in terms of indicating the foundation date of the complex. These six verses in Arabic were authored by Şeyhülislam Zenbilli Ali Efendi and inscribed by the calligrapher Hamdullah. The phrase *hayr-i cemîl* in the last verse gives the date 1487-1488 (893) if calculated according to the *abjad* system. Although the darüşşifa has no foundation inscription, Süheyl Ünver has discovered a document in the Topkapı Palace Archive, which might be a draft

¹⁵³ Hoca Sadeddin Efendi, *Tâcü-t-Tevârih*. Cilt 3, yalınlaştıran: İsmet Parmaksızoglu, (İstanbul: Kültür Bakanlığı Yayınları, 1979), 237. Şehsuvaroğlu, 258.

¹⁵⁴ Aptullah Kuran, "Form and Function in Ottoman Building Complexes," in *Architecture in Turkey from the Seljuks to the Republic*, ed. Çiğdem Kafesçioğlu, Lucienne Thys-Şenocak, Timur Kuran, (İstanbul: Türkiye İş Bankası Kültür Yayınları, 2012), 448.

¹⁵⁵ Ratıp Kazancıgil, Nilüfer Gökçe, "The Edirne Sultan II. Bayezid Darüşşifa," *The Şifahanes of Philanthropic Monuments of the Seljuk and Ottoman Eras*, ed. Abdullah Kılıç (İstanbul: Medical Park, 2012), 217. Kuran, 479.

of the darüşşifa's foundation inscription. The last verse of this inscription gives the date 1486 according to the *abjad* system.¹⁵⁶

Until the nineteenth century, the Bayezid II Darüşşifa functioned as a full-fledged hospital. It was a highly institutionalized structure where a wide range of medical service was offered to patients, regardless of age or financial situation. Similar to modern-day hospitals, a department for psychiatric patients was also included.¹⁵⁷

Evliya Çelebi who visited Edirne in 1652 describes the darüşşifa as follows:

The rooms of the carefully constructed darüşşifa house many rich and poor, young and elder patients who suffer from several illnesses. Especially in the spring, the mental ward is full of lovesick who lie and roar all day chained to their wooden bedsteads with gold and gilt silver chains.¹⁵⁸

Edirne was under Russian occupation during the 1827-1828 Ottoman-Russian Wars. After the end of the occupation, a district general hospital was established in Edirne and most of the patients started to be placed there. Thus, the Bayezid II Darüşşifa fell out of favor and eventually turned into a mental institution.¹⁵⁹ A letter written by Saffet Paşa who would later become grand vizier is significant in terms of offering a clue about the situation in 1875:

¹⁵⁶ Kazancıgil, *Edirne Sultan II. Bayezid Külliyesi*, 27.

¹⁵⁷ Nilufer Gökçe, "19. Yüzyılın Sonlarında Edirne Sultan II. Bayezid Darüşşifası'nın Durumu," *Türkiye Klinikleri Journal of Medical Ethics-Law and History*, 1 (Ankara, 2002), 27.

¹⁵⁸ Evliya Çelebi *Seyahatnamesi*, ed. Z. Danışman, cilt 6 (İstanbul: Kardeş Matbaası, 1970), 20-22.

¹⁵⁹ Gökçe, 27.

According to the accounts of a trustworthy person who spent a few days in Edirne, there is an ancient building, which is known as darüşşifa. The building houses twenty-one mental patients who are chained to walls with heavy metal chains from their necks, similar to the ones in the Süleymaniye Darüşşifa. They are given some water and bread twice a day. When the Tunca River overflows and the darüşşifa is flooded, these poor patients are covered with water up to the knees. Apart from not making the slightest effort to improve the situation of the darüşşifa, governors assigned to Edirne do not even pay a visit since they believe the rumor that whoever goes to see the darüşşifa will be dismissed from his duty. It is urgently needed to find a solution to fix this unpleasant situation.¹⁶⁰

During the 1876-1878 Ottoman-Russian War, when Edirne was occupied by Russians for the second time, the darüşşifa lost its function entirely, and psychiatric patients were sent to İstanbul. As a result of an order from İstanbul, the Bayezid II Darüşşifa was restored and started to function again for the treatment and isolation of psychiatric patients. The darüşşifa kept functioning as a psychiatric institution until 1915 when it was evacuated and its patients sent to another hospital in Edirne. Although the darüşşifa underwent several restorations following the

¹⁶⁰ Kazancıgil, 69. *Geçende Edirne şehrini görmek üzere gidip birkaç gün ikametle avdet etmiş olan bir zâtın ifade-i mevsûkasına nazaran, şehr-i mezkûrda Dârüşşifâ nâmiyle hamam şeklinde kâr-ı kadim bir bina mevcut olup derûnunda mukaddema dârüşşifa-yı Süleymâniye’de görülmüş olduğu veçhile, üzerinde birer kebe ve boğazlarından divarlara çakılmış kalın zincirlerle bağlı 21 nefer mecnun olduğundan, bunlara akşam ve sabah bir miktar su ile ekmek verilmekde ve Tunca nehirinin bazan tuğyanı halinde sızıntılardan hâsıl olan su, bu biçarelerin dizlerine çıkıp kendilerini derecede gayede bîhuzûr etmekde olduğundan ve Edirne vâîleri bulunan zevat, oraca mütevatır olan bir şayiaya, yani dârüşşifayı görmeye giden vâîlerin behemehâl azilleri vuku bulmuş olduğu rivayetine mebni, dârüşşifaya gitmeleri şöyle dursun bilvasıta islahına bile sarf-ı himmet etmemekte oldukları anlaşılmakta bulunduğundan... Bu uyumsuzluğun hemen bir an evvel def’i çaresine bakılması lüzum ve ehemmiyet-i acilesi... İstanbul University, İbn-ül Emin Mahmut Kemal Library, book no. 2973, p.131.*

inspections of the architect Sedat Çetintaş in 1935 and of Arslan Terzioğlu in 1967, it stayed in a ruined state until the end of the twentieth century (**Fig. 45-47**). Based on the protocol signed between the General Directorate of Foundations and Trakya University on 14 September 1984, the surviving units of the Bayezid II Complex except for the mosque were transferred to the university. The restorations were undertaken by Trakya University, and the darüşşifa building was eventually opened as health museum on 23 April 1997, under the name Trakya University, Complex of Bayezid II Health Museum. The museum was awarded the Council of Europe Museum Prize in 2004.¹⁶¹

2.3.a. Physical Features

The Bayezid II Darüşşifa, oriented along a north-south axis, is connected to the madrasa through its northwest corner and composed of three sections: the first courtyard, the second courtyard, and the main block (**Fig. 48**). Here we come across a unique design different from earlier hospitals, which were planned as modifications of the four-iwan madrasa plan. The Bayezid II Darüşşifa is a central-plan structure, which in a sense reflects the ideals of the Renaissance spirit. The architect of the darüşşifa planned the structure in such a manner that we come across hospitals with similar designs in some late nineteenth-century European hospitals (**Fig. 49**). Evliya Çelebi describes the darüşşifa as follows:

¹⁶¹ Kazancıgil, Gökçe, 230.

There is a hospital, which can hardly be described either with words of mouth or pen. The complex, which is in the middle of a vineyard has such a high dome extending into the sky that its top is open like the glass lantern of a hamam. In this open area, there is a small dome on six thin marble pillars like a crown. The artist, the craftsman, placed a flag on a kind of iron stick coated with pure gold on the very top of this small dome. That flag turns in the direction of the blowing wind. It has an unusual appearance. The lower big dome is eight cornered. There are eight arches even in this one arched dome. Under each arch, there is a winter room and two windows in each of them. One of the windows overlooks a small garden with roses and trees, while the other one looks to the big pool and the fountain in the middle of this big dome. In front of these eight winter rooms, there are also eight summer rooms. When the clear water spurts out of the fountains around the big pool under this big dome – three sides of which were constructed of a marble window lattice – and enters the pool, the clear water from the sprays reaches the middle of the arched dome.¹⁶²

¹⁶² English translation by Nurettin Heybeli. Heybeli, 2459-2460. *Bâyezid Han Câmii'nin taşra harem-i kebîri yemîninde bağ-ı irem içre bir dârüşşifa vardır. Vasatında eflâke ser çekmiş bir kârgir kubbe-i bâlâdır ki güyâ hamâm-ı rûşenâ camekânı gibi zirve-i a'lâsı küşâdedir. Bu küşâde yerde altı adet rakîk mermer sütunlar üzerinde tâc-ı keyâniyân-misâl bir kubbecik var. Amma gâyet mevzûn. Üstad-ı şirinkâr bu kubbe-i sagîr'ın tâ zirvesine zeheb-i hâlis ile mutallâ bir günâ demir mil üzere bir bayrak yapmış. Ne cânibden rûzgâr eserse ol bayrak, alem ol cânibe meyl eder. Garîb temâşâdır! Amma aşağı kubbe-i kebîr sekiz yüz köşedir. Bu kubbe-i netâkın içersinde dahi 8 kemer vardır. Her kemer altında bir kış odası vardır. Bu höcrelerin her birinde ikişer pencere vardır. Bir penceresi höcrenin taşrasında olan gülistanlı hıyâbâna nâzırdır. Diğeri de kubbe-i azîmin ortasındaki aşeren fî aşir olan havz-i azîm ve şadırvana nâzırdır. Bu sekiz adet kış höcresinin önünde yine kubbe-i kebîr içinde sekiz adet yazlık höcreler vardır. Uç tarafları müsebbek mermer-i hâmlar ile bina edilmiş bu kubbe-i kebîr altındaki havz-ı kebîrin çevresindeki selsebillerden mâ-i berrak çağlayıp havza dahil oldukça fiskiyelerden mâ-i zülâl kubbe-i netâkın tanlarında nihayet bulur. Şehsuvaroğlu, 260.*

The darüşşifa has two main gates, which open onto a large rectangular courtyard from north and east. On the southwest wing of the courtyard are six domed rooms, which open to an arched portico. While these rooms are considered to be the outpatient clinics, four rooms on the northeast wing were used as the gatekeeper's room, kitchen, laundry room, and storage (**Fig. 50**).¹⁶³ The first courtyard is connected to the second courtyard through a gallery covered with a cross vault, which leads to an arched gate decorated with *muqarnas* (**Fig. 51**).¹⁶⁴ The second courtyard is surrounded by two rooms on either side which were most probably used as the physicians' and administrative staff's offices.¹⁶⁵ Through a domed gallery, the second courtyard opens to the main block, which is the most significant part of the darüşşifa. The main block is a hexagonal structure with a central courtyard with a fountain, and twelve square rooms surrounding it. Six of these rooms are closed, while the others are open. The main block is covered with twelve small domes and a large central dome with lanterns, which illuminate and ventilate the inner space (**Fig. 52**).¹⁶⁶ The room opposing the entrance gallery is significant in terms of having a protruding structure, which resembles a *mihrab* (**Fig. 53**). Although the architect Kemal Altan has stated that this room might have been used as a masjidi, Sedat Çetintaş and Osman Şevki Uludağ object to this statement. Considering the good acoustics of the main block, this room was probably used for musical performances.¹⁶⁷

¹⁶³ These rooms are thought to have been outpatient clinics. Kazancıgil and Gökçe, 222.

¹⁶⁴ Cantay, 84.

¹⁶⁵ Şehsuvaroğlu, 261.

¹⁶⁶ Kazancıgil and Gökçe, 222.

¹⁶⁷ Kemal Altan, "Trakya'da Türk Anıtları," *Zaman* 30, VIII Arşiv Umum Müdürlüğü Kayıtları (1935). Sedat Çetintaş, "Edirne'de Hayreddin Hastanesi'nin Odaları," *Cumhuriyet* 21, IV (1936). Osman Şevki Uludağ, *Edirne Darüşşifası*, 1954. Şehsuvaroğlu, 261. Kazancıgil, Gökçe, 222.

The Bayezid II Darüşşifa is an ashlar stone structure except for the domes built of brick and covered with lead, and the window frames made of marble. Interestingly enough, although the main gates were the most significant parts of earlier darüşşifas, here we come across a plainly decorated and unobtrusive gate (**Fig. 54**). On the other hand, the gate, which connects the first and the second courtyards, bears more significant decorative features with its striped doorframe and *muqarnas* decoration (**Fig. 55**). İ. Aydın Yüksel states that considering the discrepancy between the two gates and the overall structure of the darüşşifa, these two gates might be later additions. As the rectangular room next to the eastern entrance is also a later addition, the original gate, which no longer exists today, might have been on the eastern wall of this room or in the place of the northern entrance.¹⁶⁸

The decoration of the first and the second courtyards follows the classical pattern: marble columns carrying the round arches are decorated with stalactite capitals similar to that of Fatih's Tabhane. Also, the hourglass-like reliefs adorning the gate of the main block and the gate that connects the first and the second courtyards are reminiscent of those on the gates of the Fatih Mosque and the Fatih Tabhane (**Fig. 37, 41, 55, 56**). Apart from its unique hexagonal design, the interior decoration of the main block is also significant with its *muqarnas* on the pendentives, and the drum of the dome. In the middle of the inner space is a fountain, which contributes to the serene atmosphere created by the light coming through the lantern on the top, and the windows around the dome (**Fig. 52**).

¹⁶⁸ İ. Aydın Yüksel, *Osmanlı Mimarisinde II. Bayezid, Yavuz Selim Devri* (İstanbul Fetih Cemiyeti, 1983), 123.

2.3.b. Social and Institutional Structure

Today we have three versions of the Bayezid II Complex's *waqfiyya*. The earliest version is in Arabic and bears the date 1487 (Jumaada al-Akhir 892). It is kept in the archives of the General Directorate of Foundations, with the number 1379/8. This earliest version, which bears the *tughra* of Sultan Bayezid II on its third page, is most probably the original *waqfiyya*. The second version is a Turkish translation with the date 1489-90 (895), kept in the İnkılâp Kütüphanesi, İstanbul. The third version in Turkish, which bears the date 4 December 1507 (Rajab 913), is a copy of a *waqfiyya* issued on 14 August 1493 (Dhu al-Qi'dah 898). This version is kept in the archives of the General Directorate of Foundations, with the number 1380/151, and of this version there exist three more copies, kept in the Edirne Public Library Selimiye Section, the Ankara Kuyud-ı Kadîme Archive, and the Office of the Prime Ministry's Ottoman Archives.¹⁶⁹

The *waqfiyya* gives significant details about the darüşşifa staff, their wages, and the qualifications expected from them:

The Sultan, the founder of the *waqf* set the conditions that: There shall be three decent physicians (*tabib*) in the darüşşifa, one of which shall be the head physician (*tabib-i evvel*), and the other two shall consult with him. The head physician shall be chosen among those who are skillful and a master at medicine. He shall be paid 30 *akçe*, while the other physicians will be paid 10

¹⁶⁹ Yüksel, 104.

akçe each, on a daily basis. Two talented ophthalmologists (*kenhal*), who are master at eye diseases, and two surgeons (*cerrah*) shall be assigned, and they will be paid 7 *akçe* each. A reliable clerk in charge of budget (*kâtip*) who will be responsible for keeping the accounts of incomes and expenditures on a daily basis shall be paid 4 *akçe*. Four servants (*kayyım*) who will be paid 3 *akçe* shall treat the patients nicely and courteously. One person skilled in pounding medicine and preparing syrups according to the medical canon shall be paid 6 *akçe*. An honest clerk in charge of provisions (*vekilharç*) shall be responsible for distinguishing good and bad, fresh and stale herbs, as well as for purchasing the medicines. He shall be paid 4 *akçe*. There shall be one storage officer (*kilerdâr*) who is reliable and good-natured. He shall be paid 4 *akçe*. There shall be two cooks (*tabbâh*) who will be paid 3 *akçe* each. They shall cook the meals appropriate for the patients, following the instructions of the physicians. There shall be one sweeper (*ferraş*), one person who washes the clothes of the patients (*gassal*), one doorman (*bevval*) and one person responsible for the incense burners (*buhuri*), who will be paid 3 *akçe* each. 200 *akçe* per day shall be granted to the darüşşifa for the provision of food and beverages, medicines, and other expenditures.¹⁷⁰

As it can be deduced from the *waqfiyya*, the darüşşifa, which incorporated employees with several tasks, was founded as a self-sustaining unit within the complex. Apart from giving details about the qualities and behavioral codes

¹⁷⁰ M. Tayyib Gökbilgin, *15. ve 16 Asırlarda Edirne ve Paşa Livası (Vakıflar-Mülkler-Mukataalar)*, (İstanbul: İstanbul Üniversitesi Edebiyat Fakültesi Yayınları, 1952), 182. See Appendices 8, 9 for the tables of wages in 1487 and 1507.

expected from the employees, the *waqfiyya* indicates that particular importance is placed on the diet of the patients; instead of obtaining the meals from the complex's kitchen, the *darüşşifa* cooks prepared the meals under the supervision of the physicians.

