

## ROBERT OERLEY and TUZLA MINERAL SPRINGS

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### INTRODUCTION

In the Tuzla borough of İstanbul are located mineral springs of great importance which have been known and used since ancient times.

Although the therapeutic value of Tuzla Mineral Springs has always been recognized, this value in terms of the history of architecture has not been very well understood. The current facilities in the springs were built in the Republican Period. The most important among them is the Spa Hotel, whose project was initiated by Robert Oerley. The other facilities include the management building, restaurant, watchman's booths, springhouses, cafeteria, wooden porch, small hotel, bungalows and toilets. These buildings have survived because their original functions were retained.

The Tuzla Mineral Springs Thermal Center has a significant value both in terms of history and architecture due to its mineral water potential due to the minerals it contains. However, the fact that it has not been adequately appraised has led to it being selected as the subject of this study. The objective is to expose the currently unknown architectural and cultural significance of Tuzla Mineral Springs. Therefore, the current situation of the formation period and process – the green fabric and the existing buildings – as well as its architectural characteristics and importance have been determined. Hence, those things that were and have still to be done architecturally for the sustainability of the Tuzla Mineral Springs area that is now in the form of two disconnected sections, namely the Great and Lesser Springs, in terms of its contributions to health and to the country's economy are here under scrutiny.

### HISTORICAL DEVELOPMENT OF TUZLA MINERAL SPRINGS

#### Ottoman Period

The history of Tuzla Mineral Springs dates from the Byzantine period. However, the extant documents are from Evliya Çelebi's *Seyahatname* [Book

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**Figure 1.** Tuzla Mineral Springs. Greater and Lesser springs areas (Tuzla Mineral Springs archive). The Tuzla Mineral Springs are located in the Evliya Çelebi neighborhood north of the Tuzla borough and southwest of the E-5 motorway (D-100), close to the İçmeler railway station, between the railway and the sea. The area consists of two disconnected sections, namely "The Greater Spring" and "The Lesser Spring". The Lesser Spring is located southeast of the Greater Spring. There is an area of dense housing between the two sections. The housing has partly extended into the area of the Lesser Spring. The Greater Spring area is divided into two by Atatürk Avenue.



**Figure 2.** Greater Spring. The E5 Motorway, Köprülü Kavşak, Railway and Greater Spring area connection (Tuzla Mineral Springs archive). Sahil Yolu Avenue, which is parallel to the railway, is east of the Greater Spring and Rauf Orbay Avenue which connects with the Tuzla İçmeleri Köprülü Kavşağı surrounds it on the north and west. Rauf Orbay Avenue separates the Greater Spring from the shipyard.

1. The first analysis of the thermo-mineral waters in Turkey was carried out by Professor Kerim Ömer Çağlar and his team. This detailed analysis was prepared by Professor Çağlar who was commissioned by the Turkish Institute of Agriculture. Professor Çağlar also prepared a report about Tuzla Mineral Springs in 1947-48. The report contained information such as the location near Istanbul and the relevant transportation, the state of the facilities at that time and the therapeutic value of the waters.

2. Atatürk intended Dr. Nihat Reşat Belger, who was also his personal doctor, to head the unit. Dr. Belger, a graduate of the Military School of Medicine and the Paris Faculty of Medicine, was the doctor of the "Plombières Spa" in the years 1930-8. Belger had specialized in internal medicine, gastroenterology and hydro-climatology in France. In 1938 he returned to Turkey and headed the unit in which he had specialized (İstanbul Tıp Fakültesi, 2012).

of Travels] published in the seventeenth century. In this book, Evliya Çelebi refers to Tuzla Mineral Springs thus:

"...The drinking water that keeps the bowels soft is consumed by thousands who come here from İstanbul and many other cities, set up tents, play music and enjoy themselves for forty days while drinking water. There is so much entertainment that it is difficult to describe. Those who have bowel problems drink water here for days. The effluvia of those who vomit is so bad that it can almost kill... from here (the Gebze Dil quay) we rowed for about three miles and reached the drinking water pavilion. We all got off, set up tents by the shore and had an entertaining time. The water flows out of a steep rock. It is nice and clear but a little salty ..." (Evliya Çelebi, 1999, 38-39).

The location of Tuzla Mineral Springs was neglected during the last years of the Ottoman period and became a marshy area during the armistice years.

### Republican Period

Addressing and utilizing Tuzla Mineral Springs consciously began in the Republican Period and at this time it became a resort with its present day buildings. The springhouses that have survived, the Spa Hotel whose project was initiated by Robert Oerley (Ateş, 2011), the refreshment bar and café and other facilities as well as the park and gardens were built at the same time (Figures 3, 4).

The first legal arrangements regarding geothermal sources in the country were prepared in the early Republican period, in 1926 (1). Law number 927, "The Exploitation of Hot and Cold Mineral Waters and Establishment of Spa Resorts" was enacted as a result of the said legal arrangements.

The Republican Period was also the time when spa treatment was addressed in its scientific aspect. In the years following the University Reforms of 1933, Atatürk decided that a facility dealing with spa treatment and balneotherapy be established within the framework of the İstanbul Faculty of Medicine. The decision was implemented by the decision of the Council of Ministers, published in the Official Gazette of 28 November 1938 and subsequently took effect. This resulted in the establishment of the first "Chair of Hydro-climatology in Turkey (2).

The Tuzla Mineral Springs and the Kamil Abduş Lake (also called Tuzla Lake or Balık Lake) (Figures 2, 26) was assigned to Kamil Abduş Bey, one of the Turks who arrived as a consequence of the exchange of populations from Western Thrace and who settled in the area in 1923.



