

Hospitals in the Ottoman Period and the Work Of Sinan the Architect: Suleymaniye Complex Dar Al-Shifa and the Medical Madrasa



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Abstract: *The hospitals, dar al-shifas, one of the leading welfare associations in the Turkish-Islamic foundation culture, which required an architectural understanding of the application of medical profession, had a great impact on the formation of the cities. These establishments, which had an important place in Islamic world even before the Ottoman period, were able to preserve and maintain their entities such as mosques, prayer rooms, lodges, madrasas and baths with the help of their foundations. In time, the establishments, which were only treating patients in their earlier days, evolved into research and academic units where medical science was taught. Particularly, the dar al-shifas introduced by the Seljuks have a great importance in the history of Turkish medicine. During the studies with regard to the history of medicine, important data was collected about Gevher Nesibe Hospital and Medical Academy (1205-1206), built in Kayseri on behalf of the Seljuk Emperor Kilicaslan II's daughter Gevher Nesibe Sultan, and Sivas Hospital, built by the Anatolian Seljuk Emperor Izzeddin Keykâvus (1217 – 1218). The Ottoman period health care organizations, which include special architectural resolutions aimed at the application of medical profession, are similar to the Seljuk health care organizations in style. Within the scope of this study, among the Ottoman period hospitals with a general plan scheme of rooms aligned around a central open atrium, the Medical Madrasa and Dar al-shifa structures, which are parts of the Suleymaniye Complex built by Sinan the architect, will be examined.*

Keywords: *Suleymaniye complex, Ottoman period, dar al-shifas, medical madrasa*

Osmanlı'da Darüşşifalar ve Mimar Sinan Eseri Süleymaniye Külliyesi Darüşşifa' sı ve Tıp Medresesi

Özet: *Türk-İslâm vakıf kültürü içerisinde önde gelen sosyal yardım kuruluşlarından biri olan Darüşşifalar, tıp mesleğinin uygulanmasına yönelik mimari anlayış gerektiren yapılar, kentlerin şekillenmesinde önemli etkisi bulunan yapı türlerindedir. Osmanlı İmparatorluğu'ndan önce de, İslâm dünyasında önemli bir yeri olan bu kuruluşlar, cami, mescid, tekke, medrese, hamam gibi varlıklarını vakıfları ile korumuşlar ve sürdürmüşlerdir. İlk kuruldukları dönemlerde sadece hasta tedavi eden bu kurumlar zamanla tıp ilminin de tahsil edildiği araştırma ve akademik birimler haline gelmişlerdir. Selçukluların özellikle Anadolu'da ortaya koyduğu darüşşifalar Türk tıp tarihi açısından önem taşımaktadırlar. Bunların içerisinde Selçuklu Hükümdarı II. Kılıçaslan'ın kızı Gevher Nesibe Sultan adına Kayseri'de yaptırılan Gevher Nesibe Tıp Medresesi ve Şifahanesi (1205-1206) ile Anadolu Selçuklu Sultanı İzzeddin Keykâvus tarafından (1217 – 1218) yaptırılan Sivas Darüşşifası hakkında, tıp tarihi açısından yapılan araştırmalardan önemli bilgilere ulaşılmıştır. Tıp mesleğinin uygulanmasına yönelik özel mimari çözümler içeren Osmanlı Dönemi sağlık kuruluşları da, biçimsel olarak Selçuklu sağlık yapılarını anımsatır. Bu çalışma kapsamında, genellikle, merkezi ve üzeri açık bir orta avlu çevresine dizilmiş oda sıralarının oluşturduğu plan şemasına sahip Osmanlı dönemi darüşşifalarından, Mimar Sinan'ın yaptığı Süleymaniye Külliyesi'nin bir parçası olan Tıp Medresesi ve Darüşşifa yapıları incelenecektir.*

Anahtar kelimeler: Süleymaniye Külliyesi, Osmanlı dönemi, Darüşşifa, Tıp medresesi

1. HOSPITALS IN THE OTTOMAN PERIOD

In history, hospitals have been referred to with many different names, including “*Bimaristan, Maristan, Darussihha, Darulâfiye, Me'menul-istirahe, Daru't-tibb, Darulmerza, Sifaiye, Sifahane, and Bimarhane*” [1, 2]. Considered as social welfare centers in the Ottoman community, health care organizations were realized by being donated through foundations to society by the emperor as the leading donor, the noble families, high ranking government officers, and the upper crust. In fact, the underlying reason for their age long existence is the principle of outreach and development in Turkish-Islamic foundation culture. This situation continued until the beginning of the 19th century, and later health care organizations were put under state-control, and new hospitals in accordance with the modern medicine concept in the west were introduced [3].