In addition to the information about the division of labor within the *darüşşifa*, the *waqfiyya* also gives significant details about the service of the staff. The duties and responsibilities of the employees and the penalties that will be imposed on those who neglect their duties are clearly stated in the *waqfiyya*:

The storage officer (*kilerdâr*), clerk in charge of provisions (*vekilharç*), revenue collector (*câbî*), and other employees will be accountable to the trustee (*mütevelli*) and the *sheikh*, if necessary.

The clerk in charge of budget (*kâtip*) is obliged to keep the annual income and expenditure accounts.

If a tutor misses a class without excuse, may he get no benefit from the money he received for this task, because he has received it without providing any service in return.

Whoever does not work will not be paid. If the trustee pays this kind of employees, it will be deducted from his salary.

Troublemakers and traitors will be dismissed.

Those who put off their duties will be warned by the *sheikh* and the trustee. If they do not come to their senses, they will be reprimanded. The trustee is

responsible for reporting them to the sultan if the warnings do not work. If he does not, may he get no benefit from his wages.¹⁷¹

What is noteworthy about these statements in the *waqfiyya* is that they point to an institutional structure based on a hierarchical organization where fulfillment of the tasks and duties are ensured by the codes of ethics as determined by Islam. According to this system, when a mistake or neglect occur and cannot be fixed, the severest punishment goes to the highest-ranking. Instead of tangible methods of punishment, emphasis is put on intangible punishments, such as the perpetrator's bad conscience.

In addition to the *waqfiyya*, the accounts of Evliya Çelebi, who visited the Bayezid II Darüşşifa in 1652, also give significant clues about the functioning of the darüşşifa. Although his narratives are mostly exaggerated and cannot be considered an entirely reliable source, their importance cannot be denied as the firsthand accounts of an eyewitness of the period. Apart from the descriptions of the physical features of the darüşşifa and the quality of the food and medicines offered to the patients, Evliya Çelebi's accounts are also noteworthy for his descriptions regarding the landscape design and the serene atmosphere created within the darüşşifa. Evliya Çelebi describes the environment as follows:

...Some (patients) gaze upon the ponds and fountains, murmuring philosophical phrases, some listen to the thousands of birds singing in the

¹⁷¹ A list containing these rules and warnings was displayed in a place where everyone could see. Kazancıgil, 50.

flower gardens surrounding the dome, and clamor with their uncontrolled voices peculiar to mental patients... In the spring, they give the patients several types of flowers such as daffodil, jasmine, gillyflower, rose, clove, basil, tulip, hyacinth, in order to treat them with fragrances...¹⁷²

Apart from the healing space created by the harmonious interplay of nature, water and light, all appealing to the senses, Evliya Çelebi also places emphasis on music as a therapeutic method:

Bayezid Veli, the deceased and the bestowed (may God rest his soul), has assigned ten musicians in order to provide a remedy for the patients. Among these musicians are three singers (*hânende*), one flute player (*nâyzen*), one violinist (*kemancı*), one pipe player (*mûsikarcı*), one dulcimer player (*santurcu*), one zither player (*çengî*), and one lute player (*udcu*). These musicians come three times a week and play for the patients most of whom are delighted and comforted by the sound of music.¹⁷³

In addition to Evliya Çelebi's accounts, the acoustic system applied in the construction of the building and its layout appropriate for musical performances can

¹⁷² *Kimi havuz ve şadırvanlara bakıp kalender hülyası kabilinden söz ederler, nicesi de, kemerli kubbenin etrafında olan gülistan ve bağ ve bostan içindeki binlerce kuş civıltılarını dinleyip, akıl hastalarına has perdesiz ve ölçüsüz sesleriyle feryada başlarlar. Bahar mevsiminde çiçek kısmından sim ve zerrin, deve boynu, müşk-i Rûmî, yâsemin, gülnesrin, şebboy, karanfil, reyhan, lâle, sümbül gibi çiçekleri hastalara verip güzel kokuları ile hastaları iyi ederler. Kazancıgil, 61.*

¹⁷³ *Merhum ve mağfur Bayezid Veli (Allah rahmet eylesin) Hazretleri vakıfnamesinde hastalara devâ, dertlilere şifâ, divanelerin ruhuna gıdâ ve def'i seva olmak üzere on adet hânende ve sâzende gulan tâyin etmişki, üçü hânende, biri nâyzen, biri kemancı, biri mûsikarcı, biri santurcu, biri çengî, biri çeng santurcu, biri udcu olup haftada üç kere gelerek hastalara ve delilere mûsiki faslı ederler. Allahın emriyle, nicesi saz sesinden hoşlanır ve rahat ederler. Evliya Çelebi Seyahatnamesi, I: 321.*

be counted as evidence for the practice of musical therapy, although there is no clue as to the appointment of musicians in the *waqfiyya* or other records that belong to the foundation years.¹⁷⁴ However, we cannot expect musicians who were not among the darüşşifa staff to be included in the *waqfiyya*. Wars and occupations, which have destroyed many records, must also be taken into consideration.¹⁷⁵

The Bayezid II Darüşşifa in Edirne was established as a highly institutionalized foundation that reflected the ideals of a rising empire. Thanks to the endowment deeds and several other documents, as well as the accounts of Evliya Çelebi, we can access vast information about its organization and discipline, the services it offered, as well as its general atmosphere. As for the present situation of the building, it would not be wrong to count it as the most fortunate among the early Ottoman darüşşifas. While the Fatih Darüşşifa no longer exists and the Yıldırım Bayezid Darüşşifa has been restored in a less than ideal fashion, the Bayezid II Darüşşifa is still in good condition in spite of wars and occupations as well as long years of abandonment. Thanks to the successful restoration project carried out by Trakya University, the Bayezid II Darüşşifa has been reinvigorated as a health museum, which is in my opinion the best way to protect a structure of such great historical value.

¹⁷⁴ Müderrisoğlu, 164.

¹⁷⁵ Enver Şengül, *Kültür Tarihi İçinde Müzikle Tedavi ve Edirne Sultan II. Bayezid Darüşşifası*, Trakya Üniversitesi, Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi (Edirne, 2008), 150.

CHAPTER 3

A COMPARATIVE OVERVIEW OF EARLY OTTOMAN AND LATE BYZANTINE HOSPITALS

3.1. The Notion of Philanthropy and Founding Hospitals as a Form of Benevolence

“Feed the hungry, visit the sick, and set the captives free.”¹⁷⁶

Sahih Bukhari

“Come, you who are blessed by my Father; take your inheritance, the kingdom prepared for you since the creation of the world. For I was hungry and you gave me something to eat, I was thirsty and you gave me something to drink, I was a stranger and you invited me in, I needed clothes and you clothed me, I was sick and you looked after me, I was in prison and you came to visit me.”¹⁷⁷

Matt. 25: 34-36.

Religion and its teachings have always been a major motive behind charitable activities in both Islamic and Christian societies. Prophetic verses place emphasis on the importance of assisting the sick and the hungry, as well as showing compassion to those who are in need. Although the teachings of Islam and Christianity do not signal specifically for medical charity, founding hospitals as a charitable activity has been adopted as a frequent form of benevolence.

¹⁷⁶ www.sunnah.com

¹⁷⁷ www.biblegateway.com

Nevertheless, apart from the expectation of gaining spiritual benefit, the executor of the charitable activity is inspired by several other motives. In order to draw out the similarities and differences between the Ottoman and Byzantine hospitals, the reasons and aims for founding hospitals, which form an important segment of medical charity, must be understood in the first place.

Miri Shefer-Mossensohn discusses the motives behind philanthropic activities in four groups: spiritual, social, economic, and political motives.¹⁷⁸ Religion constitutes the spiritual aspect of benevolence, and we find clues concerning the importance of medical charity mostly in prophetic sayings.¹⁷⁹ Pious foundations (*waqf*), which were established according to the designations of the Islamic law, can be considered as the institutionalized form of benevolence. As a matter of fact, one cannot attribute the practice of *waqf*-making to Islamic societies only, since we do not exactly know the first steps of its development and incorporation into the charitable practices of Islamic societies. However, *waqf*-making has become a favored vehicle of formal philanthropy throughout the Islamic world.¹⁸⁰

When establishing a pious foundation, not only do the founders follow the teachings of Islam with the aspiration to attaining paradise in the hereafter, they

¹⁷⁸ Shefer-Mossensohn, *Ottoman*, 101. Although Shefer handles the subject within the context of Islamic culture, it would not be wrong to assume that the motives behind the philanthropic activities apply to Christian societies as well.

¹⁷⁹ One of the most trusted canonic collections of *hadiths* (sayings), *Ṣaḥīḥ al-Bukhārī*, was compiled by Abu Abdullāh Muhammad Ibn Ismāʿīl al-Bukhārī in the ninth century. It contains roughly 7563 *hadiths* (with repetitions) organized by subjects in 98 books. www.sunnah.com. *Hadiths* concerning medicine were included in “The Book of the Sick” (*Kitab al-marda*) and “The Book of Medicine” (*Kitab al-tibb*). Miri Shefer, “Charity and Hospitality: Hospitals in the Ottoman Empire in the Early Modern Period,” in *Poverty and Charity in Middle Eastern Context*, ed. Michael Bonner, Mine Ener, Amy Singer (Albany: State University New York Press, 2003), 123.

¹⁸⁰ Amy Singer, *Constructing Ottoman Beneficence: An Imperial Soup Kitchen in Jerusalem* (New York: SUNY Press, 2002), 15-16.

also obtain political prestige, consolidate their social status in society, legitimize sovereignty, and ensure the protection and persistence of their properties. According to some scholars, *waqf*-making was utilized as a legal gap in the Ottoman policy of confiscating personal property upon death. In this way, founders could assure that their assets be handed down to their heirs. Tax reduction was yet another important issue concerning economic motives.¹⁸¹

Much like the teachings of Islam and the philanthropic practices of the earlier Islamic dynasties reflected themselves within Ottoman culture, Byzantine philanthropy was inherited from Greek and Christian antiquity.¹⁸² The Byzantines developed their own notions of charity, synthesizing the teachings of Christianity and Roman forms of public assistance. Similar to the *waqfs* of the Ottomans, the Byzantines applied the Roman practice of consecrating property for religious purposes and established large numbers of beneficent institutions run by church authorities, throughout the empire.¹⁸³

Apart from spiritual and moral purposes, several other motives should be sought behind Byzantine benevolence. Although very little evidence about this subject is found in sources, considering the facts of human nature, it can be assumed that the founder of a philanthropic institution, either humble or wealthy, expected some earthly benefits other than the blessings of God. Demetrios

¹⁸¹ Shefer, *Ottoman*, 101-102. Singer, 30-31. Amy Singer, "Charity's Legacies: A Reconsideration of Ottoman Imperial Endowment Making," in *Poverty and Charity in Middle Eastern Contexts* (Albany: State University of New York Press, 2003), 295-299.

¹⁸² Demetrios J. Constantelos, *Byzantine Philanthropy and Social Welfare* (New Brunswick: Rutgers University Press, 1968), 3.

¹⁸³ Singer, *Constructing Ottoman Beneficence*, 23.

Constantelos specifies these possible motives as vanity, self-interest, self-protection, political expediency, and other egotistical drives.¹⁸⁴

Although benefit-based correspondences can be drawn between the Ottoman and Byzantine notions of charity, it is not possible to come to a concrete conclusion about the Byzantine influence on the Ottoman traditions regarding the development of charitable practices. The institution of *waqf*, which underpinned the Ottoman concept of philanthropy, had already been absorbed by Islamic culture long before the appearance of the Ottoman state on the stage of history. The first Muslims in Arabia, Syria, and Egypt had encountered Byzantine charitable institutions and most likely adopted some of the Byzantine practices, and vice versa.¹⁸⁵ Although one cannot assume that the Ottoman traditions and practices of philanthropy developed under the direct influence of Byzantine culture, we can speak of an indirect influence which had its roots long before the Ottoman-Byzantine encounters began. Besides, Byzantine and early Ottoman culture should not be considered as two different worlds divided by clearly demarcated borders that rendered any kind of interactions impossible. Byzantines and Ottomans occupied neighboring geographies in constant contacts, interactions, and exchanges for more than one century. Although it does not seem possible to come to a concrete conclusion about the influence of the Byzantine forms of benevolence on the Ottomans, the case-study of Ottoman and Byzantine hospitals points to similarities in endowment-making traditions and practices, thanks to the surviving endowment deeds and monastic charters. Although early Ottomans followed their

¹⁸⁴ Constantelos, 28.

¹⁸⁵ Singer, *Constructing*, 23. On the history of *waqfs*, see Bülent Köprülü, “Tarihte Vakıflar,” *Ankara Hukuk Fakültesi Mecmuası*, Cilt VIII, Sayı 3-4 (1951), 479-519.

Seljuk predecessors to a large extent, their Byzantine neighbors' indirect influence on this tradition should not be overlooked.

3.2. Physical Features and Spatial Design

Architectural evidence gives significant clues about the functions of a hospital, its status as an institution, and the quality of medical practices of the period. Although not completely intact, two of the three Ottoman hospitals, which constitute the main focus of this study, give us enough evidence regarding their architectural layouts, spatial designs, and other physical features. When architectural evidence is not sufficient in case of the structures that no longer exist today, written sources provide us with knowledge about the physical features of a structure, as well as the evolution of surviving structures.¹⁸⁶

As for the late Byzantine hospitals that have been examined here, the Pantokrator Xenon and the Lips Xenon, we are not as fortunate as we are with the Ottoman hospitals under study. Since neither of these structures exists any longer and since we do not have useful archaeological evidence, it seems not possible to draw an accurate architecture-based comparison between these two Byzantine hospitals and the three Ottoman hospitals in question. We can only form an idea about their building techniques, spatial designs, as well as other physical features, and can draw possible similarities with their Ottoman counterparts by means of

¹⁸⁶ For instance, although we do not have any knowledge regarding the original features of the Fatih Darüşşifa, which no longer exists today, its earliest surviving ground plan, drawn by the chief architect Mustafa Ağa in 1824, makes it possible for us to arrive at an idea about its architectural layout.

utilizing other structures to which they were attached, archaeological evidence from earlier Byzantine hospitals, and written sources that may include clues about them.