**Figure 3.** The Greater Spring. Surviving buildings from the Republican Period (S. Ateş archive).

**Figure 4.** The Greater Spring. On the left is the Spa Hotel (by R. Oerley), refreshment bar and café, and administration building within the pine woods. On the right is the springhouse, wooden porch, bottling facility and toilets. (Tuzla Mineral Springs archive, 1985).

3. The company's name was changed to "Tuzla İçmeleri Anonim Şirketi" on 28 September 1954. The change was published in the Turkish Trade Registry Gazette (Tuzla Mineral Springs archive).

4. Prior to the sale of İçmeler (Springs) to Tuzla İçmeleri Co., Messrs. Hamit and Halil, officers of the Istanbul Trade and Industry Office, made a study of the location on 6 January 1928 and determined the value of the existing buildings. A report was prepared and signed on January 24. A total value of TL 59 000 was determined for the total land of the springs area and the buildings (Tuzla Mineral Springs archive).

The official communication dated 24 March 1929 number 7132-13 written by the Ministry of the Economy requested that the mineral water of Tuzla Mineral Springs be sold to "Tuzla İçme Maden Suları Türk Anonim Şirketi" by royalties owner Kamil Bey and the sale permission was approved by the decision number 7820 and dated 27 March of the same year and signed by President Gazi Mustafa Kemal, Prime Minister İsmet İnönü and the members of the Cabinet. The decision was published in the Official Gazette dated 13 April 1929 (Ateş, 2011, 25).

The company established under the name "Tuzla ve Havalisi İçme Maden Suları İstismarı Türk Anonim Şirketi" (3) held two meetings, one on 1 January 1928 and the other on the 24th of the same month. The minutes of the meetings demonstrate that Kamil Abduş, Dr.Mehmet Kamil, Dr.Akil Muhtar, Dr.Neşat Ömer and merchant Selahattin, Hacı Hüseyin, Kilisli Rıfat, Şakir Ahmet and Derviş were shareholders in the company. An *in situ* evaluation study was carried out on 6 January to determine the existing facilities in Tuzla Mineral Springs and their value. This evaluation was documented by a report which gives information about the buildings on the site and the conditions of the facilities in 1928 (4).

Greater Spring Area (Figures 3, 4)

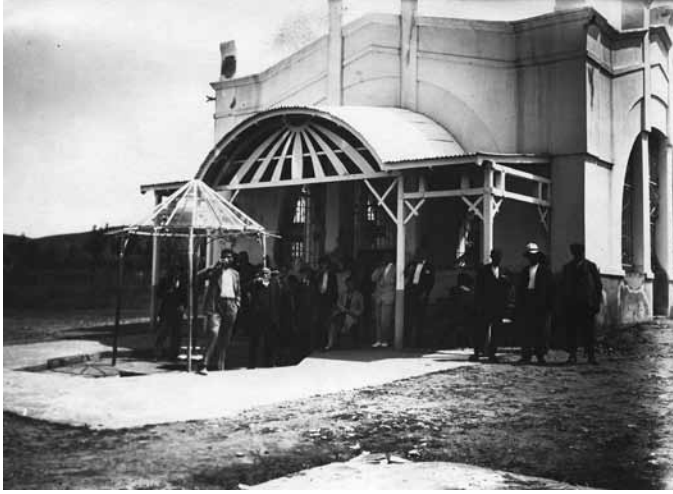
Springhouse (Figures 6a, 6b, 6c)

The definite construction date of the springhouse is unknown. However, the detection report indicates that it existed in 1928. It is a symmetrical masonry building measuring 9.5 m<sup>2</sup>. The building is 6.0 m. high. According to the information in the report, it is of bricks on concrete foundations

**Figure 5a.** The Greater Spring in 1937 (Tuzla Mineral Springs archive). The Spa Hotel, administration building and entrance gates viewed from the source direction. The wooden porch used as a cafeteria is on the left.

**Figure 5b.** The Spa Hotel and administration building in the 1930s. View from the cafeteria (wooden porch) near the springhouse (Tuzla Mineral Springs archive).





**Figure 6a.** The Springhouse and the fountain in the 1930s (Tuzla Mineral Springs archive).

**Figure 6b.** The fountain and canopy at the same time (Tuzla Mineral Springs archive).

**Figure 6c.** The Springhouse at the same time (Tuzla Mineral Springs archive).

**Figure 6d.** The Springhouse today (S. Ateş archive, 2011).

and is covered by Marseille tiles. The mineral water spring is taken into a marble reservoir. The spring water is then pumped into a 2.5 ton reservoir next to the source and distributed from a fountain surrounded by twenty taps.

As seen in the photographs (**Figure 6d**), the building has survived to the present rather well-preserved. The iron railing at the large openings on the four façades have retained their originality. The ground surrounding the building has recently been covered with marble, turning it into a hard floor to reduce the damage caused to the building by water. The sections extending from the ground level to the openings on the four façades have also been clad with stone for protection against humidity.

#### Toilets (**Figures 3, 4, 7a, 7b**)

The toilets consist of four sections in two groups of two, with one group for men and the other for women. Two are in masonry and the other two are half-masonry. Each section has eighteen toilets. The floor of the toilets is covered with mosaics and there are two galvanized water tanks for each

**Figure 7a.** WC units today (Tuzla Mineral Springs archive).

**Figure 7b.** The central space where the wash basins receive light and air through barrel lights on the roof (Tuzla Mineral Springs archive).



section. The toilets are covered by Marseille tiles. The same buildings are still in use to this day. The fact that they maintain their original functions has led to their retaining the characteristics of their construction period to a great extent, except for some material differences in the interior spaces.

#### Refreshment Bar and Café

According to information gathered from the report this facility is constructed of wood over masonry foundations and covers an area of 165 m<sup>2</sup>. The roof is covered with galvanized sheets and the edge of the eaves is decorated with carved wood. The floor is of concrete (**Figures 5a, 5b, 8a, 8b, 10b**).