With the influence of the Seljuk culture, the Ottomans built dar al-shifas in many districts of the empire starting from Bursa. In the dar al-shifas which were constructed with the purpose of treating illnesses, medical training was also given in the frame of master-apprentice relationship as a continuation of Islamic tradition. The administrative duties of all the hospitals in the Ottoman period were carried out by the chief physician who was in charge of health care in the palace and in the state; whenever a doctor was needed, the chief physician, who kept a record of authorized doctors' names and conditions, would appoint senior and competent doctors upon request [4]. In the Ottoman Empire, where medical training or medical practice was carried out within the body of dar al-shifas, the first dar al-shifa was built in Bursa by Yildirim Beyazid (1399-1400). Subsequent to this, Fatih the Conqueror Dar al-shifa was established in 1470, and it continued its operations until 1824. It is known that music therapy was used to cure mental patients in Fatih Dar al-shifa. It is also known that Beyazid Dar al-shifa in Edirne, built by Sultan Beyazid II, had an important place in treating eye diseases and curing mental patients with music therapy. Besides, it is known that private medical training was carried out in Medrese-i Etibbâ, which is connected to the hospital with a gateway [5]. Even though Bimaristan, which was built in Manisa (1522) by Ayşe Hafsa Sultan, the wife of Yavuz Sultan Selim, was a small hospital, it had an important place until the end of the 19th century due to its practice of using music therapy to treat mental patients. Built by Suleiman the Magnificent between the years of 1550-1557, the hospital, which is located on the west corner of Suleymaniye Complex, exhibits an authentic design with its multi-functions (like hospital, bath, and bakery). Located opposite it, Suleymaniye Medical Madrasa, where students had applied courses and did internship, was also planned as a special institution. Haseki Dar al-shifa, which was built as a general hospital by Suleiman the Magnificent's wife Haseki Hürrem Sultan in Istanbul in 1550, still continues its operations with the name Haseki Hospital.

The two other significant hospitals established during the Ottoman period are Valide-i Atîk Hospital and Sultan Ahmed Hospital. The former, where all kinds of patients were treated, was built by Sinan the architect in Uskudar in 1583 upon the demand of Nûr Bânu Sultan, the wife of Sultan Selim II, and the latter was built in 1617 [6].

1.1. Dar al-shifas in Acts of Foundation

Written documents show that these foundations provided for the needs of the public regardless of their economic situation, religion, language and race, and at the same time they supplied medicine, food, and treatment free of charge [1, 7, 8, 9]. It is observed that music and inculcation were used while treating mental patients in particular [1, 8]. It is learnt that inpatients were given frequent baths and special clothes to keep both the patients and their rooms clean. It can be understood from the carefully kept records that this was not something arbitrary; rather it was a practice which was done mandatorily [9]. It is even learnt that patients were given some money subsequent to their time of recovery so that they could cover some of their expenses. In some acts of foundation, working conditions of doctors and staff, and even how patients should be treated were specified [9]. For instance, in the act of foundation of the dar al-shifa

made by Sultan Kalavun in Cairo in 1284, how the rooms were to be furnished was indicated, and we learn from the research by Esref Buharali that in the hospital which was built 731 years ago to keep the health conditions of the patients stable, bedsteads were to be made of iron and wood; beds, quilts and covers were to be made of cotton; and pillows were to be made of leather; with the water from the River Nile, water supply networks were to be installed in all wards and departments; patients were to be given musk on a daily basis; food was to be served in earthenware; rooms were to be illuminated by oil lamps; hand-held fans made from the leaves of date trees were to be distributed to patients so that they wouldn't get exhausted from heat [9]. In addition, in the same act of foundation, detailed clauses from medicine making to kitchen cleaning were stated and that every night a concert was to be given by four people playing the lute to cheer the patients up [9]. The descriptions and applications used hundreds of years ago are indicators of the value given to patients and the level of development during those days.