In several aspects, Ottoman hospitals resemble Seljuk hospitals. Apart from the foundation practices, the Ottomans adopted the architectural principles of the Seljuks and modified them over the centuries. The most prominent feature inherited from Seljuk hospital architecture was the four-iwan plan. However, Seljuk hospitals were built as grandiose structures in terms of their architectural and decorative features, whereas Ottoman hospitals were more modest structures since they were designed as one of the several sections that belonged to a mosque complex where the mosque intended to be the main focus.¹⁸⁷ In the decorative program of Ottoman hospitals, we neither come across the lavish muqarnas decoration of the Seljuk hospitals, nor figurative elements carrying significant symbolic meanings.

The earliest of the Ottoman hospitals, the Yıldırım Bayezid Darüşşifa in Bursa, the Fatih Darüşşifa in İstanbul, and the Bayezid II Darüşşifa in Edirne, were all stone and brick constructions built according to the pattern of the four-iwan plan inherited from Seljuk architecture. However, the ground plans of these structures, each of which represent different periods, ideologies and approaches, were designed as different variations of the standard four-iwan madrasa plan. Among these hospitals, the Bayezid II Darüşşifa was by far the most extraordinary structure with its unique design, a combination of the traditional madrasa plan and central planning.

¹⁸⁷ Orhan Bolak, *Hastanelerimiz: Eski Zamanlardan Bugüne Kadar Yapılan Hastanelerimizin Tarihi ve Mimari Etüdü* (İstanbul Matbaacılık, 1950), 41-42.

Similarly, the Pantokrator Xenon and the Lips Xenon were not built as individual structures; they were attached to monastery complexes that resembled Ottoman mosque complexes with the numerous units that they incorporated. Possibly the most significant source concerning the visual characteristics of these Byzantine hospitals is the inauguration epigram of the Pantokrator Xenon, which is currently preserved in the Athens National Library. This epigram mentions the hospital twice and describes its gold decorations, pairing it with the churches.¹⁸⁸ Although the gold decoration of the surviving churches, which could have been cogent evidence, no longer exists today, we can assume that the hospital boasted eye-catching decorative features worth mentioning. Thanks to the accounts of the Russian pilgrims to Constantinople in the fourteenth and fifteenth centuries, we obtain further evidence about the decorative program of the monastery. In addition to the gold mosaics, which most likely decorated the domes of the buildings, the mosaic image of Christ Pantokrator was another decorative element that was usually placed over the main gates.¹⁸⁹ We do not know whether the hospital was also decorated with the images of Christ Pantokrator, but it would not be unreasonable to estimate that this figurative element was also used to emphasize its relation to the healing power of Christ and to his teachings about assisting the sick, as well as providing patients with emotional inspiration. Here, we can draw a contrast between this Byzantine hospital and the three Ottoman hospitals under study: although the Pantokrator Xenon was possibly decorated in such a way that

¹⁸⁸ Talbot, "Byzantine Monastic Horticulture," 64. Wolford, *Healing on the Fourth Hill*, 13.

¹⁸⁹ Majeska, *Russian Travelers to Constantinople*, 289.

its magnificence could compete with those of the churches, Ottoman hospitals were very understated structures bearing nearly no decorative elements.

Medical care and the building in which it is delivered cannot be thought separately; the quality of the architecture and spatial design exert significant impact on the healing process.¹⁹⁰ The general layout and the spatial design of hospitals also reflect the cultural taboos of disease, and social attitudes towards illness and medicine.¹⁹¹ Ottoman and Byzantine architects were fully aware of this fact, and their hospitals show a strong resemblance in their spatial designs. Involvement with gardens and water was all but certain for both Ottoman and Byzantine hospitals. Considering the fact that Ottoman and Byzantine hospitals included at least one elaborate central garden, they must have strongly adopted the principles based of the concept “healing by design.” This concept refers to principles followed with the aim of creating curative spaces that can give the patients positive sensory experiences, improve their spiritual well-being, and thus promote recovery from illness.¹⁹²

In his article “Healing by Design,” C. Robert Horsburgh examines a number of American hospitals built in the 1980s and 1990s, based on the four qualities of space which can be adapted to Ottoman and Byzantine hospitals as well: *orientation, connection, scale, and symbolic meaning*.¹⁹³ *Orientation* refers to the

¹⁹⁰ Horsburgh, “Healing by Design,” 735.

¹⁹¹ Patricia Baker, “Medieval Islamic Hospitals: Structural Design and Social Perceptions,” in *Medicine and Space: Body, Surroundings and Borders in Antiquity and the Middle Ages*, ed. Patricia A. Baker, Han Nijdam, Karine van 't Land (Leiden: Brill, 2011), 245-72.

¹⁹² Jean Larson, Mary Jo Kreitzer, “Healing by Design: Healing Gardens and Therapeutic Landscapes,” *Implications*, Volume 2, Issue 10: 2. Ergin, “Healing by Design?,” 1-37.

¹⁹³ Horsburgh, 735-40.

ease of access, and the ability to locate a destination within a building.¹⁹⁴ Since both Ottoman and Byzantine hospitals were built as a part of or close to a large-scale complex, they were easily distinguishable from other buildings in the city. Their stone and brick construction also distinguished them from the rest of the urban fabric.¹⁹⁵

The term *connection* describes the quality of the interaction between people and their environment. A well-designed hospital allows a gradual transition between community and privacy.¹⁹⁶ Ottoman hospitals provided the patients with both communal and private spaces; patients could socialize in the courtyards and under the porticos when they wished, or they could prefer staying in the small patient rooms when they needed privacy. For both Ottoman and Byzantine hospitals, importance attributed to gardens, landscape design, and waterworks was yet another aspect of connection: connection with nature.¹⁹⁷

The architectural quality of *scale* simply refers to the balance between the size of the human figure and that of the building together with its components. A hospital not featuring the ideal quality of scale can give the patients an overwhelming or claustrophobic experience. Considering the fact that both Ottoman and Byzantine hospitals contained fifty beds at the most, and that their courtyards were designed as easily perceivable spaces, they were not grandiose and imposing structures that could dwarf the patients.¹⁹⁸

¹⁹⁴ Ibid., 735.

¹⁹⁵ Ergin, 31.

¹⁹⁶ Horsburgh, 736.

¹⁹⁷ Ergin, 32.

¹⁹⁸ Ibid. Horsburgh, 738.

Symbolic meaning is yet another quality of space specified by Horsburgh. Every building bears a certain symbolic meaning regardless of its function; a hospital designed according to the principles of “healing by design” provides the patients and their families with an atmosphere of security, cleanliness, and physical comfort, thus making them feel that they are individuals rather than merely medical cases.¹⁹⁹ Although there is not enough evidence for the Byzantine case, we know that some architectural design principles contributed to the issue of cleanliness in the Ottoman hospitals. Usage of easy-to-clean building material, and adequate water supply and drainage system allowed creating a clean environment. For instance, water runnels in the Bayezid II hospital were designed for the disposal of the water that cleaned the rooms and the courtyard (**Fig. 57**).²⁰⁰ Based on the detailed descriptions in the endowment deeds and monastic charters, concerning the duties of the employees, it is evident that security, cleanliness, and comfort were ensured in both Ottoman and Byzantine hospitals. Apart from the medical staff who were responsible for giving the patients the best treatment, thus making them feel as comfortable as possible, the auxiliary staff including servants, laundresses, sweepers, and doormen had a major role in creating a clean and secure environment for the physical and mental well-being of the patients. Although the variety and number of these employees changed in each hospital, they had similar duties and responsibilities in both Ottoman and Byzantine cases, as specified in the foundation documents.²⁰¹

¹⁹⁹ Ibid., 738. Ergin, 33.

²⁰⁰ Ibid., 33-34.

²⁰¹ See Appendices.

3.3. Institutional Structure, Distribution of Tasks, Services Offered

Endowment deeds (*waqfiyya*) and monastic charters (*typikon*) are the most significant primary sources concerning the institutional structure of Ottoman and Byzantine hospitals. In contrast to the shortcomings of architectural evidence, these written documents provide us with detailed information about general rules and regulations, division of labor, duties, responsibilities and the economic situation of the medical and auxiliary staff within Ottoman and Byzantine hospitals, therefore giving us the opportunity to compare them in terms of their institutional structure.

The earliest of the Ottoman hospitals, the Yıldırım Bayezid Darüşşifa, represents the primary stage of the Ottoman hospitals' institutionalization process. Although its *waqfiyya* does not give detailed information regarding its organizational structure other than the salaries of the employees, the Bursa Court Registers provide us with knowledge about the distribution of tasks in different periods of time. These documents also prove the existence of medical specialties in the Yıldırım Bayezid Darüşşifa beginning from its foundation period and their increasing variety in time.²⁰² The endowment deeds of the Fatih Darüşşifa and the Bayezid II Darüşşifa are more detailed when compared to that of the Yıldırım Bayezid Darüşşifa. In addition to the information they include about the wages of the medical and auxiliary staff, they give significant details about the employees' duties and responsibilities, qualifications, as well as the codes of behavior they were expected to follow. We can also form an idea about the fluctuations in the number of employees and their salary rates in different periods, thanks to the

²⁰² See Appendices 1-3.

endowment deeds. Whereas the number of people employed in the Yıldırım Bayezid Darüşşifa ranges from nine to thirteen in different periods, this number changes from ten to fifteen in the Fatih Darüşşifa, and from twenty to twenty-one in the Bayezid II Darüşşifa.²⁰³

In contrast to the early Ottoman hospitals, which were the institutions of a young and rising empire, the late Byzantine hospitals examined in this study were founded in a period of crisis. Nevertheless, given the details in their monastic charters, the organizational structures of the Pantokrator and the Lips Xenon were designed as sophisticated as those of the Ottoman hospitals under study. The *typikon* of the Pantokrator Xenon shows us that the number of employees was around 103 when it was first founded.²⁰⁴ Although only about half of these employees would be present in the hospital due to a rotational schedule, it can be stated that the Pantokrator Xenon was founded as a large-scaled institution ahead of its time, based on its employees. With its twenty employees, the Lips Xenon was a smaller version of the Pantokrator Xenon. However, given that it served female patients only, it can be assumed that the same quality in the Pantokrator Xenon was maintained.²⁰⁵

Although we do not know how long it operated according to the ideal conditions defined in the *typikon*, especially the Pantokrator Xenon was intended as an institution in the modern sense. The *typikon* shows us that the hospital staff was established according to a certain hierarchy similar to the system in the Ottoman

²⁰³ See Appendices 1-7.

²⁰⁴ Cécile Morrisson, "Coinage and Money in Byzantine Typika," *Dumbarton Oaks Papers*, No. 56, ed. Alice-Mary Talbot (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2002), 267.

²⁰⁵ See Appendices 8-9.

hospitals. In Ottoman hospitals, the person at the top of this hierarchy was the head physician beginning from earliest times. The head physician was responsible for supervising the medical personnel within the *darüşşifa*, as well as working in collaboration with the trustee who was the highest-ranking officer within the *waqf* administration. By contrast, Byzantine physicians barely had any authority in administrative issues in the twelfth century. Prior to the establishment of the Pantokrator Xenon, the hospital administrators, known as *xenodochoi* or *nosokomoi*, were chosen among the clergy, deacons or priests.²⁰⁶

Salary rates of the medical and auxiliary staff are an important indicator regarding the quality of hospital care. Thanks to the endowment deeds and other written records, we can acquire vast knowledge about the salary rates in the early Ottoman hospitals in different periods. On the other hand, although surviving sources do not present a complete picture of late Byzantine hospitals, we are fortunate enough to have the monastic charters of the Pantokrator Xenon and the Lips Xenon, which provide us with the knowledge concerning the salary rates of the medical and auxiliary staff.²⁰⁷ According to the *typikon* of the Pantokrator Xenon, the top-ranking physician, the *primmikeriori*, was paid annually 8 *noumismata* and 45 *modioi* of wheat, which would be equal to 11.75 *noumismata* in total. In the Lips Xenon, which was founded 150 years later, physicians were paid slightly less than the *primmikeirori* of the Pantokrator Xenon, annually 16 *noumismata*, which is equal to 10.6 *noumismata* in twelfth-century currency. Since an annual income of 12 *noumismata* represented a living wage according to the

²⁰⁶ Timothy S. Miller, "Byzantine Hospitals," *Dumbarton Oaks Papers Vol. 38*, Symposium on Byzantine Medicine (1984), 59.

²⁰⁷ Miller, *The Birth*, 200.

calculations of George Ostrogorsky, Byzantine physicians are to be counted as poor unless we assume that they performed private medical service outside the hospitals.²⁰⁸ On the other hand, the wages of Ottoman physicians stayed stable almost for centuries. As stated in the *waqfiyya* of the Yıldırım Bayezid Darüşşifa, physicians were paid 8 *akçe* per day, which was according to Osman Çetin a sufficient living wage for that period.²⁰⁹ About seventy years later, the daily wage of a physician was 20 *akçe* in the Fatih Darüşşifa. This amount also applied to the Bayezid II Darüşşifa in the year 1488, and it stayed stable in the following centuries. In the sixteenth century, the daily wage of a physician was still 8 *akçe* in the Yıldırım Bayezid Darüşşifa, and it was reduced to 10 *akçe* in the Fatih Darüşşifa.²¹⁰ Thus, we can assume that, although salary rates were determined to be sufficient in early periods, physicians must have experienced hard times in later centuries.²¹¹

Although Ottoman and Byzantine hospitals are considered to be health care institutions in modern sense, one needs to investigate to what extent they were similar to or different from today's health institutions in terms of the basics of the services they offered. In contrast to modern-day hospitals where principles of preventive medicine constitute an important segment of the medical profession,

²⁰⁸ Ibid., 161. George Ostrogorsky, *Löhne und Preise in Byzanz*, BZ (1932) 32, 295-301.

²⁰⁹ Çetin, 102.

²¹⁰ See Appendices 1-7. Unan, 290.

²¹¹ In his comprehensive work "500 Years of Prices and Wages in İstanbul and Other Cities," Şevket Pamuk has investigated the wages of skilled and unskilled construction workers in İstanbul and other Ottoman cities between the years 1489 and 1922. In the second half of the sixteenth century, the daily wage of an unskilled construction worker in İstanbul changed from 7 to 10 *akçe*. Şevket Pamuk, *500 Years of Prices and Wages in İstanbul and Other Cities*, (T.C. Başbakanlık Devlet İstatistik Enstitüsü, 2000), 69. Given that a physician was paid 8 *akçe* in the Yıldırım Bayezid Darüşşifa and 10 *akçe* in the Fatih Darüşşifa in the second half of the sixteenth century, their income from this position was no more than that of an unskilled worker. This situation brings into mind the existence of private practice as a means of additional income.

Ottoman and Byzantine health systems were based on the care of the sick and those who were in need. In this respect, these institutions have been referred to by several names evoking the concepts of hospitality and care.