A similar building exists today and is used as a restaurant in connection with Robert Oerley's Spa Hotel (**Figures 8a, 8b**). However, it now appears different from photographs taken in the 1930s as it has been turned into a complete masonry building. In all probability, after the restaurant of the Spa Hotel was turned into a lobby, it was rebuilt in an architecturally similar style to the old one and in connection with the hotel. The building's location is also different from that in the photographs of the 1930s (**Figures 5a, 5b**), and is now next to the Spa Hotel (**Figures 8a, 10b**).

#### Other Facilities (**Figures 3, 4, 5a, 5b**)

According to the report, there was a wooden kitchen, snack bar and one doctor's cabinet and a clerk's room on an area of 20m x 20m. There are also two wooden ticket booths. All the facilities are covered with galvanized sheets.



These buildings are situated near the springhouse. However, they have undergone some changes to adapt to current needs. An indoor cure pool has replaced the wooden porch that was connected to the kitchen and used as an open air cafeteria.

**Figure 8a.** The location of the Spa Hotel with the refreshment bar and cafe (S. Ateş archive, 2011).

**Figure 8b.** Refreshment bar and cafe (S. Ateş archive, 2011).



**Figure 9.** Entrance to the Greater Spring today (S.Ateş archive, 2011).

#### Wire Fences and Entrance Gate

According to the report, an area of approximately 11500 m<sup>2</sup> where these buildings are located is surrounded by a two-meter high wire fence fastened to iron stakes placed one and a half meters apart. The entrance is through a grated gate placed between two brick columns (**Figure 5a**). However, the wire fence was replaced by a wall in later years and the entrance gates have not preserved their original character depicted in the photograph of 1937 (**Figure 9**).

According to other information gathered from the report, Tuzla Mineral Springs covered a much larger area in the past. The Greater Spring area was situated between Balık Lake (Kamil Abduş Lake, **Figures 2, 26**) and the shore and had a railroad façade 270 m. in length and a 700 m long sandy coastal strip constituting, at the time, a beach. In his report dated 1947 Professor Kerim Ömer Çağlar wrote:



**Figure 10a.** Entrance façade of the Spa Hotel designed by Robert Oerley (S.Ateş archive, 2011).

**Figure 10b.** Sea façade of the Spa Hotel in the 1930s and wooden cafe (Tuzla Mineral Springs archive).

**Figure 10c.** Sea façade of the Spa Hotel today (S.Ateş archive, 2011).

“... The Tuzla Mineral Springs area has a beautiful beach being very close to the sea. The place is very likely to be one of the exclusive summer resorts of İstanbul with its view of the islands...” (Tuzla Mineral Springs archive).

There were also quarries within the area. The land had previously belonged mostly to exchanged Greeks and had not at that time been parceled out. A wall separated The Greater Spring area from Kamil Abduş Lake (The Tuzla Mineral Springs archive).

As soon as the royalties of the mineral water of Tuzla Mineral Springs was bought by “Tuzla İçme Maden Suları Türk Anonim Şirketi”, Robert Oerley was contacted in order to develop this area and he was asked to prepare a layout plan. In 1930, Oerley prepared the project of Spa Hotel (Ateş, 2011, **Figures 10a, 10b, 10c**).

A single storey masonry building used as an administration building across the sea-facing façade of the Spa Hotel is seen in the photograph taken in 1937 (**Figures 5a, 5b**). The exact construction date of this building is also unknown. It is assumed to have been built at the same time or close to the time of the hotel construction, as it does not appear on the report of 1928. However, there is no resemblance architecturally between this building and the hotel (**Figure 11**).

#### Lesser Spring Area (**Figure 12**)

According to information gathered from the report, there is a half-masonry 45 m. x 45 m. springhouse covered by galvanized sheets, a wooden “rest area” and snack bar of 115 m<sup>2</sup>, also covered with galvanized sheets, and a 17 m<sup>2</sup> doctor’s cabinet on the treasury land where the Lesser Spring is located.

There are currently two buildings in the Lesser Spring area. One is the springhouse indicated in the report; the other is the masonry building close to the source. This building creates a unity with the source and gives the impression that the two were built at the same time due to the similarity

**Figure 11.** Administration building today (S.Ateş archive, 2011).

**Figure 12.** Lesser Spring. The Springhouse on the right and the building containing the doctor’s cabinet, resting area and snack bar functions on the opposite side (Tuzla Mineral Springs archive, 1999).

**Figure 13.** Green area at the Greater Spring (Tuzla Mineral Springs archive, 1985).





**Figure 14a.** French brochure in 1928 (Tuzla Mineral Springs archive).

**Figure 14b.** Turkish brochure in 1929 (Tuzla Mineral Springs archive).

**Figure 14c.** The Springhouse on the back cover of the brochure (Tuzla Mineral Springs archive).

**Figure 14d.** French brochure showing the therapeutic effects of water. “Tuzla Büyük Membaı Tabii İçme Suyu” (Tuzla Great Spring Natural Drinking Water) is written in the central emblem (Tuzla Mineral Springs archive).

in their architectural characteristics. However, they are in a state of considerable dereliction and are badly in need of restoration. The rest area can be given a new but similar function as a cafeteria for those who come for a one-day drinking cure.

#### Afforestation Activities and Other Buildings at Tuzla Mineral Springs

According to the company’s Annual Report of 1929, approximately fifteen hundred trees planted the previous year took root, and three thousand trees were to be planted the following year. The report also contains an acknowledgement to Edirne Governor Emin Bey who sent the trees for a minimal fee.