2. SULEYMANIYE COMPLEX DAR AL-SHIFA¹

The complexes which emerged in the scope of Islamic society foundation law and concept of charities consist of a group of structures including a mosque in the center, and baths, madrasas, schools, imarets, libraries, public soup-kitchens, caravansaries, bazaars, shrines, Islamic monasteries and hospitals. The complexes, with their multiple functions, are central core structures which shape neighborhoods and towns. Istanbul, however, after being the capital of the Ottoman Empire, began to take shape due to the efforts to make it the scientific and cultural center of the Islamic world within the scope of fast reconstruction activities. In this city, Suleymaniye Complex, built by Suleiman the Magnificent between the years of 1551-1557, consisting of mosques, madrasas, libraries, infant schools, baths, imarets, burial areas and shops, is a complex which became more prominent with its educational and social services rather than its religious identity. The Suleymaniye Dar al-shifa, which is a part of Suleymaniye Complex, on the other hand, emerges as an institution which should be examined in view of the importance that the dynasty gives to public health care and medical science. While important people such as Katipzade Mehmet Refi Efendi and Hekimbasi Gevrekzade Hafiz Hasan Efendi taught at Suleymaniye Medical Madrasa, which was recognized as one of the most valued medical centers of the Ottomans, Hekimbasi Hasan Efendi and Sanizade Ataullah Efendi served in the hospital [10].

During that period it was stipulated that the mudarris of this madrasa be as knowledgeable as the chief physician of the palace. According to the act of foundations of Suleymaniye Complex, there were 1 chief physician, 3 physicians, 2 ophthalmologists, 2 surgeons, 1 pharmacist, 1 pharmacy technician who prepared medicine and syrup, 5 pharmacy assistants, 1cellarer, 1 bookkeeper and 1 caregiver in the hospital [10].

2.1. Architectural Formation in Dar al-shifa

Dar al-shifa

Sinan the architect devised a plan unlike the plans of previous dar al-shifas while designing the dar al-shifa in Suleymaniye Complex in Istanbul in 1553-1559 on behalf of Suleiman the Magnificent: Two rectangular yards parallel to each other, archways leading to the yards, and a series of rooms behind the archways [Figure 1, 2]. By making the best use of the topographic conditions where the hospital was located, a basement was planned under the structure. In the basement, some areas were formed under the archways with a covered brick tunnel vault and loophole windows. The intended use of the rectangular saloon was for incurable mental patients [11].

¹ In order to get more detailed information about Suleymaniye Complex, please make use of the following references: K rk o lu Kemal Edip (1962) *S leymaniye Vakfivesi*. Ankara: Vakıflar Umum M d rl g  Barkan  mer (1974) *S leymaniye Cami ve İmareti İnşaatı (1550-1557) c.I*. Ankara: T rk Tarih Kurumu Basımevi.