Miri Shefer-Mossensohn divides the services offered in Ottoman hospitals in several groups. Physical and mental treatment of the sick, together with the amenities offered such as food and beds, constitute the first circle of service. This service also included an unlimited stay, which implies that hospitals also acted like almshouses. The comfort of the patients was assured by the strict rules and regulations stated in the endowment deeds. The second circle of service was the treatment of the outpatients who visited the hospital to receive treatment but returned home for the night. Patients who were not able to visit the hospital or who could not afford a private physician constituted the third circle. A physician sent from the hospital would treat these patients.²¹² Another important service offered in the Ottoman hospitals was medical education. Although this issue has long been a point of contention among scholars, more recent publications prove that medical education was indeed performed in Ottoman hospitals. Taking into account the fact that practical training is an important aspect of medical education, hospitals are the most convenient places to improve practical skills amidst the flow of patients with several types of diseases.

The Eurocentric view of history concerning the evolution of hospitals assume that only in the second half of the nineteenth century did hospitals become anything more than almshouses, which were charitable institutions for the care of the poor and the sick, rather than medical institutions. As Timothy Miller puts it, this view

²¹² Shefer-Mossensohn, *Charity*, 136.

only applies to the hospitals or hospices of Western Europe and entirely ignores the hospitals of the Byzantine Empire.²¹³ Although Byzantine hospitals enjoyed their heyday in the seventh century, and the hospitals of the twelfth and thirteenth centuries represent a period of decline, detailed rules and regulations in the monastic charters of the Pantokrator Xenon and the Lips Xenon prove that these institutions were founded with the aim of pursuing the service quality of earlier hospitals and creating a clean, warm and comfortable environment for inpatient care. Similar to those in the Ottoman hospitals in question, their specialized staff offered treatment for several types of diseases. Another remarkable aspect of the *xenon* care was the vegetarian diet specified for the patients, which was a well-balanced diet according to modern-day nutritionists.²¹⁴ In addition to the treatment of the inpatients, Byzantine hospitals also offered outpatient service in a separate clinic. As for the treatment of the patients who were not able to visit the hospital, the *typika* do not say anything whether these patients were being provided with a kind of service similar to that in the Ottoman hospitals. As for the issue of medical education, the existence of a teacher in the Pantokrator Xenon staff indicates that medical education was performed, as it was in the Ottoman hospitals.²¹⁵

²¹³ Miller, *The Birth*, 3.

²¹⁴ Ibid., 14-15. The issue of the nutrition was taken into consideration also in Ottoman hospitals. As stated in the endowment deeds, preparation of the meals was under the control of the physicians. Gökbilgin, *15. ve 16 Asırlarda Edirne ve Paşa Livası*, 182.

²¹⁵ Gautier, 757- 758. The issue of medical education is one of the most harshly criticized topics in Timothy Miller's book. Vivian Nutton criticizes Miller for considering formal medical education as part of Byzantine hospitals beginning from earlier times. Nutton faults Miller for ignoring the fact that in contrast to the situation in the Islamic hospitals, Byzantine students gained practical experience by means of attaching themselves to a particular physician, and there is no evidence regarding the existence of formal medical education in Byzantine hospitals prior to the times of the Pantokrator Xenon. Nutton: 220. While further discussion of the adoption of medieval Islamic practices by the Byzantine medical system deserves more extensive treatment, this issue goes beyond the scope of this thesis. Here, I will prefer accepting formal medical education as a part of the late Byzantine hospitals.

Assuring the mental well-being of the patients was also an important issue in both Ottoman and Byzantine hospitals. In addition to the importance attributed to the pleasing ambience of gardens and water, Ottoman and Byzantine hospitals under study offered their patients different types of spiritual experiences. The therapeutic effect of music has been recognized since Antiquity, and it was often applied in medieval societies in spite of the reaction of religious circles. Evliya Çelebi's detailed descriptions of the Bayezid II Darüşşifa, together with the architectural evidence suggest that music therapy was most likely an important dimension of psychosomatic healing in the early Ottoman hospitals under study.²¹⁶ Although narratives show us that this ancient tradition continued in the Byzantine Empire, there is no evidence, which might indicate that music therapy was being performed in the Pantokrator and the Lips Xenon the way it was in the Ottoman hospitals.²¹⁷ Religion also played an important role in spiritual treatment. Although there existed no worship space within the borders of the Ottoman hospitals, the Byzantine hospitals under study included at least one chapel. In addition to the relieving effect of fulfilling religious obligations, it seems plausible to suggest that liturgical chants performed regularly in these chapels might have functioned as music therapy.²¹⁸

²¹⁶ Evliya Çelebi Seyahatnamesi, I: 321. Müderrisoğlu, 164. Kazancıgil, 61. Although Evliya Çelebi states that Bayezid II included in this *waqfiyya* several musicians, there exist no record in the *waqfiyya* regarding the provision of musicians.

²¹⁷ Accounts of the Persian mystic, Hujwiri, who lived in the eleventh century, prove that the therapeutic effect of music was still being applied in eleventh-century Byzantine hospitals. As Hujwiri narrates, hospital patients were brought to concerts regularly where they could listen to string instruments. We do not know which hospital Hujwiri mentioned, but it was most likely a Christian hospital in Syria. Shefer, *Ottoman*, 71. Reynold A. Nicholson, *The Kashf Al-mahjûb: The Oldest Persian Treatise on Sufism*, (Luzac, 1976), 407. Peregrine Horden, "Religion as Medicine: Music in Medieval Hospitals," *Hospitals and Healing from Antiquity to the Later Middle Ages*, Variorum Collected Studies Series (Ashgate, 2008), IV-135.

²¹⁸ Ibid., IV-147. Miller, 19.

3.4. Social Structure, Patient Profiles

Since Ottoman and Byzantine hospitals were equally founded as charitable institutions with the aim of serving those in need, at first sight they might seem like centers populated by people without regard to religious affiliation, age, gender or social status, similar to modern-day public hospitals. Nevertheless, there was a certain separation among society in terms of visiting hospitals. Miri Shefer-Mossensohn focuses exactly on this issue and analyzes who the patients of Ottoman hospitals were.²¹⁹ Shefer's study can be taken as model in order to analyze the patient profile in Ottoman and Byzantine hospitals through a comparative approach.

In the Ottoman Empire, receiving treatment at home was a common practice among those who were able to afford a private physician. Yet, although hospitals mostly served the poor and needy, some written sources prove that wealthy patients would also be hospitalized under certain circumstances. Based on the İstanbul *kadı* court records, we learn that some people died in hospitals and left behind estates.²²⁰ It does not seem possible to make a definite statement about the reasons why these wealthy people preferred to receive treatment in hospital, although it was not a common practice; we know that being in foreign lands and/or without any family members or relatives to take care of oneself was an important reason for taking refuge in a hospital.²²¹

The situation in the Byzantine hospitals was quite similar. Although hospitals were populated mostly by poor patients, the wealthy would also visit hospitals instead of receiving treatment from private physicians. Some points in the

²¹⁹ Shefer, *Charity*, 128-133.

²²⁰ *Ibid.*, 129.

²²¹ *Ibid.*, 130.

typikon of the Pantokrator Xenon indicate that, while some patients were so destitute that the hospital provided them with clothes, others had the means to obtain at least their own underwear.²²² Based on the rules against collecting tips, we can assume that some of the patients were wealthy enough to give money to the hospital staff.²²³

Ottoman hospitals were basically pious foundations established to serve Muslim society. Although the *waqfiyya* of the Fatih Darüşşifa says that the darüşşifa was devoted to Muslim society together with all the people of God, this does not imply that Ottoman hospitals were open to people of all religions.²²⁴ In the *waqfiyya* of the Bayezid II Darüşşifa it is stated that the hospital is founded for serving the pious poor.²²⁵ Although the separation between Muslims and non-Muslims might seem rather discriminative if evaluated on the basis of today's perspective, in reality, the social dynamics of the period were underlying this separation. As Shefer-Mossensohn clarifies, medical theories and therapeutic procedures could contradict different religious beliefs. Thus, each religious community was served by autonomous hospitals run by their own community.²²⁶ The same applied to Byzantine society: Byzantine hospitals were established as charitable facilities attached to monastic complexes, with the intent of serving the Christian community.

In both Ottoman and Byzantine hospitals, the moral codes of society necessitated the segregation of male and female patients. Ottoman hospitals were

²²² Androustos, Karamanou, Matsaggas, *Les Institutions*, 72.

²²³ Miller, 19-20.

²²⁴ Kunter, 142-147.

²²⁵ Gökbilgin, 168-171.

²²⁶ Shefer, *Charity*, 131.

populated mostly by male patients, and there exists no information in the *waqfiyyas* regarding the existence of a female clinic within the hospitals.²²⁷ Does this mean that female patients not able to afford a private physician were deprived of medical service? Female patients were most likely treated in a secluded room within the *darüşşifa*, under the supervision of a family member. Describing the seventeenth-century situation of the Fatih Darüşşifa, Evliya Çelebi mentions a separate section where women and non-Muslim were treated.²²⁸ However, we do not know whether this was a separate wing dedicated to women within the *darüşşifa* or an additional building nearby.²²⁹

Byzantine sources provide more definite evidence regarding the issue of gender. It is clearly stated in the *typikon* of the Pantokrator Xenon that a clinic was separated for the service of female patients. As we learn from its *typikon*, the Lips Xenon was already founded as a women's hospital and served female patients only.²³⁰ The issue of a male doctor treating a female physician was also clear in the monastic charters. Female employees were assigned for the care of female patients in both the Pantokrator and the Lips Xenon. On the other hand, there is no evidence concerning female patients being treated by male physicians in Ottoman hospitals. Based on the absence of a female medical staff within the Ottoman hospitals in question, we can come to two possible conclusions: the doors of these hospitals were strictly closed to women, or being treated by a male physician was not a taboo for Muslim women and could occur under certain circumstances.

²²⁷ Shefer, *Ottoman*, 128-129.

²²⁸ Evliya Çelebi *Seyahatnamesi*, I: 321.

²²⁹ Shefer, *Ottoman*, 129.

²³⁰ Gautier, 734. *Ibid.*, 1281.

To conclude, although they were founded as charitable institutions, there was a certain division among society in terms of having access to the services offered by Ottoman and Byzantine hospitals. Did these institutions serve everybody in need regardless of religion, age, social status, or gender? In other words, did poverty imply eligibility for the hospital service? Clearly it did not. Although acquiring religious merit was the apparent reason for charitable activities in both Muslim and Christian cases, we cannot consider benevolence as altruism.²³¹ As Amy Singer aptly puts, “charity cannot be thought free of politics, and is harnessed in the service of ideology; thus charitable activities serve interests associated with class, confession, gender, or national identity.”²³²

²³¹ I would like to thank Miri Shefer-Mossensohn for her remarks on this issue.

²³² Amy Singer, *Charity in Islamic Societies*. Cambridge University Press, 2008: 223.

CONCLUSION

The aim of this thesis was to present a comparative study of early Ottoman and late Byzantine hospitals. While the focus was on the three Ottoman hospitals under study, the late Byzantine hospitals discussed as two case studies served as comparanda in order to investigate differences, similarities, and possible interactions between Ottoman and Byzantine hospital founding traditions.

As also stated in the introduction, although a comparison of early Ottoman hospitals with earlier Islamic hospital models would also be a coherent choice since Ottoman medicine and hospital founding tradition had their roots in the Arab-Muslim medical tradition, I intentionally chose to make this comparison by looking at the Byzantine model, which constituted another side of the sociocultural process that gave birth to Ottoman medicine and medical institutions. All of the hospitals included in this study were chosen for specific reasons. The Ottoman hospitals under study, the Yıldırım Bayezid Darüşşifa in Bursa, the Fatih Darüşşifa in Istanbul, and the Bayezid II Darüşşifa in Edirne, were all royal commissions founded in the three cities that served as capital of the Ottoman Empire. These hospitals –except for the Fatih Darüşşifa- left behind enough evidence, to make an art historical investigation of their architectural and decorative features possible. Also, their fully surviving *waqfiyyas* (endowment deeds) and other archival documents such as court registers were crucial in terms of forming an idea about their social and organizational structure. As for the Byzantine hospitals, I was not as fortunate as I was with the Ottoman case, since neither the Pantokrator nor the Lips Xenon left behind any archaeological evidence. Although it was quite

challenging to form an idea about their physical features based on the existing evidence about other parts of the monastery complexes of which they had been a part, the reason for choosing these two hospitals for the present study was the fact that they represented the so-called decline period of the Byzantine Empire, and similar to the Ottoman hospitals under study, they were founded as royal commissions in the capital city. Also, their surviving monastic charters made it possible to compare their social and organizational structures with those of the Ottoman hospitals. Nevertheless, although our knowledge gained from endowment deeds about the Ottoman hospitals under study is supported by other sources such as court registers and physical evidence, our dependence on the monastic charters in terms of investigating the Byzantine hospitals causes uncertainty. All we can do in the light of this limited amount of evidence about the Byzantine hospitals is to make our comparison based on the information in the *typika* without taking them for granted. In other words, one should not overlook the possibility that the Byzantine hospitals under study as the institutions of a period of political and economic crisis might not have operated as ideally as stated in the *typika*. But still, although we do not know whether the designations in the foundation documents reflect the absolute reality or not, their value cannot be denied in terms of revealing the perceptions of ideal medical assistance and institutionalist principles of the period in question.

In the introduction, I raised several questions to serve as a road map for a comparative study of early Ottoman and late Byzantine hospitals. The answers to these questions can be summarized as follows:

- The hospital as a distinctive architectural form:

The early Ottoman hospitals under study all owed much to their Seljuk predecessors in terms of their general layouts. Although sometimes we come across considerable innovations as in the case of the Bayezid II Darüşşifa, in essence, all Ottoman hospitals were designed as modifications of the four-iwan madrasa plan, the basic feature of Seljuk hospital design. Another important aspect of Ottoman hospitals was the existence of at least one central courtyard surrounded by porticoes, which was also inherited from the Seljuks. As for the decoration, although they showed some similarities in detail (i.e. sun disc symbols, muqarnas), Ottoman hospitals were less elaborate structures compared to their Seljuk predecessors.

As for the Byzantine hospitals under study, unfortunately we cannot arrive at a concrete conclusion about their physical features due to the lack of archaeological evidence. Nevertheless, similar to their Ottoman counterparts, Byzantine hospitals under study were also built as part of a complex. All we can do is to make certain assumptions based on evidence such as existing structures of these monastery complexes or inauguration epigrams. This evidence suggests that Byzantine hospitals were possibly stone and brick constructions, and similar to the Ottoman hospitals, they also included courtyards, waterworks, as well as baths, which were apparently indispensable in the process of designing a health institution.²³³

²³³ For further details about the role of water in Byzantine medicine and its reflections in architecture, see Robert G. Ousterhout. "Water and Healing in Constantinople: Reading the Architectural Remains," *Life Is Short, Art Long: The Art of Healing in Byzantium, Exhibition Catalogue*, Pera Museum, Istanbul, 2015: 65-77.