The empty spaces were afforested with three thousand pine trees planted in 1929 (**Figure 13**). Following the Spa Hotel, an infirmary and personnel dormitory was built in the Greater Spring area in the 1930s. A small Hotel was added in the 1940s (**Figure 3**).

#### Promotional Activities

As of 1928, the administration of Tuzla Mineral Springs prepared brochures in Turkish, Ottoman Turkish and French for the promotion of the springs (**Figures 14a, 14b, 14c, 14d**). The brochures specified that the premises were open from 15 June to 15 October. The departure times of trains from Haydarpaşa and arrival times in İçmeler, as well as their arrival at the stations *en route*, and their departure times from Tuzla Mineral Springs to Haydarpaşa were also included in the brochure for those traveling by train.

Water vouchers dating from the first years of the Republic demonstrate that at this time the mineral water of Tuzla Springs was bottled and distributed to various neighborhoods of İstanbul (**Figure 15**).

Tuzla Mineral Springs obtained a “Mineral Waters and Spa and Drinking Waters License” from the General Directorate of Public Health of the Turkish Ministry of Health in 1935. According to the license:

“...The reports and plans pertaining to the waters and facilities of Tuzla Mineral Springs have been examined. It has been determined that Tuzla Mineral Springs waters have therapeutic characteristics and that the facilities are suitable and therefore, permission has been granted for its operation for therapeutic purposes and its accepting those who come for treatment purposes...” (**Figures 16, 17**, Tuzla Mineral Springs archive)

At the time, Tuzla Mineral Springs also accepted patients from abroad. On September 2 1940, Doctor W. Boerner from Graz wrote a report for his patient, a merchant by the name of Andreas Rakowitz, advising a

2

**EAU de TOUZLA**  
"ITCHMÉ"

Commande

du 28 Juin 1923

Jouze (12)

**Dame - jeannes**

Soit

Litres: 660

Reçu 11 Jan.

T. C.  
SAHAT ve İHTİMAT  
MÜAVENET VEKÂLETİ  
Kısmenle İhtisap Üsses Baskınlığı

Maden Sulari ile  
Kuyular ve İçmeler Hukuknamesi

№ 3

1933 senesini Üsses Hukuknamesi kâğıtlarında 200 ve 201 inci maddeleri  
maddesine vâli olan müessesat üssesini genceli Vilayeti Şahitinde Tuzla ile  
Pencil arzında Gebze kâğıtlarında müessesat olan Tuzla İçmeleri  
suya ile teslimatı ve rapor ve şifâret tekâmül edilecek ve İçmelerin  
güçlü kâğıtların his ve teslimatına mevâkif olduğu anlaşılmakla ekkâ nakli  
müessesat içtimâsını ve buraya tedavi maksadıyla gelen kâğıtların  
ANALİZİ... münasip edilecektir. 1935

Sahat ve İhtisap Müavenet  
Vekilli





Figure 15 Demijohn voucher (Tuzla Mineral Springs archive).

Figure 16 Report dated 1935 from the Public Health Office (Tuzla Mineral Springs archive).

Figure 17 Patient admission after the Spa and Drinking Authorization was obtained in 1935 (Tuzla Mineral Springs archive).

Figure 18 Report written by Doctor W. Boerner for a patient in 1940 (Tuzla Mineral Springs archive).

Figure 19 The general water analysis report of the Mineral Springs dated 24 November 1947 (Tuzla Mineral Springs archive).

Figure 20 The document showing that Tuzla Mineral Springs were incorporated in the tourism plan of the Marmara Region (Tuzla Mineral Springs archive).

Andreas Rakowitz  
Chirurg, Spezialarzt für  
Chirurgie, Zahnheilkunde

Aerztliche Bescheinigung.

Herr Andreas Rakowitz, Kaufmann, leidet seit Jahren an Magen-Darmerkrankungen (nervösen Sekretionsstörungen). Da angeblich eine im vorigen Jahr durchgeführte Kur in Tuzla Işmeleri ihm eine mehrere Monate andauernde Beschwerdefreiheit gebracht hat, wird ihm geraten, sich neuerlich einer Trinkkur dortselbst zu unterziehen.

Geme. 2.9.1940.



T. C.  
ZIRAAT VEKÂLETİ  
T. C. Üsses Fakültesi  
Tuzla Kâğıtlarına

Ankara 24/11/1947

Su tahli raporur

Güdüğü yer : *İhtisap Tuzla*

Lahutiyatör No: *284*

Alınış tarih : *24.11.1947*

Makam : *Kıyıkuyu*

**Fiziki analiz**

Görünüş : *İçme suyu*

Renk : *Renksiz*

Tat : *Acımsız*

Koku : *Kuvvetli hidrojün (Çarık yarık)*

**Kimyevi analiz (litrede eriyen olarak)**

Klor (Cl)	154
Sulfat (SO <sub>4</sub> )	24
Hydrokarbonat (HCO <sub>3</sub> )	514,4
Nitrat (NO <sub>3</sub> )	0
Bittün asitlik (CaO bazında)	23,66
(CaCO <sub>3</sub> )	
Karbonat sertliği	23,66
Kalsiyum sertliği	0,0
Besleyiş (PH)	6,7
Kalsiyum sertliği	8,8

NETİCE: *Gök suyu (birinci) bu sudur.*



Ankara: 11.10.1950

T. C.  
BAŞBAKANLIK  
BAŞIN-YAYIN VE TURİZM  
GENEL MÜDÜRLÜĞÜ  
Dahşet BÜFÖ  
Ö. Sayı: 823/1057  
G. Sayı: /1057

ÖZETİ

Sayın Kâmil İ. Abdus  
Altınca Vakıf Han No: 6  
GALATA-İSTANBUL

12 Ekim 1950 tarihli mektubunuz cevabıdır:

Sahibi ve müessesisi bulunduğunuz Tuzla İçmeleri, iç ve dış turizm bakımından ehemmiyetli tesisler bulunduğundan, müessesat olan müessesatin teslim edilmesine emre olabilmektedir. Dosyanızı getirtirerek inceledim. Muhtelif tarihlerde Başın-Yayın ve Turizm Genel Müdürlüğüne yapmış olduğunuz müessesatlar Üssesine, istisnalarla ilgili kâğıtların İçme Ulaştırma ve Bayındırlık Bakanlıklarına nazdinde gereken teğebbüsün Daireses tekiiden yapıldığını müşahade ettim.