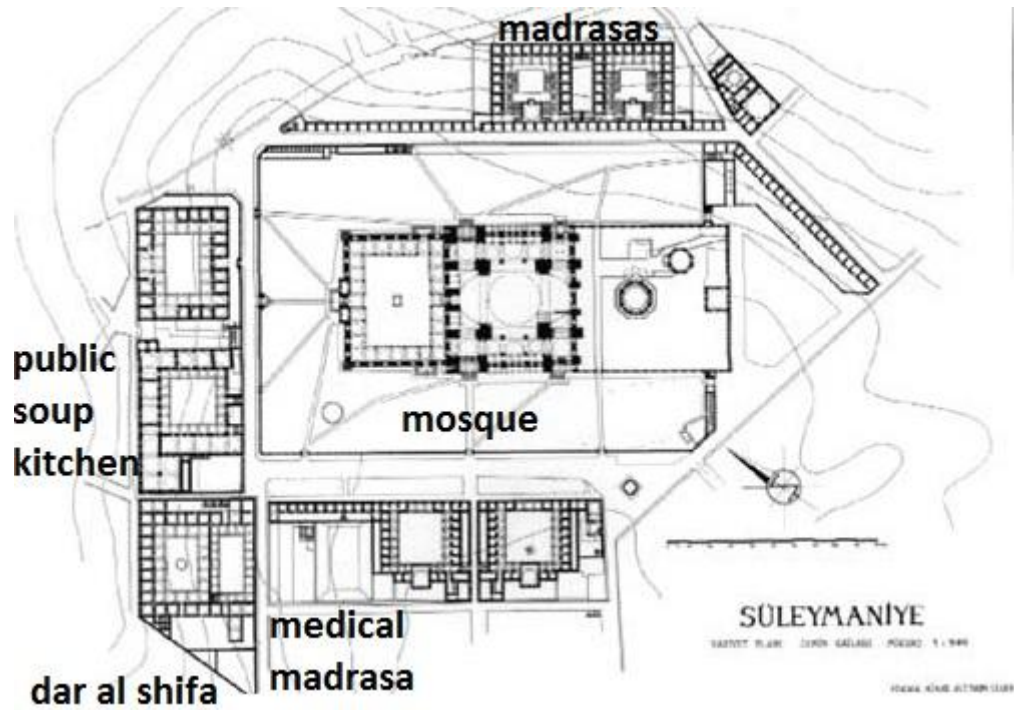


Figure 1. Site Plan of Süleymaniye Complex
(Plans prepared by Ali Saim Ulgen)



Figure 2. Medical Madrasa and Dar al-shifa in Süleymaniye Complex [12]

Under the northwest archways and hinterland of the structure, Sinan the architect planned nine rectangular areas with profound depth, and he also designed the monumental sphere of the dar al-shifa overlooking Golden Horn as a two-storey building. The domed rectangular areas surrounding the first yard were intended for the use of the personnel of the dar al-shifa. Sinan the architect connected the whole dar al-shifa block to the streets with two doors opening to Dar al-shifa Street [12].

Baths

While domed rooms were aligned behind the archways of the second yard for patients, the private bath space was located in the south corner. Planning a bath for patients within the borders of the structure is integral in showing the level achieved in hospital planning (Figure 3, 4).