- Institutional structure:

In this respect, Ottoman and Byzantine hospitals under study were quite similar. Thanks to the written primary sources, we can gain a great deal of knowledge such as general rules and regulations, division of labor, duties, responsibilities and the economic situation of the medical and auxiliary staff. Based on these primary sources such as endowment deeds, monastic charters, and court registers, one can assume that both Ottoman and Byzantine hospitals were founded as highly institutional structures, which hosted a staff with a certain hierarchy and specializations. While on the one hand Ottoman and Byzantine hospitals were similar to today's health institutions in terms of the basics of the services they offered, they evoked the concepts of charity and hospitality on the other. Another important aspect of Ottoman and Byzantine hospitals under study was that they served as institutions of medical education, which we learn from their foundation documents, as well as thanks to the madrasa structures usually built attached to the Ottoman hospitals. The issue of providing professional education also reminds us modern-day practices.

- Social structure:

All of the hospitals discussed throughout this study were royal commissions, thus were founded with the intention of meeting the highest standards of their periods. As discussed in detail in the final chapter, religion was an important motive behind the act of founding hospitals as a form of benevolence in both Ottoman and Byzantine societies. These pious endowments also acted as a

means of obtaining political prestige, consolidating social status, legitimizing sovereignty, and assuring the protection and persistence of the founder's properties. Whereas the philanthropic practices of the earlier Islamic dynasties reflected themselves within Ottoman culture, Byzantine philanthropy was inherited from Ancient Greece and Early Christian society.

Although both Ottoman and Byzantine hospitals were founded as charitable institutions, they did not serve people without regard to religious affiliation, age, gender or social status. Both Ottoman and Byzantine hospitals mostly served poor patients who were members of their own religious community, and the moral codes of both Ottoman and Byzantine societies necessitated the segregation of male and female patients. Thus, considering the separation in society based on social status, religion and gender, private medical practice was also an important aspect of both Ottoman and Byzantine health systems.

To conclude, while the early Ottoman and late Byzantine hospitals discussed throughout this study shared certain similarities and differences, it is not possible to come to a concrete conclusion about whether the traditions were transferred from one culture to the other. Instead of considering Byzantine and Ottoman cultures as two distinct worlds, I prefer looking at the traditions and institutions of these two cultures as the products of a shared geography and hundreds of years of history and ongoing interactions. On the one hand, the Ottomans inherited much of their institutions and practices from their Seljuk predecessors; on the other hand, the Byzantine Empire's interactions with the

Medieval Islamic cultures, and thus their indirect influence over the early Ottoman institutions, should not be overlooked.

It goes without saying that there are still several questions that are waiting to be answered. Since it was beyond the scope of this thesis, I was not able to offer a detailed examination of other Byzantine hospitals, which beyond doubt could have brought into light significant evidence for the comparison of Ottoman and Byzantine hospitals.²³⁴ I am also aware of the fact that, regarding their physical features, it is not possible to come to a concrete conclusion without a detailed archaeological investigation. A comparative study of Byzantine and Seljuk hospitals would also shed light on some aspects of the early Ottoman hospitals of which we do not know whether they were appropriated from the Byzantine or Medieval Islamic traditions. Last but not least, a more comprehensive social and anthropological reading of these hospitals would also make a great contribution to this topic, especially the gender issue deserves a more extensive treatment.

²³⁴ For instance, one of the most significant statements on the architectural features of Byzantine hospitals has been made by Semavi Eyice in his article about the archaeological findings in Side. Based on the descriptions of Procopius (c. 500–560), Eyice states that this two-storey construction composed of several sections would most likely be the sixth-century hospital of St. Cosmas. Semavi Eyice. "Side'de bir Bizans Hastahanesi mi?" *Adalya V*, 2001-2002: 153-162.

FIGURES



Figure 1: The sites of the Pantokrator and the Lips Monasteries in Constantinople city map.



Figure 2: The Pantokrator Monastery as the Zeyrek Mosque today. Source: www.eistinpolin330.blogspot.com



Figure 3: Exterior of the apses of the Pantokrator Church prior to the restoration. Source: ArtServe - The Australian National University (<http://www.pallasweb.com/>).



Figure 4: Fenari Isa Mosque, 1990. Source: www.oguztopoglu.com



Figure 5: Detail from the South church. Source: www.sachmet.ch



Figure 6: Distant view of the Yıldırım Bayezid Complex from south west. Source: Gulru Necipoglu (www.archnet.org).

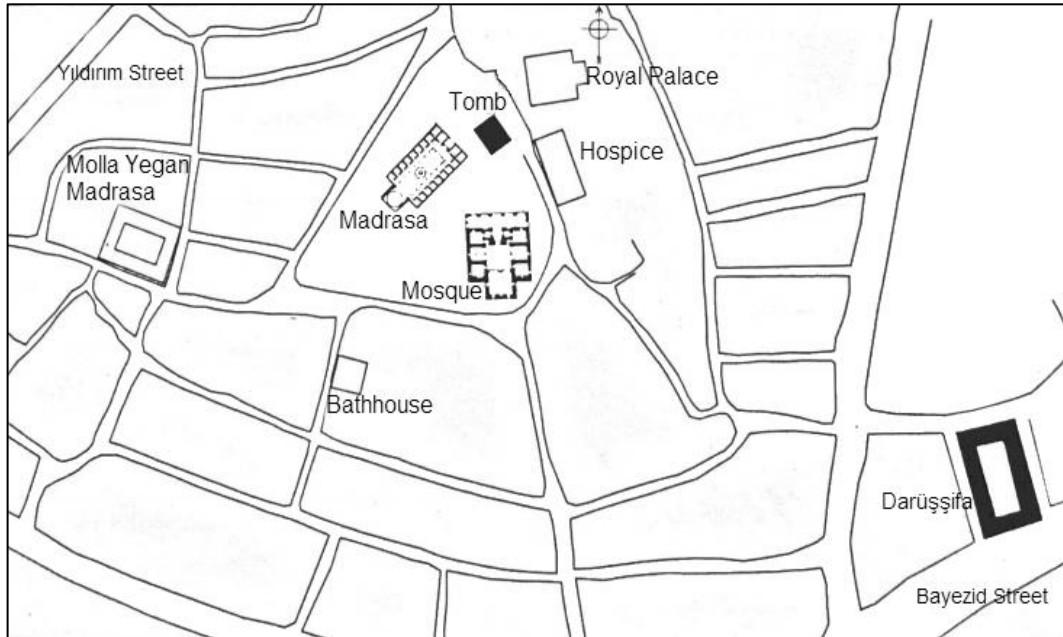


Figure 7: Yıldırım Bayezid Mosque Complex. Source: Osman Çetin (*İlk Osmanlı Hastanesi Bursa Yıldırım Darüşşifası - Bursa Mahkeme Sicillerine Göre*, İstanbul, 2006).



Figure 8: The gate of the Yildirim Bayezid tomb. Source: Özgür Basak Alkan (www.archnet.org).



Figure 9: The Yıldırım Bayezid Darü'sşifa before the restoration. Source: Osman Çetin.



Figure 10: The Bursa Yıldırım Darü'sşifa Eye Center. Source: www.gozvakfi.org.

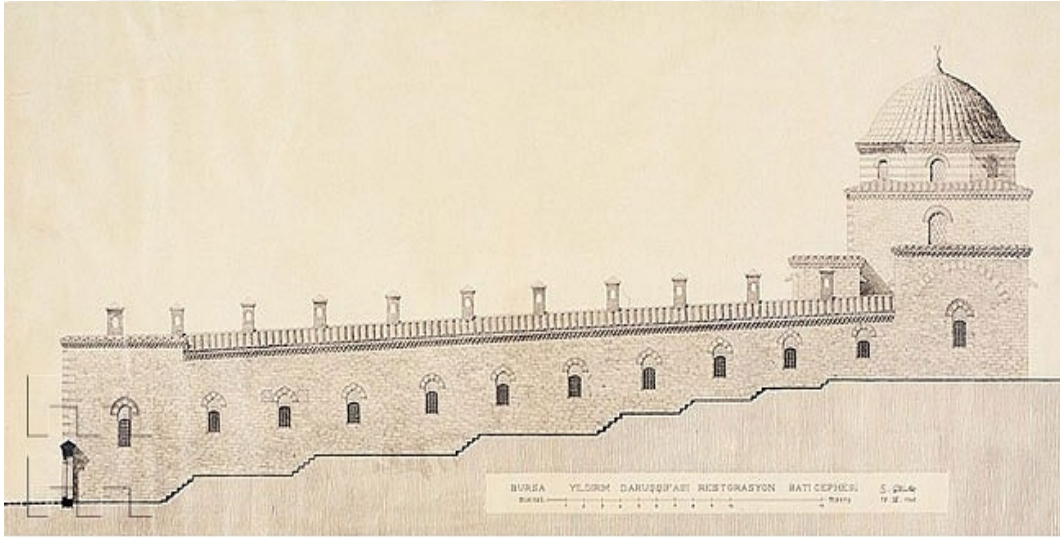


Figure 11: Yıldırım Bayezid Darüşşifası West elevation (restoration) by Sedat Çetintaş (ITU Faculty of Architecture Archive). Source: www.mimarlikmuzesi.org

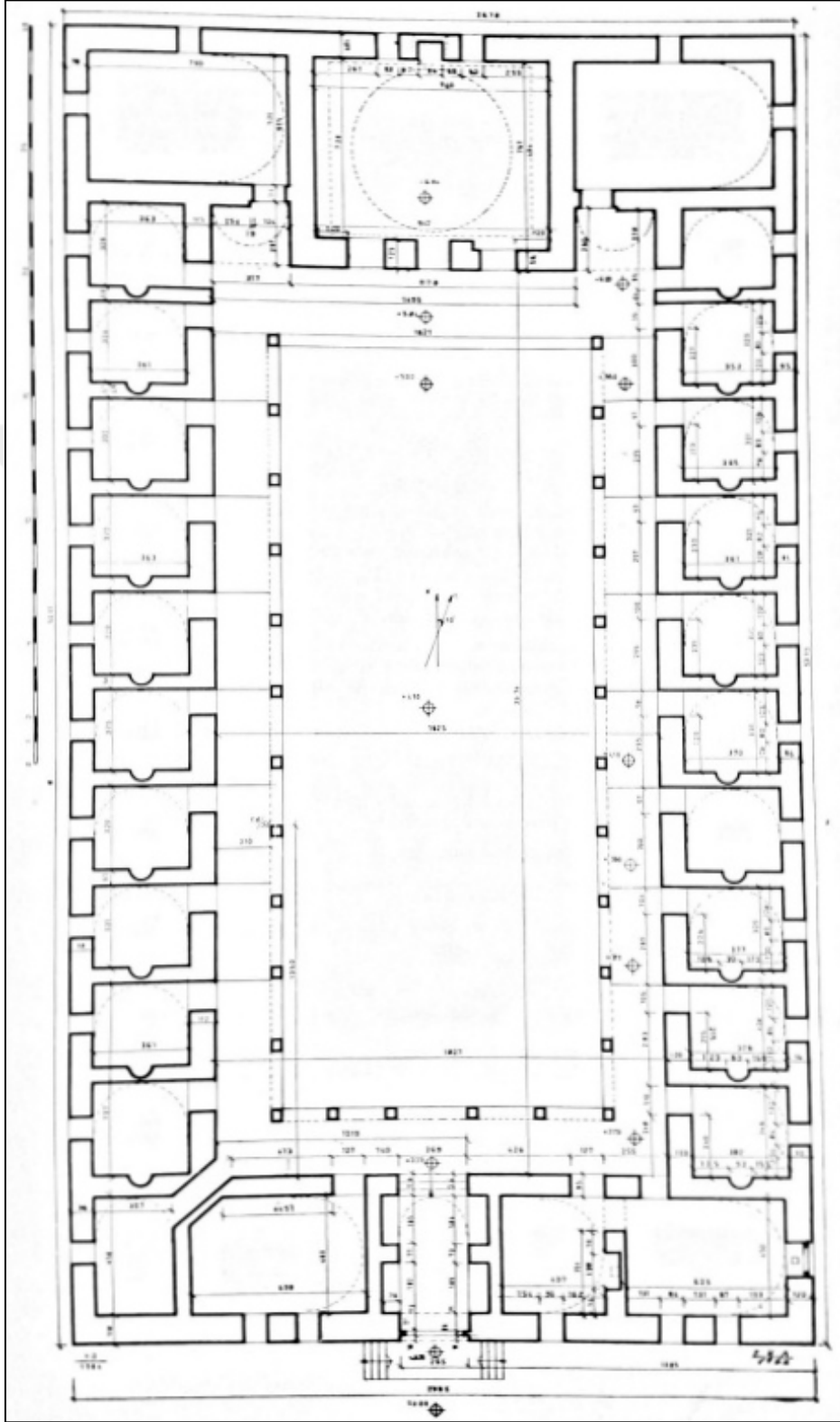


Figure 12: Ground plan of the Yıldırım Bayezid Darüşşifa. Source: Ekrem Hakkı Ayverdi. (*Osmanlı Mimarisi'nin İlk Devri 1230-1402*, İstanbul, 1966).



Figure 13: Yıldırım Bayezid Darüşşifa main gate and the entrance gallery from south in 1944. Source: Sedat Çetintaş (*Türk Mimari Anıtları, Osmanlı Devri Bursa'da Murat I ve Bayezid I Binaları*, İstanbul, 1952).

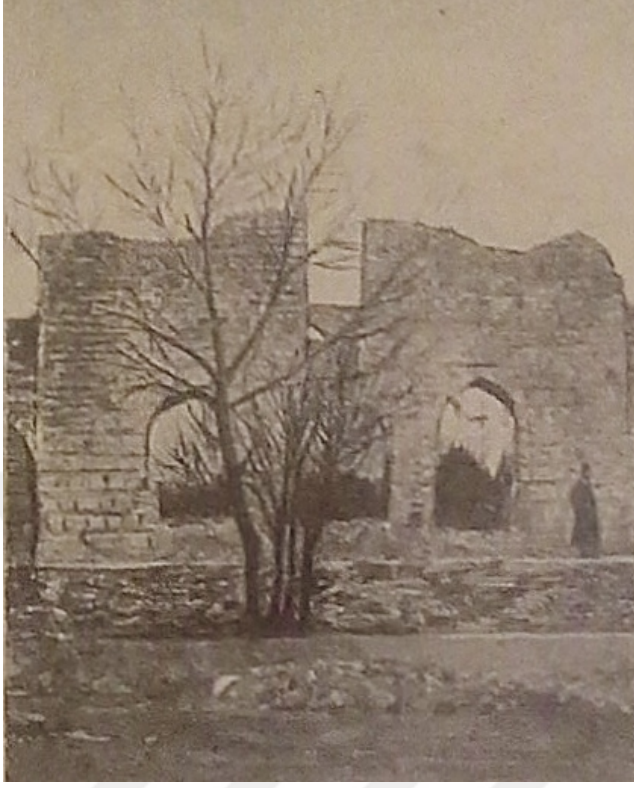


Figure 14: The state of the classroom façade of the Yıldırım Bayezid Darüşşifa 32 years before Çetintaş's excavation Source: Çetintaş.



Figure 15: Original decoration of the main gate of the Yıldırım Bayezid Darüşşifa. Source: Ekrem Hakkı Ayverdi.



Figure 16: Detail from the main gate of the Yıldırım Bayezid Darüşşifa today. Source: Author's photograph.