Turizm işlerinin nezaket ölçüsünde esaslı bir programa bağlanması Üssesinde çalışmalar yapmaktadır. Kütüpler bir hayli ilerlemiş bulunmaktadır. İstanbul ve Marmara bölgesinin turizm bakımından hazırlanmakta olan planına Tuzla İçmelerinin katılması bulunduğunuz ve bu müessesatle de taleplerinizin nazarı itibare alınmış olduğundan bilgi edinmenizi rica ederim.

Saygılarımla.

Genel Müdür  
  
(Dr. Halim Alyot)

M.S.

return to Tuzla Mineral Springs where he had been the previous year for the treatment of stomach pains and nervous excretion disorders, and had benefited from the treatment (Figure 18).

The first detailed "water analysis report" of the springs area was prepared on July 20 1947 by the Ministry of Agriculture's Y.Z.E. (Institute of Agriculture) Soil Institute of the Faculty of Agriculture. (1) The water temperature, the anions and cations in a litre of water were stated in the separate analyses carried out for the Greater and Lesser Springs (Figure 19).



A document dated October 21 1950 sent by the Prime Ministry General Directorate of Press and Tourism to Kamil İ. Abduş, General Manager of Tuzla Mineral Springs Co., stated that efforts were being made to prepare a thorough program for tourism in the country as a whole and that Tuzla Mineral Springs had been included in the tourism plan for İstanbul and the Marmara Region (**Figure 20**).

Some documents in the Tuzla Mineral Springs archives also demonstrate that efforts were made to export Tuzla Mineral Spring water to Syria, Israel and Algeria in 1963.

### **ROBERT OERLEY and the SPA HOTEL**

Robert Oerley (1876-1945) is one of the foreign architects invited to Turkey during the Republican Period. Cengizkan (2002, 71) introduces Oerley as an Austrian architect known as “the architect of the Numune Hospital” and “Jansen’s assistant in Ankara”. Oerley attracted attention particularly for his residential building designs. Among these, there are urban houses and large apartment blocks like the “Hanuschhof” (1924-5) and “George-Washington-Hof” (1927-30) in the tenth district in Vienna that he designed with K. Krist. He is also known for his interior and furniture designs (Blau, 1999, 272). Oerley was a multi-dimensional artist also known as a watercolor painter and lithographer. Among his other works are the Luithlen Sanatorium (1907-8), Villa Wustl (1912-4) for which he was awarded the Vienna City Award, the Zeiss Factory building (1917) and the Vienna Planetarium (1927-8). He was one of the most important architects of the Vienna Secession between 1907 and 1939 and one of the founders of the Austrian Werkbund (Blau, 1999, 272).

In his Luithlen Sanatorium project or Sanatorium Auersperg, as stated by Klein (2005, 222), Oerley emerged with his simple unadorned design unusual in Vienna. This project led to his being ranked beside architects such as Max Fabiani, Joze Plecnik and Adolf Loos (Answers, 2012).

During his time as Vice President of the Central Association of Austrian Architects from 1915 (Blau, 1999, 272), he was asked to come to Turkey to design the plans for the Public Hygiene Institute and the Numune Hospital (Cengizkan, 2002, 72). He ranked alongside Viennese architects such as Theodor Jost, Clemens Holzmeister, and Ernst Egli who took part in the rebuilding of Ankara.

In the years 1928-33, Oerley designed buildings especially for the Ministry of Health in Ankara, the capital of the newly founded Republic of Turkey. Therefore, he came to be known as the “architect of health buildings of the Republican period”. His renowned works in Ankara in order of their dates of construction are as follows:

Kızılay [Red Crescent] Directorate (Hilal-i Ahmer Müdiriyyeti) (1928–30)

Refik Saydam Public Hygiene Institute (main building, school, lodgings and stables) (1928-32)

Ankara Ulus Wholesale Market (1930)

Numune Hospital, İsmetpaşa Pavilion (1928-1933)

Cengizkan (2002, 72) indicated that there is the possibility that the Çiftlik Mansion in the Ankara Orman Çiftliği and the Gazi Mansion in Yalova are also works by Oerley.



**Figure 21.** Villa Wustl. Villa wustl gesamtansicht.JPG (2012) [[http://commons.wikimedia.org/wiki/File:Villa\\_wustl\\_gesamtansicht.JPG](http://commons.wikimedia.org/wiki/File:Villa_wustl_gesamtansicht.JPG)] Accessed (02.07.2012).

In his building designs both in Turkey and Vienna, Oerley did not use the flat roof of the cubic approach of modern architecture. Except for the Luithlen Sanatorium, his buildings have slanting roofs with tiles and usually dormer windows. Art Nouveau dominated his pre-World War I designs. His designs for the buildings in Turkey reflect the influence of Red Vienna (Viennese Reform Style) architecture which developed in the years 1919-34.

The architecture of the Spa Hotel he designed for the Tuzla Mineral Springs reflects the distinct influence of the residences he designed in Vienna (**Figures 21, 22a**). The same architectural influence is observable in the tiled slanting roofs and dormer windows of the Spa Hotel. Nicolai (2011, 27) notes that Oerley's apartment blocks have an aesthetic understanding which is relatively traditional. He also states that Oerley's architectural approach establishes a direct relationship with his buildings dated after 1910.