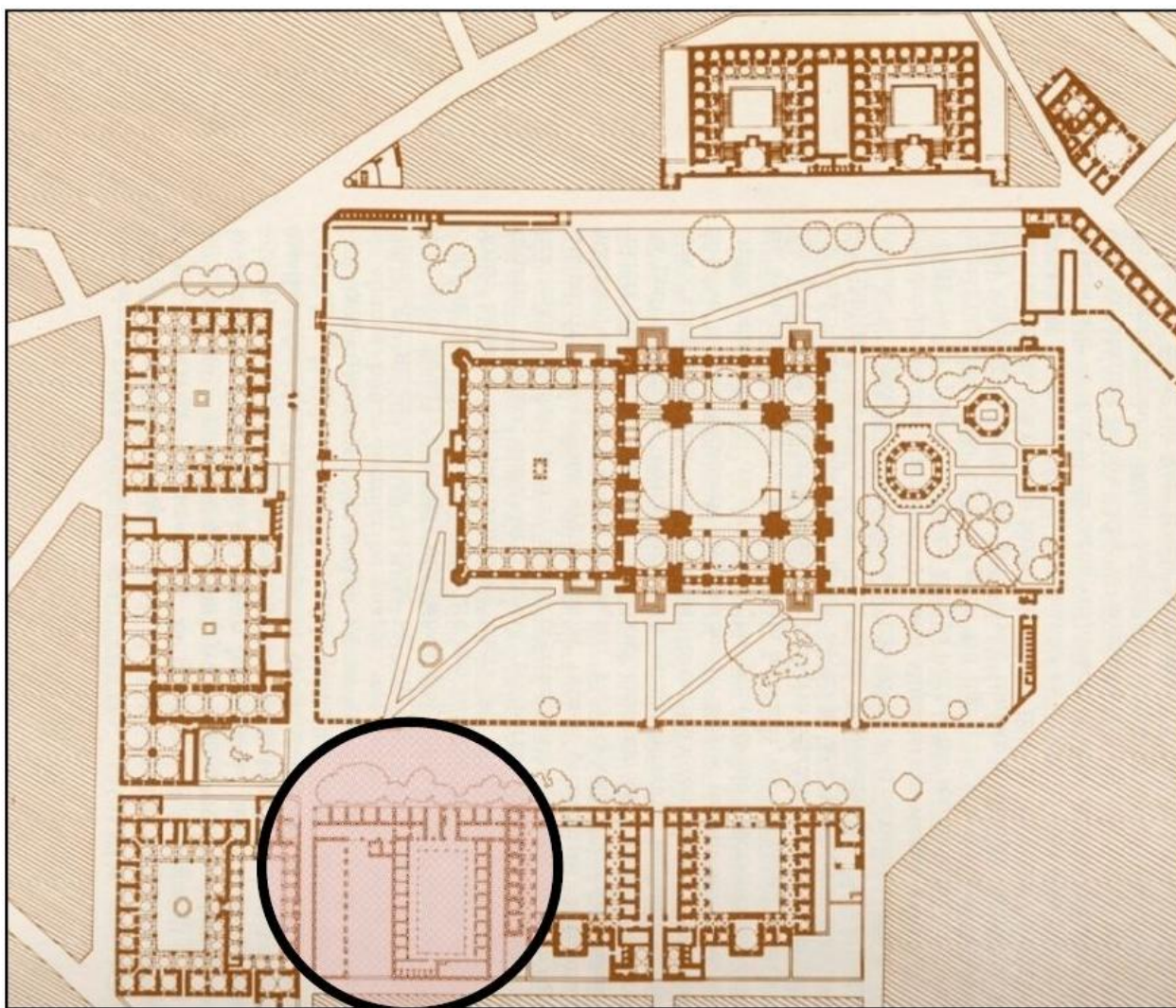


Figure 3. Plan of Medical Madrasa in Suleymaniye Complex
(drawn by Feridun Akozan, 1961; tinting done by Tuna Kan) [14].

Fodl Furnace

Another element which makes dar al-shifa special is the fodl furnace which would only serve the place itself. At the end of the first yard of dar al-shifa, there was a fodl (a kind of bread) furnace in a comparatively big rectangular room with a chimney.