Figure 17: The sun motif on the main iwan of the Keykavus Darussifa. Source: Gönül Öney ("Sun and Moon Rosettes in the Shape of Human Heads in Anatolian Seljuk Architecture," *Anatolia*, Vol. 3 (Ankara Üniversitesi Basımevi: Ankara, 1969-1970: 195-203).



Figure 18: Fringe-like decoration of the classroom wall of the Yıldırım Bayezid Darüşşifa. Source: Osman Çetin.



Figure 19: One of the west wing windows and the decorative panels, which no longer exist today. Source: Ekrem Hakki Ayverdi.



Figure 20: Sedat Çetintaş's drawing of the west wing window decoration of the Yıldırım Bayezid Darüşşifa. Source: ITU Faculty of Architecture Archive.



Figure 21: Decorative motifs on the western wall of the entrance gallery of the Yıldırım Bayezid Darüşşifa (1962). Source: Ekrem Hakki Ayverdi.



Figure 22: Decorative motifs on the western wall of the entrance gallery of the Yıldırım Bayezid Darüşşifa (today). Source: Author's photograph.



Figure 23: The Yıldırım Bayezid Darüşşifa classroom converted into a cafeteria with metal construction and glass additions. Source: Author's photograph.



Figure 24: The Yıldırım Bayezid Darüşşifa Main entrance and northern iwans covered by metal construction and glass additions. Source: Author's photograph.



Figure 25: Eastern part of the classroom converted into a bathroom. Author's photograph.

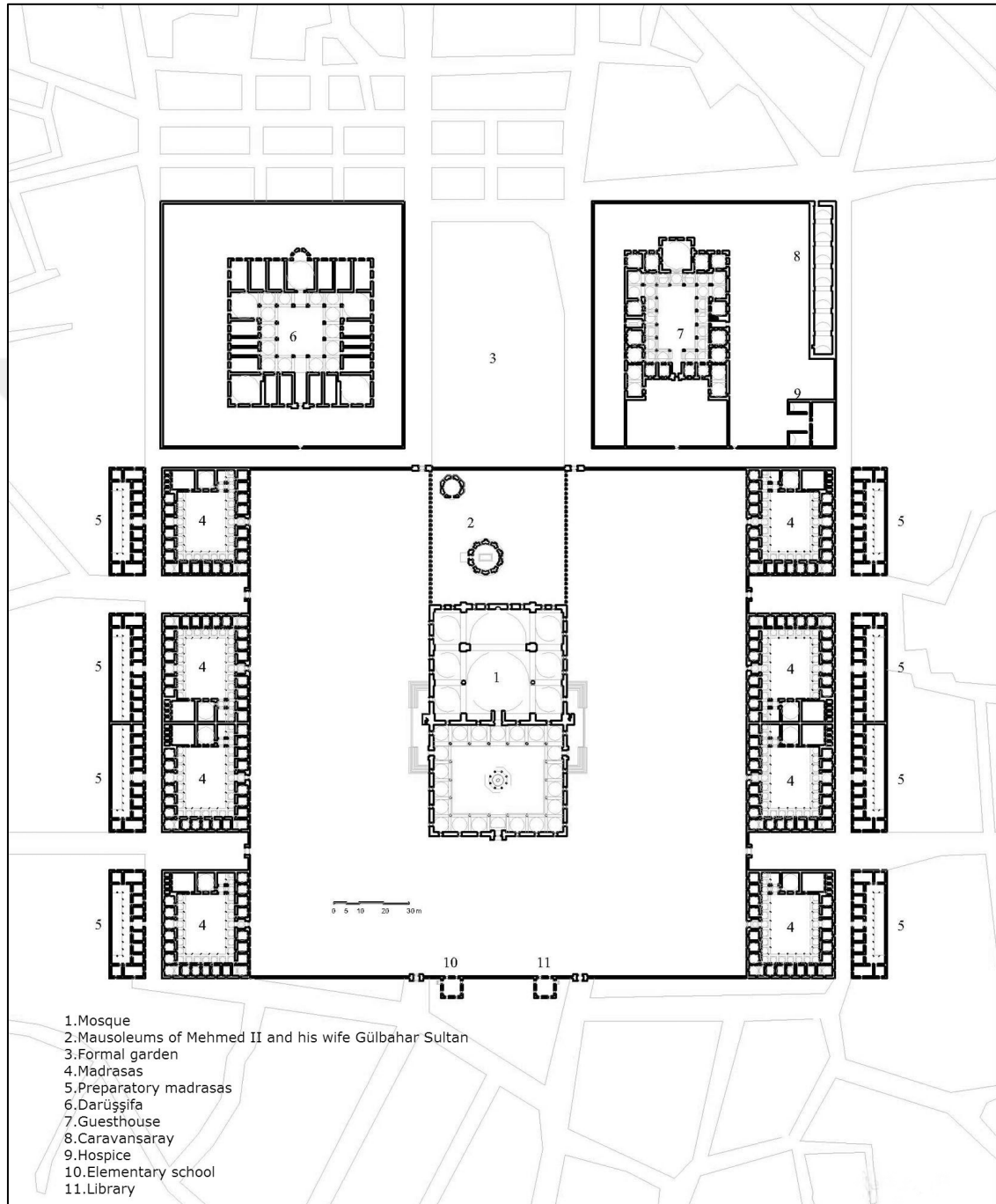


Figure 26: Reconstruction plan of the Fatih Complex. Source: Gulru Necipoglu (*The Age of Sinan: Architectural Culture in the Ottoman Empire*, Reaktion Books, 2010).



Figure 27: Monumental gate of the Fatih Mosque. Source: Author's photograph.



Figure 28: Inscription panel on the monumental gate of the Fatih Mosque. Source: Author's photograph.

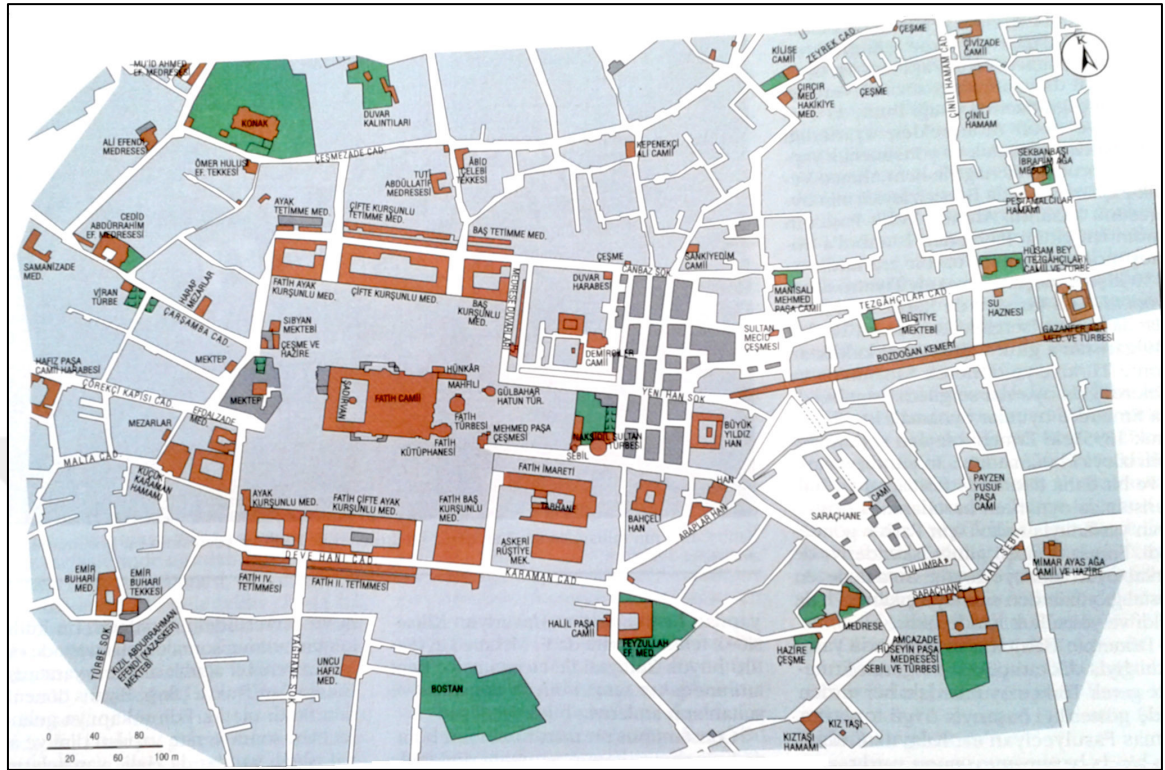


Figure 29: Map showing the Fatih region in 1875. Source: Encyclopedia of İstanbul.

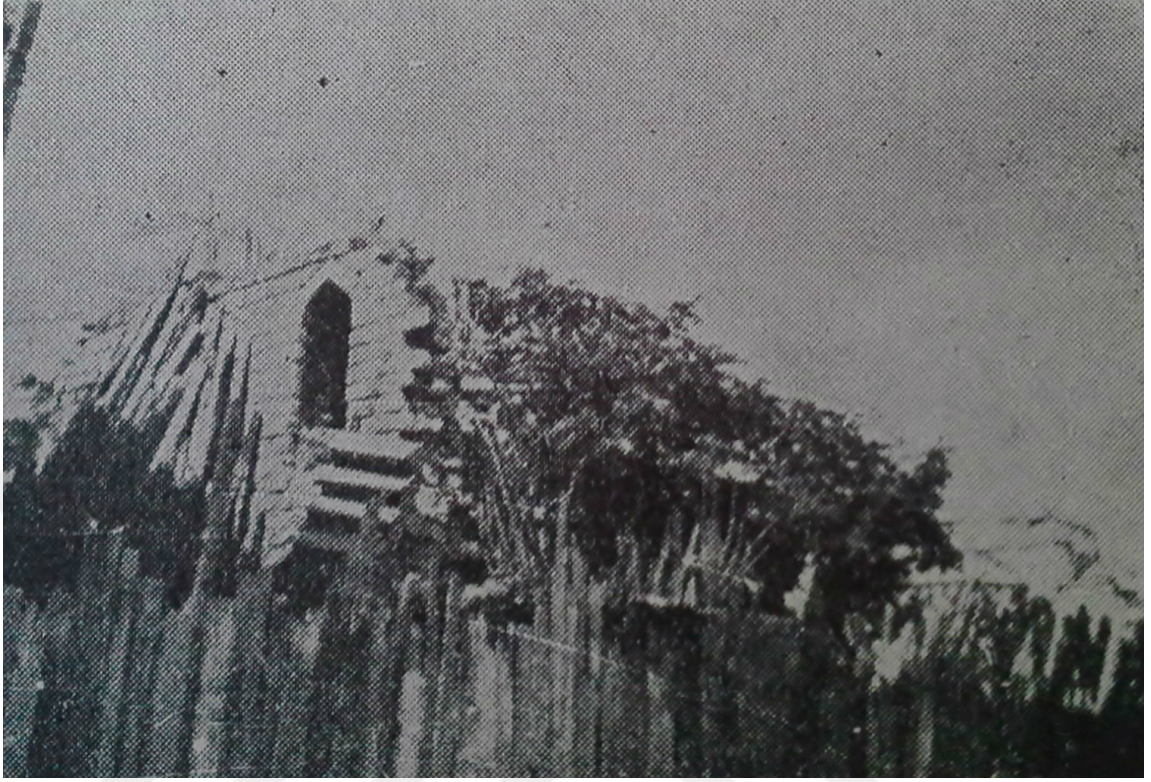


Figure 30: The state of the Demirciler Masjid in 1930s. Source: Suheyl Unver (Ekrem Hakkı Ayverdi, *Osmanlı Mimarisinde Fatih Devri*, İstanbul, 1973)



Figure 31: The state of the Demirciler Masjid in 1930s. Source: Suheyl Unver (Ekrem Hakkı Ayverdi, *Osmanlı Mimarisinde Fatih Devri*, İstanbul, 1973).

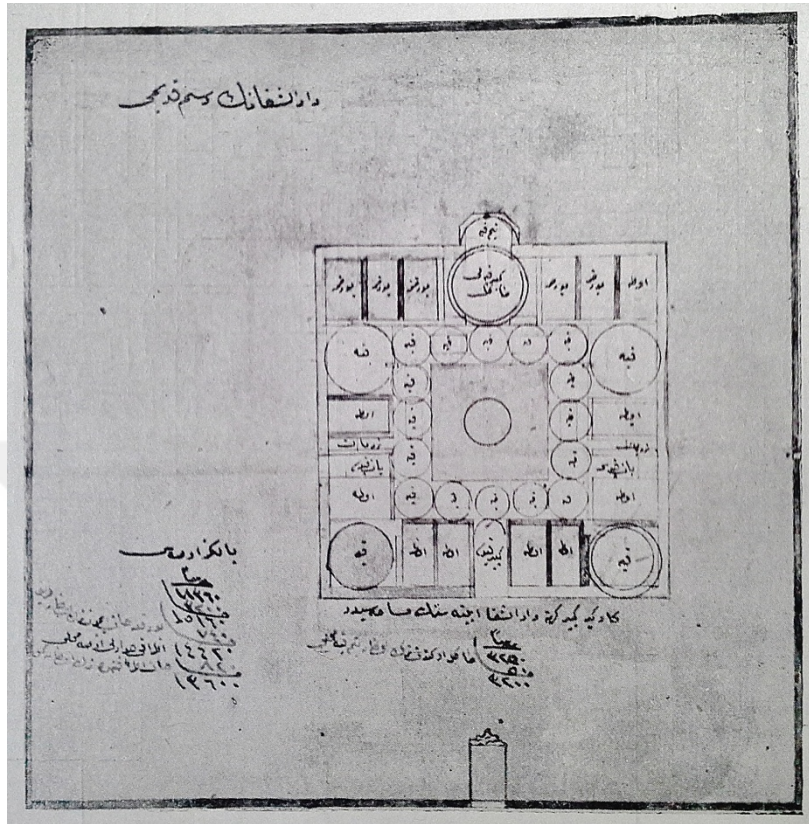


Figure 32: The ground plan of the Fatih Darüşşifa drawn by Mustafa Ağa in 1823. Source: Ekrem Hakkı Ayverdi (*Osmanlı Mimarisinde Fatih Devri*, İstanbul, 1973).

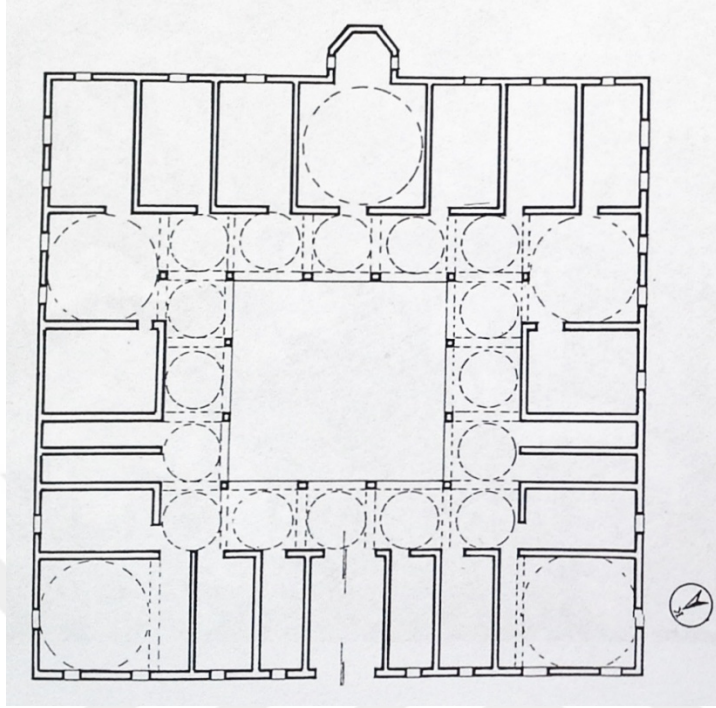


Figure 33: The ground plan of the Fatih Darüüşşifa, drawn by Ayverdi. Source: Gülten Dinç (*Fatih Darüüşşifası*, Anadolu Selçuklu ve Osmanlı Şefkat Abideleri Şifahaneler: The Şifahanes of Philanthropic Monuments of the Seljuk and Ottoman Eras, ed. Abdullah Kılıç, Medical Park, İstanbul: 2012).