Blau (1999, 383) mentions that Oerley made much use of geometric figures in his designs. In Hanuschhof, this geometric shape is a triangle and it was reflected on the façades by the number of triangle overhangs and stacked balconies (**Figure 22c**). Oerley made use of the same triangle overhangs and balconies in the Spa Hotel in İstanbul and the Lodging of the Refik Saydam Hygiene Institute in Ankara which were designed at the same time (**Figures 10c, 22d**). The triangle overhangs and balconies, horizontal lines continuing along the building façade and between the floors, and the multi-internal window form are common architectural features of these buildings' plans and façades.



**Figure 22a.** A view from the George-Washington-Hof. [[http://commons.wikimedia.org/wiki/category:george\\_washington\\_hof](http://commons.wikimedia.org/wiki/category:george_washington_hof)] Accessed (02.07.2012).

**Figure 22b.** A detail from the George-Washington-Hof. [http://commons.wikimedia.org/wiki/category:george\\_washington\\_hof](http://commons.wikimedia.org/wiki/category:george_washington_hof)] Accessed (02.07.2012).

**Figure 22c.** Hanuschhof (1923-25). [[http://www.synthesa.at/.../pics/Hanuschhof\\_vorher.jpg](http://www.synthesa.at/.../pics/Hanuschhof_vorher.jpg)] Accessed (02.07.2012).

**Figure 22d.** Lodging of the Hygiene Institute in Ankara (Nicolai, 2011, 32).





Figure 23. A detail from the Spa Hotel (S.Ateş archive, 2011).

Oerley generally used roof stratagems in his buildings to provide dynamism to the façade architecture. Cengizkan (2002, 81) states that the façades of the Employee Lodgings of the Ankara Refik Saydam Public Hygiene Institute designed by Oerley in 1930 reflect influences of the Vienna residence typologies of the years 1919-1934, and adds that he also added the eave-details of Turkish mansions. Oerley used wide eaves in the Spa Hotel too (Figure 10a, 10c).

As pointed out by Cengizkan (2002, 81), Oerley's building entrance is highlighted by concrete eaves and iron entrance doors with diamond shaped designs or, as stated by Aslanoğlu (2010, 176), "lozanj shaped", which typify his buildings and render them recognizable (Figures 21, 23, 24a, 25a, 25b, 25c).

Another characteristic in Oerley's designs is the shape of windows and their organization. Windows of similar characteristics are used both in his Viennese buildings and those in Turkey. In the Spa Hotel, the windows that allow light to the stairs and the hall are designed in the form of vertical bands and rise in accordance with the height of the risers (Figure 23). Oerley used the same architectural approach in the Ankara Numune Hospital (Figure 24b). Similar window shapes are found in the George-Washington-Hof residential blocks (Figure 22b).

The Spa Hotel was built after "Tuzla İçme Maden Suları Türk Anonim Şirketi" bought the royalties of the Tuzla Springs mineral waters. Then, work on the development of Mineral Springs began and Robert Oerley was



Figure 24a. Iron entrance gates of Refik Saydam Hygiene Institute, Ankara. [http://www.goethe.de/ins/tr/ank/prj/urs/arc/oer/trindex.htm] Accessed (02.07.2012).

Figure 24b. A staircase façade detail of Ankara Numune Hospital. [http://www.goethe.de/ins/tr/ank/prj/urs/arc/oer/trindex.htm] Accessed (02.07.2012).

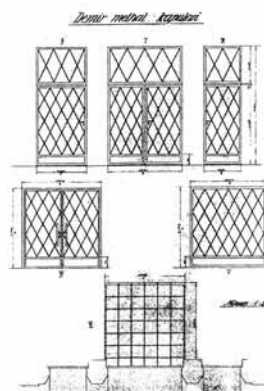
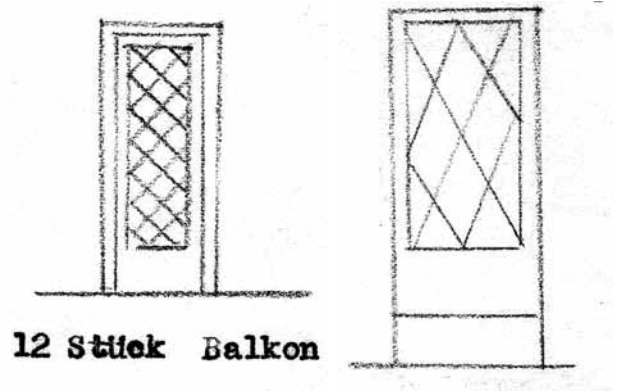


Figure 25a. Metal gates detail of Hıfzısıhha Enstitüsü, Ankara (Cengizkan, 2002).

Figures 25b, 25c. Gate sketches of the Spa Hotel by Oerley (Tuzla Mineral Springs archive).





**Figure 26.** The Greater Spring, shipyard and Tuzla (Kamil Abduş) Lake (Tuzla Mineral Springs archive). E5 Motorway, Köprülü Kavşak, Railroad and Greater Spring area connection. (Tuzla Mineral Springs archive)

contacted and asked to prepare a layout plan at the end of 1929. As a result, Oerley sent the Spa Hotel's plans to the Mineral Springs administration; this is understood from the letter which Oerley sent them in June 1930, in which he is entitled "Chief Architect of Ankara Housing Authority" (Ateş, 2011). However, Nicolai (2011, 33) notes that Oerley did not work as a designer between 1930-2 but rather as a provisional chief adviser in the Ankara Housing Authority with the aim of realizing the "Ankara Plan" prepared by Jansen in 1929.