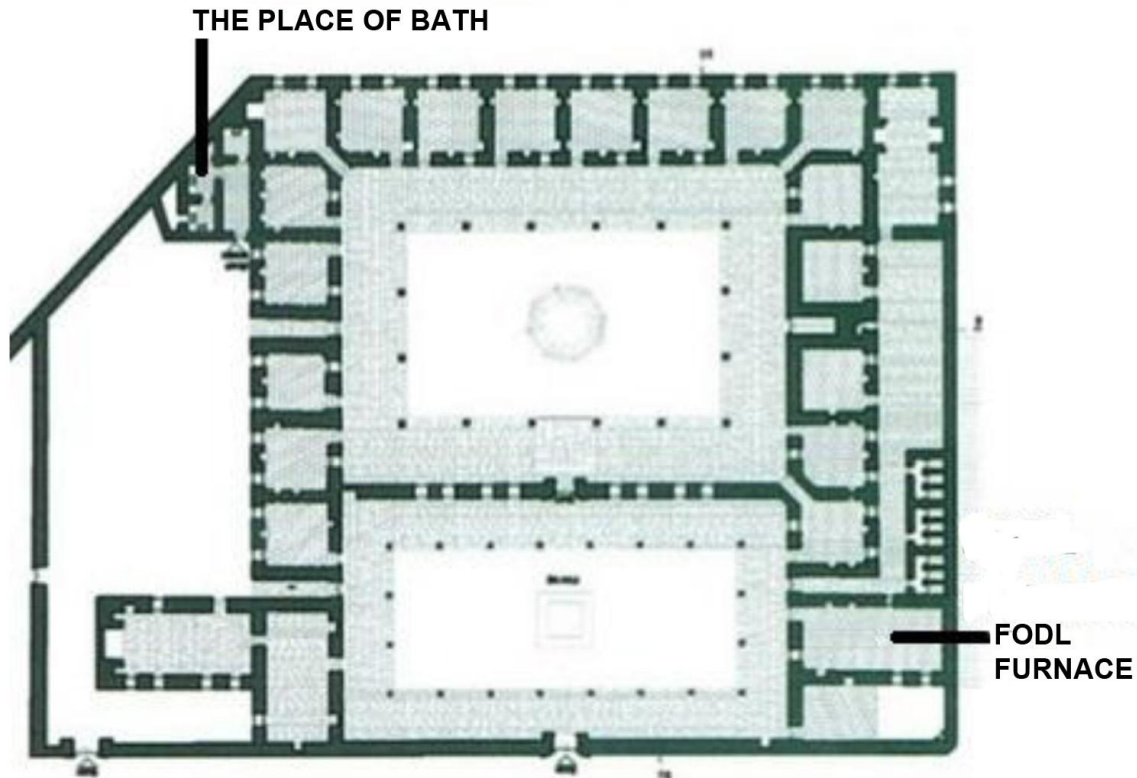


Figure 4. Hospital Plan in Suleymaniye Complex with bath and fodl furnace [15].

2.2. Dar al-shifa Today

It is known that the hospital had a big staff for long years, and the existence of a psychiatry- neurology service and music therapy made it different from other hospitals, which continued until the mid 19th century. The building, where Italian Dr. Mongeri (1815-1882) started working as a chief physician in 1858, was used as an isolation hospital during the cholera epidemic which started in 1865; later, it was allocated to mental patients brought from Toptasi Hospital. The functioning of Dar al-shifa as a hospital lasted until 1873. After the establishment of the republic, some additions and alterations were made to the structure where the military press settled in, and this spoilt the qualities of the classical Ottoman architecture. When the military press evacuated the building in 1972, General Directorate of Foundations rented the building out to a private school giving religious education, and the alterations made during these years led to the deterioration of the structure's architecture. Recently, the restoration of the structure has been completed by General Directorate of Foundations, and it has been decided that it be utilized as a part of Suleymaniye Manuscript Library.

3. SULEYMANIYE MEDICAL MADRASA

The fact that Sinan the architect built a medical madrasa separate from the hospital within the scope of Suleymaniye Complex makes the structure distinct from its counterparts. In the resources, the structure is referred to as *Medrese-i Tibbiye* or *Daru't-Tibb*. The Ottoman medicine attained a formal educational institution thanks to the medical madrasa which Suleiman the Magnificent had built in his name in 1556 within the complex [13]. An extension of the tradition of medical training done in madrasas preceding it, Suleymaniye Medical Madrasa is the only one to be stated as a “medical madrasa” in its act of foundations, unlike the previous hospitals [13]. With the introduction of this madrasa, hospitals and medical madrasa started to share tasks; while hospitals dealt with the practice of medical science, Suleymaniye Medical Madrasa started to take care of the theoretical aspect of it. This aspect of the madrasa may be said to symbolize a transition in mentality as the ongoing classical concept of education in the form of master- apprentice relationship was replaced with institutionalization and specialization. The establishment of Suleymaniye Medical Madrasa did not prevent the continuation of the traditional way of educating doctors which was based on the longstanding tutor-pupil relationship. Along with the several imperatives brought about by the period’s political, economic and social conditions which led the Ottomans to establish a specialized madrasa, their efforts to find a prospective way out for the medical knowledge they gained and enriched with their own qualities was also effective [13].

3.1. Architectural Formation in Medical Madrasa

Medical Madrasa

The two side wings of the other three wings of the madrasa are behind the archways, and are in the form of rooms with furnaces and windows looking out on the yard [Figure 3]. In front of these places are a pent roof and a long nave. The shops are located under this roof. Thus, the front facades of the rooms in the line of the shops, in other words the front facade belonging to the modern day Tiryakiler Carsisi, was planned to be two-storied. In the medical madrasa which was built separately from the hospital, both master-apprentice education and practical education serving patients were able to be sustained.

Drug Houses

Another feature unique to the hospital was that Dâr’ül Âkâkîr (drug house), known as the drug store, was located on the facade facing the hospital. It is known that, during its period, drugs were distributed from Dâr’ül Âkâkîr (drug house) to other hospitals and pharmacies [12].