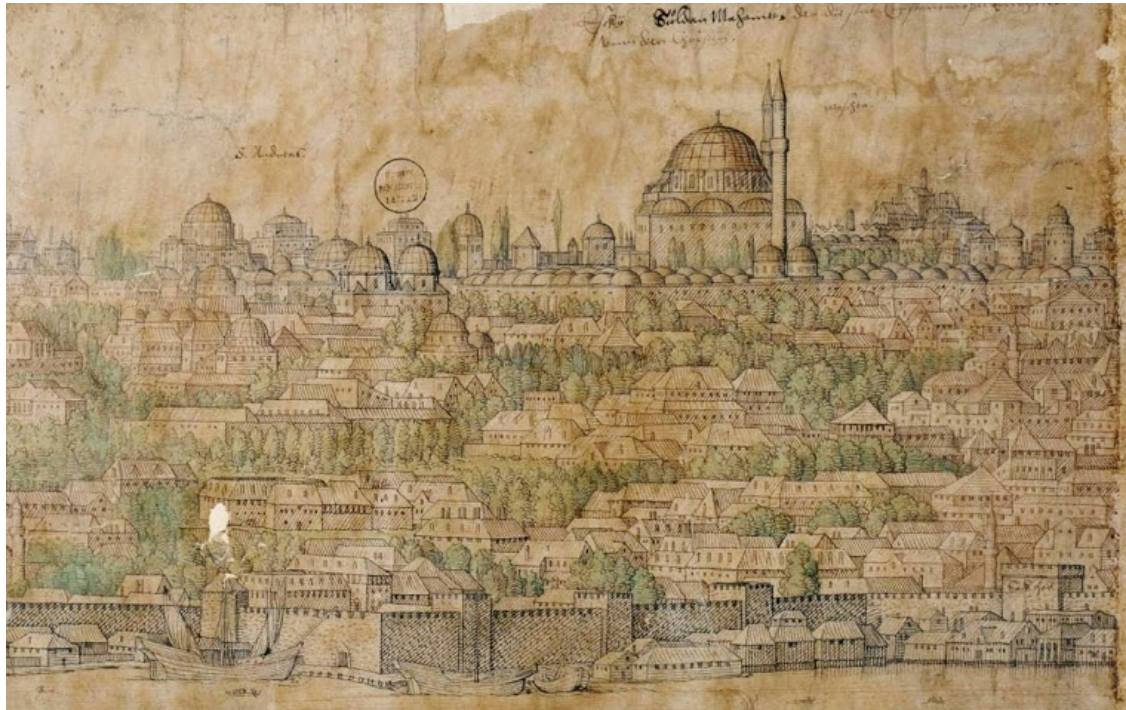


Figure 34: Detail from the İstanbul panorama of Melchior Lorichs.

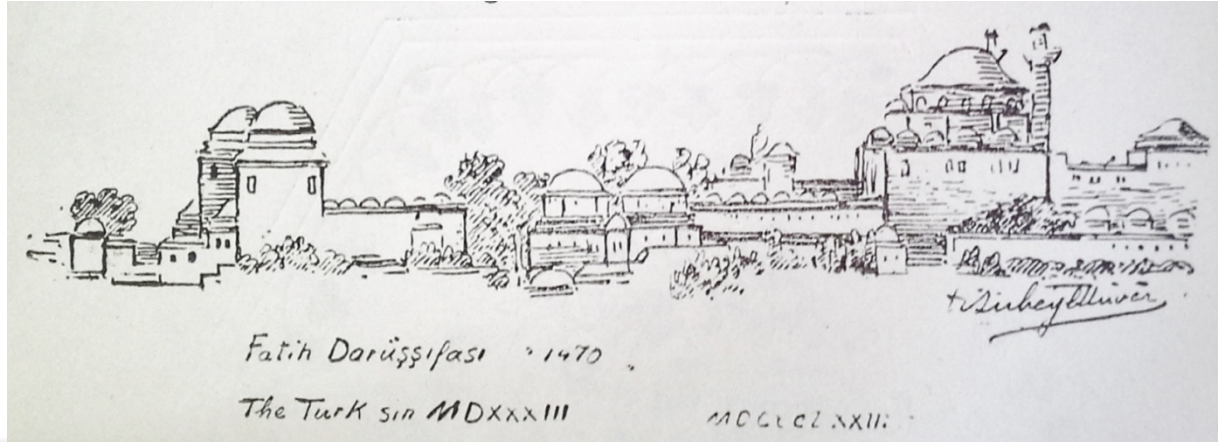


Figure 35: Süheyl Ünver's sketch of the Fatih Mosque and the darüşşifa. Source: Süheyl Ünver (*Fatih Külliyesi ve Zamanı İlim Hayatı*, İstanbul, 1946).



Figure 36: Main gate of the Karadeniz Baş Çifte Kurşunlu Madrasa (used as a private student dormitory today). Source: Author's photograph.



Figure 37: Main gate of the Fatih Tabhane, which is currently under construction. Source: www.formgrup.com

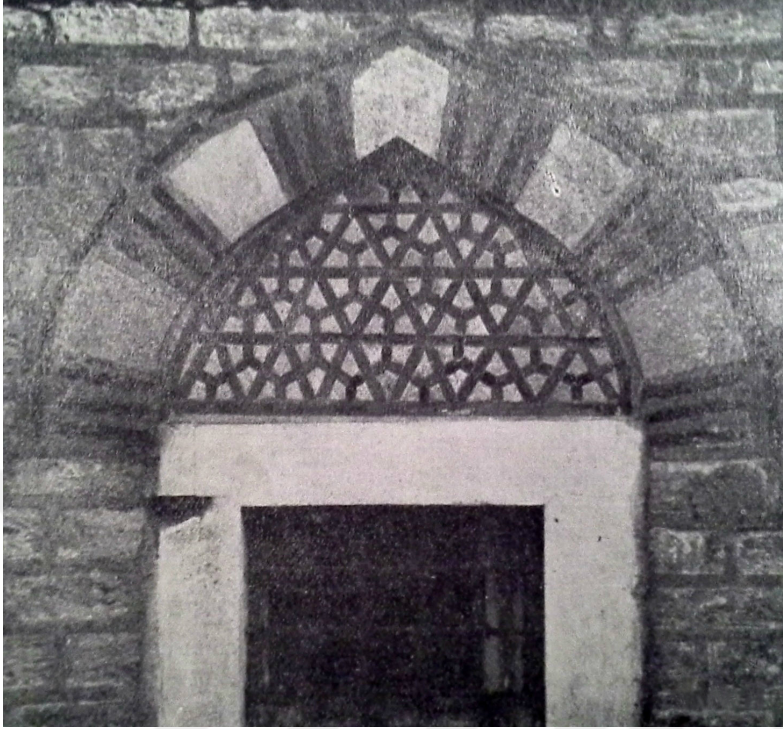


Figure 38: Glazed brick decoration of the Karadeniz Ayakkurşunlu Madrasa window. Source: Ekrem Hakkı Ayverdi (*Osmanlı Mimarisinde Fatih Devri*, İstanbul, 1973).

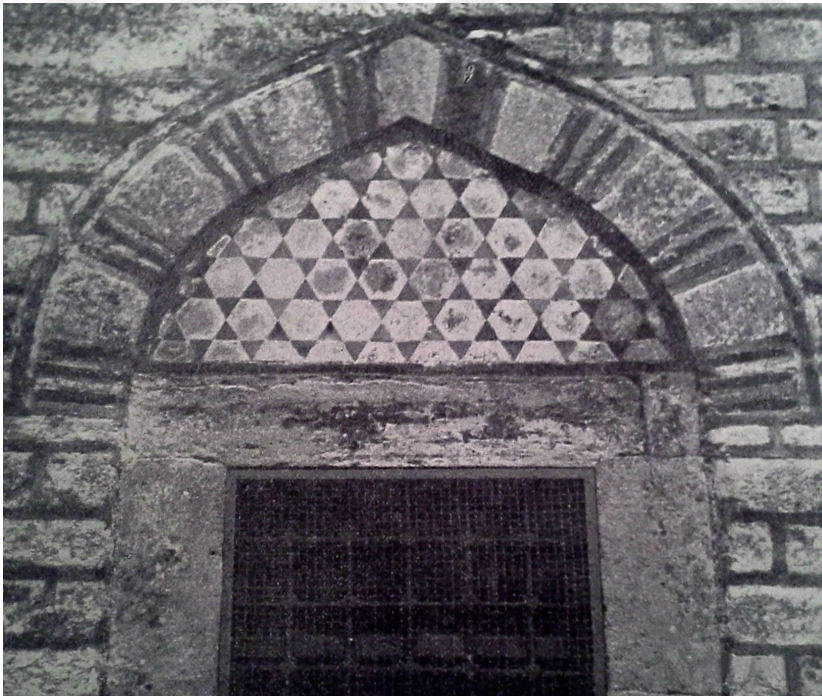


Figure 39: Glazed brick decoration of the Akdeniz Başkurşunlu Madrasa window. Source: Ekrem Hakkı Ayverdi (*Osmanlı Mimarisinde Fatih Devri*, İstanbul, 1973).



Figure 40: Columns in the courtyard of the Fatih Tabhane. Source: Author's photograph.



Figure 41: One of the rectangular columns in the courtyard of the Fatih Tabhane. Source: www.formgrup.com

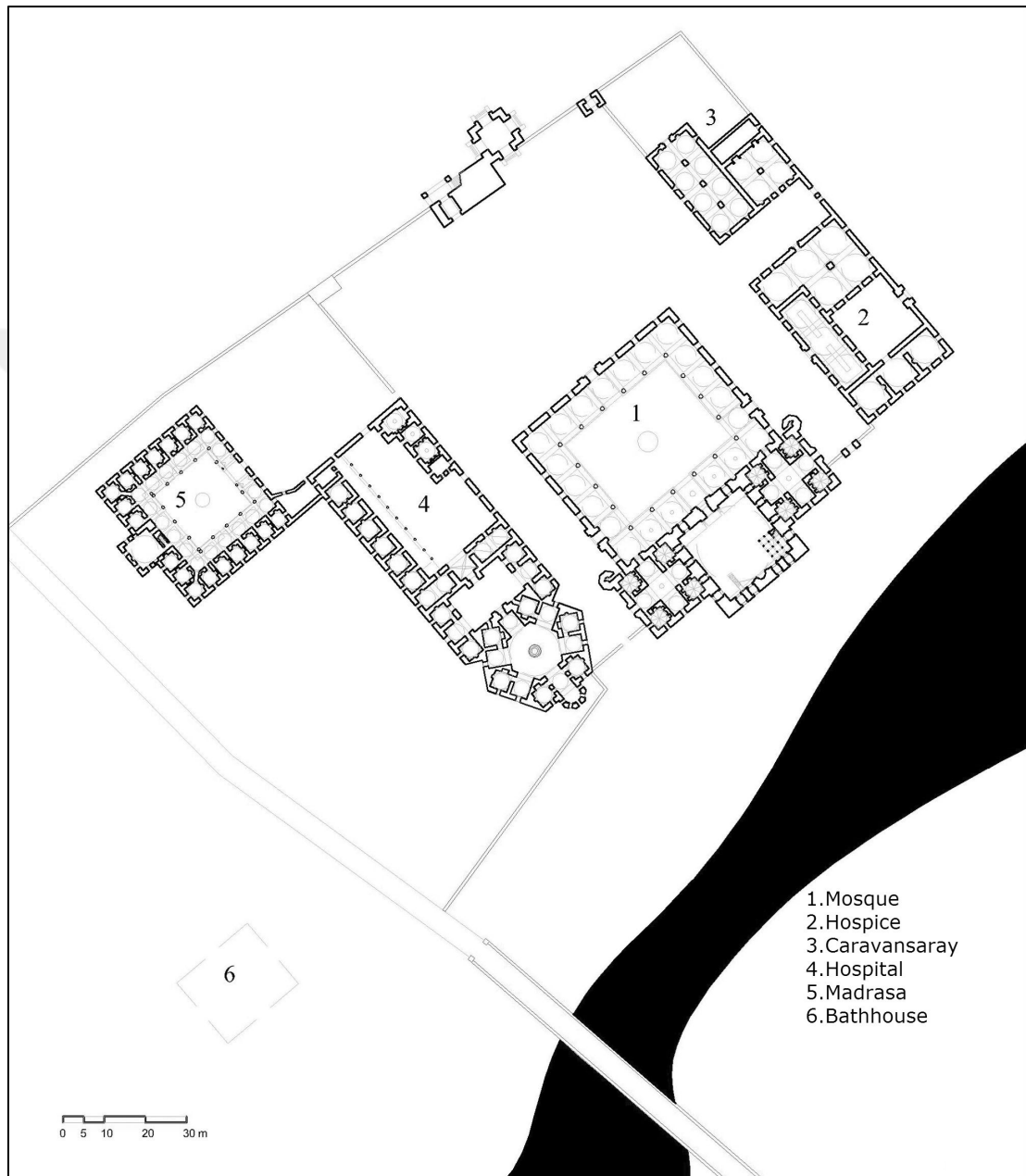


Figure 42: General layout of the Bayezid II Complex. Source: Gulru Necipoglu (*The Age of Sinan: Architectural Culture in the Ottoman Empire*, Reaktion Books, 2010).



Figure 43: The Bayezid II Complex. Source: www.saglikmuzesi.trakya.edu.tr



Figure 44: The monumental gate of the Bayezid II Mosque. Source: Author's photograph.

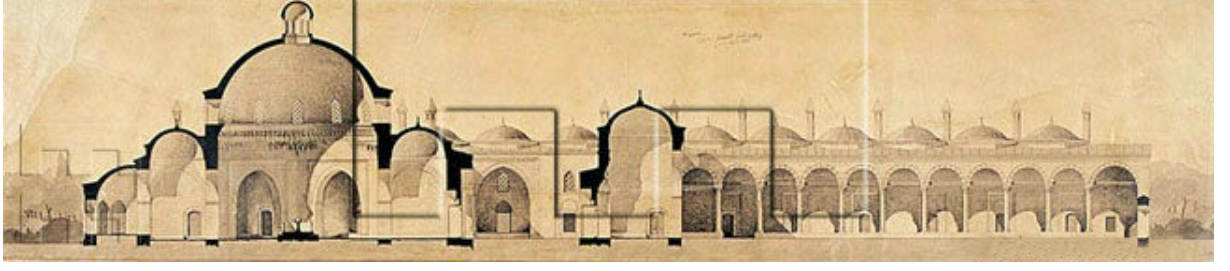


Figure 45: Drawing of the Bayezid II Darüşşifa by Sedat Çetintaş (ITU Faculty of Architecture Archive). Source: www.archmuseum.org



Figure 46: The northern entrance of the Bayezid II Darüşşifa in 1970s. Source: Ayten Altıntaş (Gönül Cantay, *Anadolu Selçuklu Ve Osmanlı Darüşşifaları*, Atatürk Kültür Dil ve Tarih Yüksek Kurumu, Atatürk Kültür Merkezi, 1992).