Nicolai (2011, 33) states that Oerley's architecture is not reduced to a specific architectural language, and emphasizes the different architectural understanding between the "Public Hygiene Institute Lodgings" and "Ulus Wholesale Market". This can be said in respect of the buildings which contain differing functions, such as the Luithlen Sanatorium, Zeiss Factory and Vienna Planetarium. However, there is a common architectural language between his dwellings in Vienna designed between 1912-30, the buildings in Ankara designed between 1928-33 and the Spa Hotel in İstanbul designed in 1930 which "typify his buildings and render them recognizable", as pointed out by Cengizkan (2002, 81).

The Spa Hotel continues to be the most important accommodation building of the springs, as it has not undergone major architectural changes and has been conserved due to continuous maintenance. However, it is facing the ageing that comes with time. There is deterioration in the materials used and in the load-bearing system. It needs meticulous restoration and the consolidation of the load-bearing system if it is to survive for much longer.

### **TUZLA MINERAL SPRINGS TODAY**

Tuzla Mineral Springs have been neglected as of 1969, after the death of Kamil Abduş Bey and the lake went into a disappearance process. Swamps have formed around them and the facilities have also been neglected. While those who came for the therapeutic waters could swim and sunbath before the shipyard was built, the expropriation conducted by the Ministry of Transportation on the sea side in 1970, and the construction of the shipyard as well as the problems caused by unplanned constructions and increasing

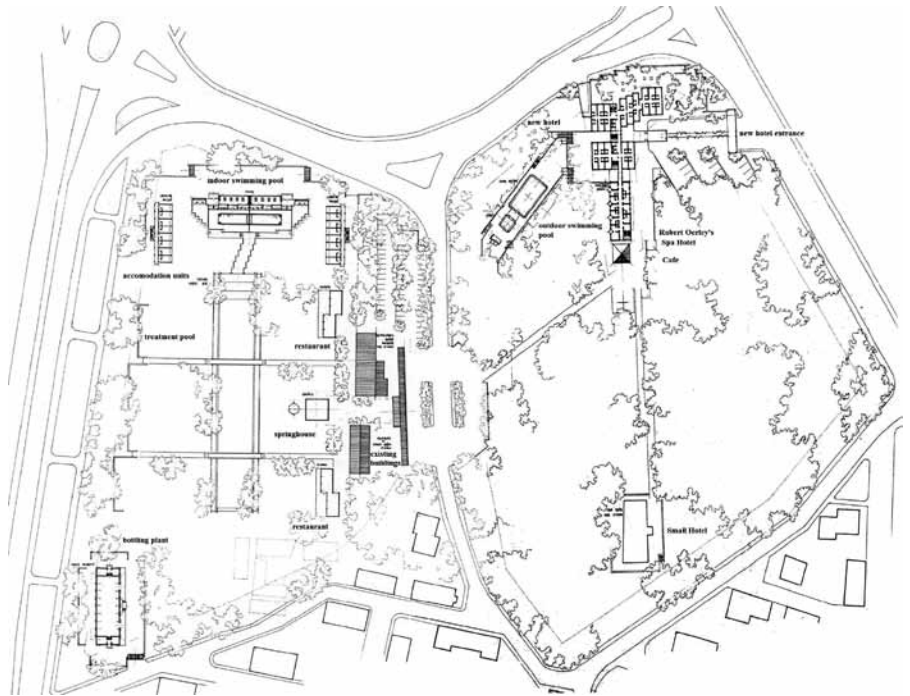


Figure 27a. The 1/500 layout plan of the Great Spring approved by the Board (S.Ateş archive).

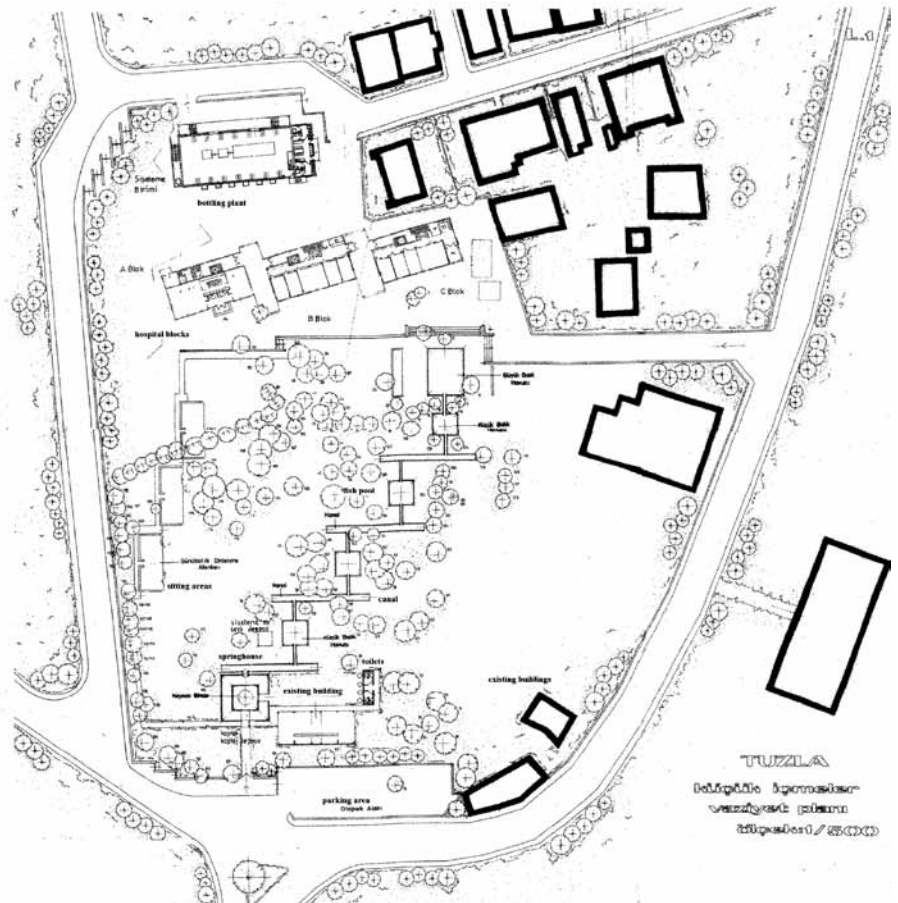


Figure 27b. The 1/500 layout Plan of the Lesser Spring approved by the Board (S.Ateş archive).