3.2. Medical Madrasa at the Present Time

Although the medical madrasa continued its genuine functionality until the 1850s, it remained inactive with the introduction of the modern school of medicine, and served as a guest house for the victims of the fire in 1918. It is learnt that the building was used until 2009, with the Suleymaniye Maternity Hospital built in 1946 at the back side of the building which was repaired between the years of 1944-45, during Dr. Lütü Kırdar’s Governorship and Mayorship of Istanbul [12, 13]. The original part of the medical madrasa which survived until today is restricted to the front section, which is known as Tiryakiler Carsisi. The Medical Madrasa was transferred to Suleymaniye Manuscript Library with the Law No. 596 of Protection Council, passed on 23.01.2009 [14].

4. CONCLUSION

In one of her researches, by making the explanation “*For its period, Suleymaniye Complex was an extraordinary group of structures and the education meaning complex-university, which was first seen in Sahn-ı Seman Madrasas of Fatih Complex in Istanbul, was developed further and an education and health site was realized by giving importance to both human health and medical education*”, Gonul

Cantay emphasized the significance of Suleymaniye Hospital in historic process by using the definition of complex-university (Figure 5) [12].

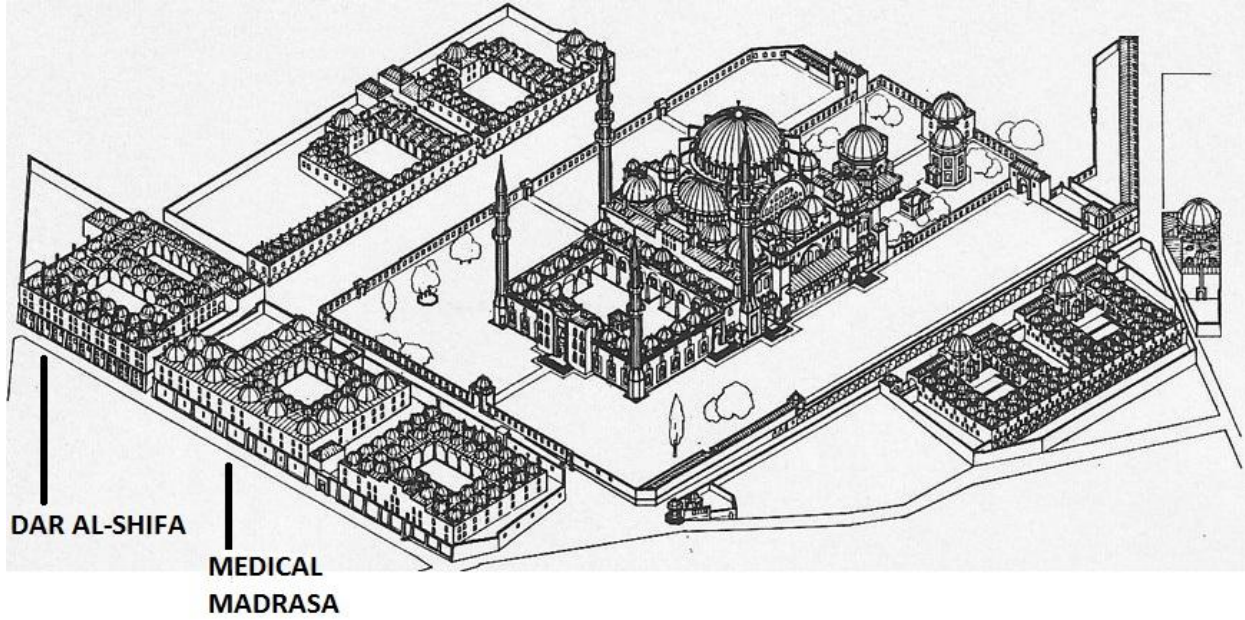


Figure 5. Isometric view of overall complex [16].

In Suleymaniye Hospital, which has a different plan scheme from Ottoman period hospital architecture and considered the largest due to its dimensions, the grand master Sinan the architect planned the patient rooms and staff rooms separately, and conceived the madrasa building allocated to medical education as a separate building from the hospital. Medical education which was realized in the hospitals until that time developed an autonomous identity by its disintegration. In addition to this planning, building the bath, bakery and drug house with a specific design can be defined as the magnificent result of the integration of function and form.