Figure 47: The state of the first courtyard of the Bayezid II Darüşşifa in the 1970s Source: Ayten Altintas (Gönül Cantay,. *Anadolu Selçuklu Ve Osmanlı Darüşşifaları*, Atatürk Kültür Dil ve Tarih Yüksek Kurumu, Atatürk Kültür Merkezi, 1992).

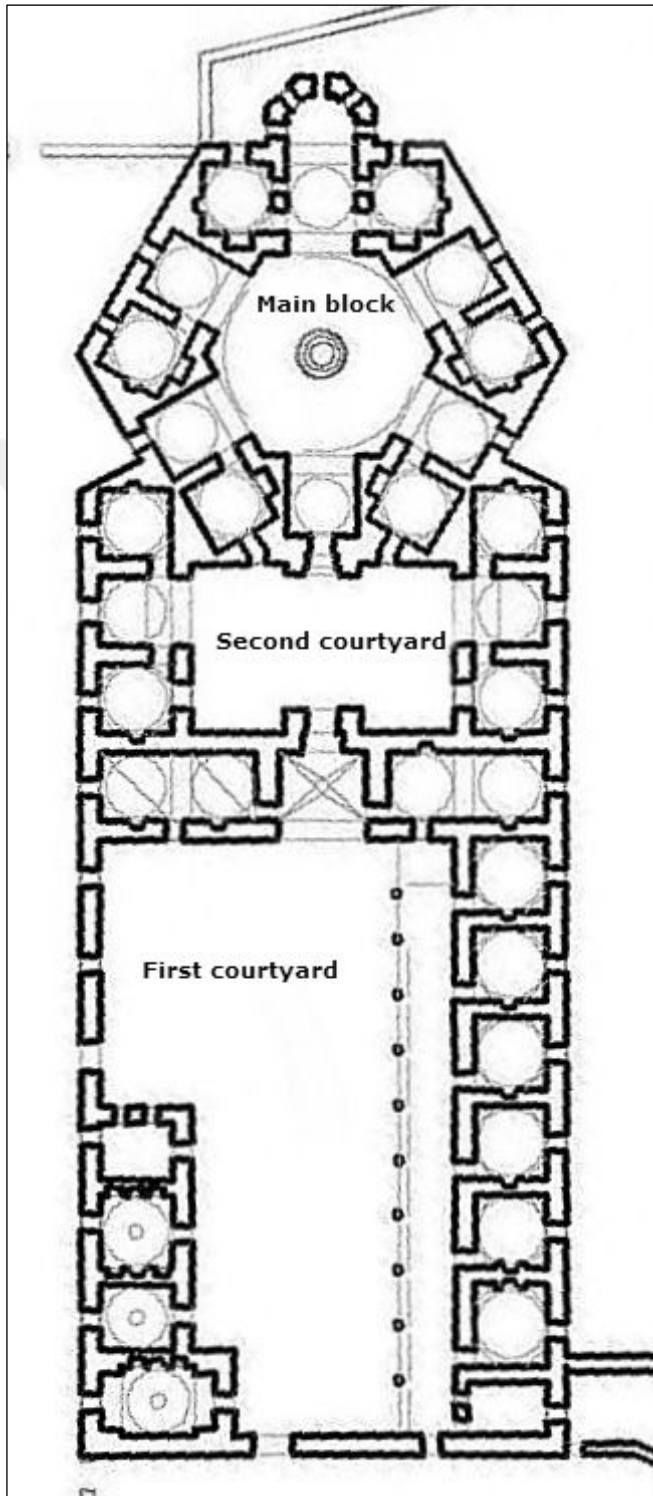


Figure 48: Ground plan of the Bayezid II Darüşşifa (Detail from Necipoğlu).

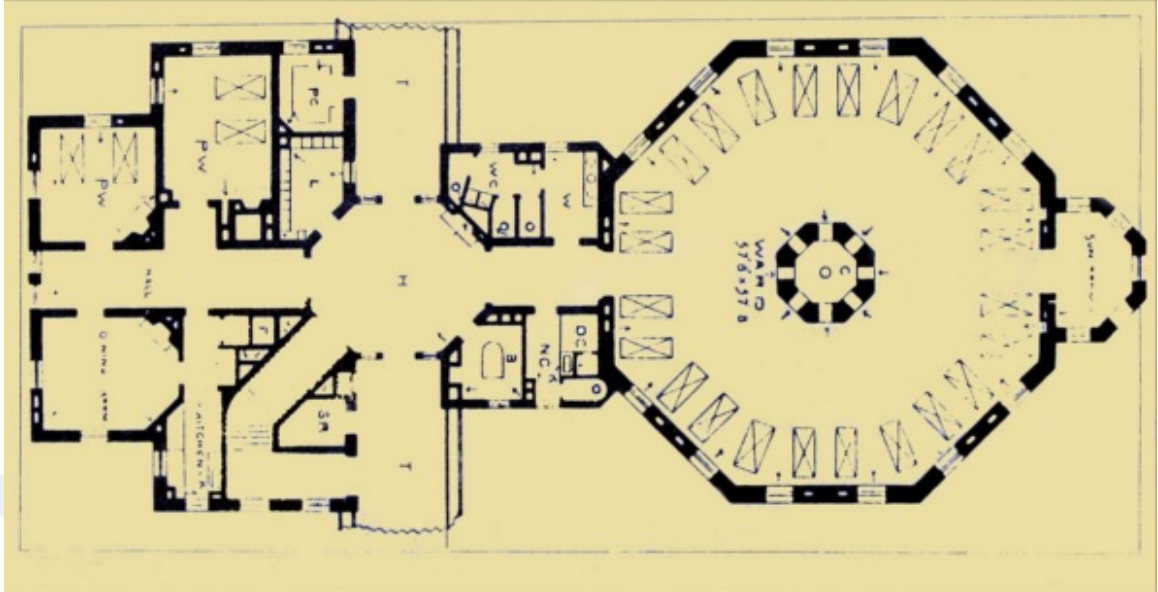


Figure 49: Ground plan of the Johns Hopkins Hospital built in 1876 in Baltimore. Source: Arslan Terzioğlu (Ratıp Kazancıgil, Nilüfer Gökçe, “The Edirne Sultan II. Bayezid Darüşşifa,” *The Şifahanes of Philantropic Monuments of the Seljuk and Ottoman Eras*, ed. Abdullah Kılıç, Medical Park, İstanbul: 2012).



Figure 50: Rooms in the North east wing of the Bayezid II Darussifa. . Source: Author’s photograph.



Figure 51: The first courtyard of the Bayezid II Darussifa. Source: Author's photograph.



Figure 52: The main block of the Bayezid II Darussifa. Source: Author's photograph.



Figure 53: The mihrab-like room opposing the entrance gallery in the Bayezid II Darussifa. Source: Author's photograph.



Figure 54: The main entrance to the first courtyard of the Bayezid II Darussifa. Source: Author's photograph.



Figure 55: The gate, which connects the first and the second courtyards of the Bayezid II Darussifa. Source: Author's photograph.



Figure 56: The gate of the main block of the Bayezid II Darussifa. Source: Author's photograph.



Figure 57: Water runnel in the Bayezid II Darussifa. Source: Nina Ergin (“Healing by Design? A Multi-Sensorial Approach to Early Modern Ottoman Hospital Architecture,” *Turkish Historical Review* 6 , 2015)

APPENDICES

Employee	Number of employees	Coins (food allowance included) (in <i>hyperpyra nomismata</i>)
Infirmarian (<i>nosokomos</i>)	1	8.6
Primikerios	2	8
Chief physicians (Protomenitas)	2	7.5
Chief surgeons	2	7.5
Physicians (<i>iatroi</i>)	4	6.8
Monastery physicians	2	4.25
Outpatient clinic physicians	2	4.25
Outpatient clinic surgeons	2	4
Female physician	1	3
Attendants	2	3.16
Superintendent (<i>meizoteros</i>)	1	4.3
Chief pharmacist	1	3.5
Certified assistants (<i>hypourgoi embathmoi</i>)	16	2.66
Certified female assistants	4	2.66
Auxiliary assistants (<i>hypourgoi perissoi</i>) / female assistants	8	2.08
Certified druggists	3	3.46
Auxiliary druggists	2	2.58
Outpatient clinic auxiliary assistants	4	2.58
Orderlies (<i>hyperetai</i>)	8	4.25
Female orderlies	3	4.25
Lectors	2	3
Doorkeeper	1	3
Keeper of the kettles	1	3.25
Cooks	2	3
Laundresses	5	1.5
Priest	1	3
Undertakers	4	2
Purser	1	2.33
Bakers	2	5
Groom	1	4
Miller	1	1
Drain cleaner	1	2.16
Sharpener	1	1.5
Hernia specialist	1	3.66
Coppersmith	1	2

Table 10: Salaries of the Pantokrator Xenon staff

Employee	Number of employees	Coins (in hyperpyra nomismata)
Physician	3	16
Assistant	1	12
Nurse	1	14
Head pharmacist	1	12
Attendant	6	10
Chief druggist	2	12
Priest	1	12
Blood-letter	1	4
Servant	3	10
Cook	1	10
Laundress	1	5

Table 11: : Salaries of the Lips Xenon staff.

Employee	Number of employees	<i>Akçe</i> paid per day (<i>dirham</i>)
<i>Tabib-i evvel</i> (head physician)	1	12
<i>Tabib</i> (physician)	2	8
<i>Şerbetiyan</i> (syrup makers)	2	2
<i>Aşşâb/Saydalâni</i> (pharmacist)	2	2
<i>Tabbâh</i> (cook)	1	2
<i>Habbaz</i> (baker)	1	2

Table 12: Wages of the Yıldırım Bayezid Darüşşifa staff according to the *waqfiyya* (Çetin).

Employee	Number of employees	Akçe paid per day (dirham)
<i>Tabib-i evvel</i> (head physician)	1	12
<i>Tabib</i> (physician)	2	8
<i>Şerbetiyan</i> (syrup makers)	2	2
<i>Aşşâb/Saydalâni</i> (pharmacist)	2	2
<i>Tabbâh</i> (cook)	1	2
<i>Habbaz</i> (baker)	1	2

Table 13: Wages of the Yildirim Bayezid Darüşşifa staff in 1565 (Çetin).

Employee	Number of employees	Akçe paid per day (dirham)
<i>Tabib-i evvel</i> (head physician)	1	25
<i>Tabib-i sâni</i> (junior physician)	1	15
<i>Cerrah</i> (surgeon)	2	2
<i>Kenhâl</i> (ophthalmologist)	1	2
<i>Tabbâh</i> (cook)	2	2
<i>Katib</i> (clerk in charge of budget)	1	2
<i>Bevâb</i> (doorman)	1	2
<i>Kilârî</i> (storage officer)	1	2
<i>Kayyım</i> (servant)	3	2
<i>Câmeşûy</i> (launderer)	1	2
<i>Gassal</i> (the person who washes the deceased)	1	2
<i>Vekilharç</i> (clerk in charge of provisions)	1	2

Table 14: Wages of the Yildirim Bayezid Darüşşifa staff in 1662 (Çetin).

Employee	Number of employees	<i>Akçe</i> paid per day (<i>dirham</i>)
<i>Nâzır</i> (governor)	1	5
<i>Tabib</i> (physician)	1	20
<i>Cerrah</i> (surgeon)	1	5
<i>Kayyım</i> (servant)	2	3
<i>Tabbâh</i> (cook)	2	3
<i>Kâtib</i> (clerk in charge of budget)	1	10
<i>Kilârî</i> (storage officer)	1	4
<i>Vekilharç</i> (clerk in charge of provisions)	1	4

Table 15: Wages of the Fatih darüşşifa staff in the foundation period (according to the version in the archives of the Directorate General of Foundations, no.2114).

Employee	Number of employees	Akçe paid per day (dirham)
<i>Tabib-i evvel</i> (head physician)	1	20
<i>Tabib-i sâni</i> (junior physician)	1	20
<i>Cerrah</i> (surgeon)	1	8
<i>Kenhâl</i> (ophthalmologist)	1	8
<i>Edviye-i kûb</i> (drug pounder)	1	6
<i>Emin-i mahzen</i>	1	4
<i>Kayyum</i> (servant)	1	3
<i>Tabbâh</i> (cook)	2	3
<i>Kâtib</i> (clerk in charge of budget)	1	10
<i>Kilârî</i> (storage officer)	1	4
<i>Vekilharç</i> (clerk in charge of provisions)	1	4
<i>Ferraş</i> (sweeper)	1	3
<i>Bevvâb</i> (doorman)	1	3
<i>Mâni'ün-nukûş</i> (renovator-cum-odd-job-men)	1	2

Table 16: Wages of the Fatih Darüşşifa staff according to the archives of the Directorate General of Foundations, 28. Anadolu Vakfiye Defteri (Unan).

Employee	Number of employees	Akçe paid per day
<i>Tabib-i evvel</i> (head physician)	1	30
<i>Tabib</i> (physician)	2	20
<i>Cerrah</i> (surgeon)	2	7
<i>Kenhâl</i> (ophthalmologist)	3	5
<i>Edviyeci</i> (drug pounder)	1	6
<i>Kayyım</i> (servant)	3	3
<i>Tabbâh</i> (cook)	2	3
<i>Kâtib</i> (clerk in charge of budget)	1	4
<i>Vekilharç</i> (clerk in charge of provisions)	1	4
<i>Kilerdâr</i> (storage officer)	1	4
<i>Ferraş</i> (sweeper)	1	3
<i>Bevvâb</i> (doorman)	1	3
<i>Gassal</i> (person who washes the deceased)	1	3

Table 17: Wages of the Bayezid II Darüşşifa staff in 1487 (Müderrişoğlu)

Employee	Number of employees	Akçe paid per day
<i>Tabib-i evvel</i> (head physician)	1	30
<i>Tabib</i> (physician)	2	20
<i>Cerrah</i> (surgeon)	2	7
<i>Kenhâl</i> (ophthalmologist)	2	7
<i>Edviyecî</i> (drug pounder)	1	6
<i>Kayyım</i> (servant)	4	3
<i>Tabbâh</i> (cook)	2	3
<i>Kâtib</i> (clerk in charge of budget)	1	4
<i>Vekilharç</i> (clerk in charge of provisions)	1	3
<i>Kilerdâr</i> (storage officer)	1	4
<i>Ferraş</i> (sweeper)	1	3
<i>Bevvâb</i> (doorman)	1	3
<i>Buhuri</i> (person in charge of incense burners)	1	3
<i>Gassal</i> (person who washes the deceased)	1	3

Table 18: Wages of the Bayezid II Darüşşifa staff in 1507 (Müderrişoğlu).

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