Suleymaniye Hospital, which was thought, designed and applied 456 years prior to our day is an unmatched example similar to the concept of applied medicine today in which theoretical medical education and health care services go hand in hand; therefore, it stands as a structure which is worth examining in more depth as it is a physical indicator of the importance given to human health and medical education in the 16th century.

REFERENCES

- [1] Cantay, G., 1992. Anadolu Selçuklu ve Osmanlı Darüşşifaları. Ankara: AKDITYK Atatürk Kültür Merkezi, s. 1-8, 15-19, 45-59, 67-71.
- [2] Bayat A., H., 2003. Tıp Tarihi. İzmir: Sade Matbaa, s. 174, 177, 227-231, 251.
- [3] Fişek, N., 1971. "Türkiye' de Sağlık Devrimi", Mimarlık Dergisi, sayı 9-10, İstanbul: T.C. Mimarlar Odası, s. 9.
- [4] Fazlıoğlu, İ., 1997. "İbn Nefis'in Eserlerinin Osmanlı Tıp Eğitimine Etkisi", II. Uluslararası Kültür Sempozyumu: Tabib, Fakih ve Filozof İbn en-Nefis, Kuveyt. (<http://www.ihsanfazlioglu.net/yayinlar/makaleler/1.phpid=159>)
- [5] İzgi, C., 1997. "Osmanlı Medreselerinde İlim", c. II, İstanbul, s. 20-22.

- [6] **Ataseven, A., 1985.** “Tarihimize Vakfedilmiş Sağlık Müesseseleri Darüşşifalar”, II. Vakıf Haftası 3-9 Aralık 1984 Konuşmalar ve Tebliğler, Ankara, s. 157-162.
- [7] **Ünver A., S., 1940.** Selçuk Tababeti XI-XIV üncü Asırlar. Ankara: Türk Tarih Kurumu, s. 47-83.
- [8] **Terzioğlu A., 1970.** “Ortaçağ İslâm-Türk Hastahaneleri ve Avrupa’ya Tesirleri” Belleten, sayı 136, Ankara: Türk Tarih Kurumu, s. 121-149.
- [9] **Buharalı, E., 2005.** “Üç Türk Hükümdarın Yaptırdığı Üç Sağlık Kurumu: Tolunoğulları, Zengiler ve Memlüklerde Sağlık Hizmetleri” AÜ DTCF Tarih Bölümü Tarih Araştırmaları Dergisi, cilt 25, sayı 40, s. 29-39.
- [10] **Terzioğlu A., 1999.** Osmanlı’da Hastaneler Eczacılık Tababet ve Bunların Dünya Çapında Etkileri, İstanbul, s. 121-149.
- [11] **Gönül C., 1988.** “Sinan Külliyyelerinde Darüşşifa Planlaması”, Mimar Sinan Dönemi Türk Mimarlığı ve Sanatı, Türkiye İş Bankası Kültür Yayınları no 288 sanat dizisi 41, İstanbul, s. 48, 49.
- [12] <http://www.traveling-lady.com/5-amazing-mosques-to-visit-in-istanbul>
- [13] **Gönül C., 1988.** “Darüşşifalar”, Mimar Baş Koca Sinan Yaşadığı Çağ ve Eserleri, Ankara: Vakıflar Genel Müdürlüğü, s. 355-368.
- [14] **Kan, T., 2014.** İstanbul Süleymaniye Külliyesi Örneğinde Külliyyeler için bir Yönetim Modeli Yaklaşımı, yayınlanmamış doktora tezi, Mimar Sinan G. S. Üniversitesi, Mimarlık Anabilim Dalı, s.171, 269.
- [15] **Eyüpgiller, K., Özaltın, M., 2007.** Restitüsyon ve Restorasyon, Bir Şaheser Süleymaniye Külliyesi, s. 193-232, Kültür ve Turizm Bakanlığı, Kütüphaneler ve Yayınlar Müdürlüğü, Ankara.
- [16] **Zorlu, T., 2008.** “Klasik Osmanlı Eğitim Sisteminin İki Büyük Temsilcisi: Fatih ve Süleymaniye Medreseleri”, Türkiye Araştırmaları Literatür Dergisi, cilt 6, sayı:12, s.617.
- [17] <http://www.tamirhane34.com/index.php/sueleymaniye-complex>

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