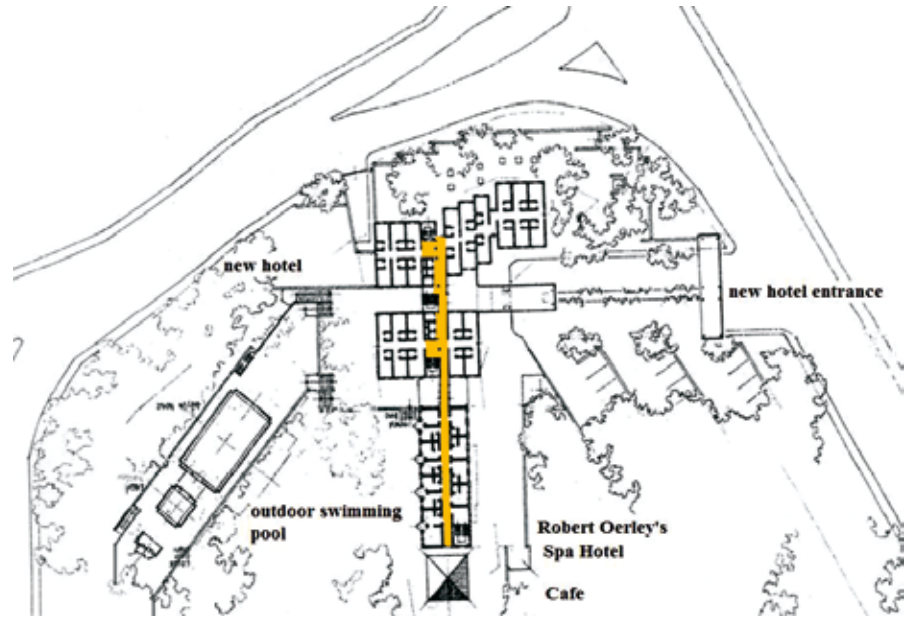


Figure 27c. The 1/200 Preliminary Project of the new hotel (S.Ateş archive).

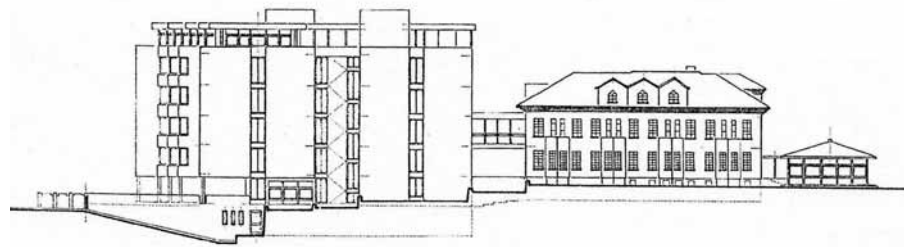


Figure 27d. Relation of R. Oerley's Spa Hotel, refreshment bar-cafe and the new hotel (S.Ateş archive).

industrial facilities in the 1980s have had adverse effects on the springs; their connection to the sea was severed and the water became polluted (Figure 26). Although thermal sources by the seaside normally enjoy advantages from the point of view of tourism, Tuzla Mineral Springs no longer have this advantage (5).

Today the vicinity of Tuzla Mineral Springs is overridden by industrial facilities and housing due to the lack of sensitivity shown in the 1/25.000, 1/5000, and 1/1000 scale physical planning work prepared for the main layout, concentration, circulation and access axes, the "environment planning", "master plan" and "application plan". The dense construction so close to the water source is seriously damaging the springs.

As of 1990, the new owners have made efforts to revive the facilities that were left to their own fate and inactive for years. On 11 November 1991, Tuzla Mineral Springs Co. applied to the II Preservation Board of Cultural and Natural Heritage for the protection of this natural heritage in the process of disappearance, and asked for the area to be proclaimed a "natural site". The Board proclaimed Tuzla Mineral Springs a natural site with its decision number 2787 dated 14 January 1992. The Board also determined the degree of natural sites with its decision number 5316 dated 30 September 1999. The sources of the Greater and Lesser springs were registered as first degree, and the other areas around the source as second degree natural sites.

5. It provides the possibility of the sea and the climate to be applied as a medical cure, and to establish thalassotherapy centers.

The 1/500 scale layout plans and the 1/200 scale preliminary projects of the buildings prepared within the scope of the Tuzla Mineral Springs Rehabilitation Project by Professor Muammer Onat were approved by the II Preservation Board of Cultural and Natural Heritage in 1999 (**Figures 27a, 27b**).

The first step during the project-design work was to consider all the open and closed spaces belonging to the Greater and Lesser Springs to enable the sustainable use of the facility. First of all the road traversing the Greater Spring dividing it into two separate sections was incorporated into the spa center, thus uniting the two sections that had been disconnected. As the existing capacity of the facilities no longer answer present day demand, a new hotel project was designed in addition to Oerley's Spa Hotel. The new hotel has been located in the place of the building that was added later, next to the Spa Hotel, and contains accommodation units as well as therapy units and the thermal pool (**Figures 3, 28**). The patient treatment units and thermal pool in this additional building have been incorporated in the newly-designed hotel.

The new hotel consists of two blocks connected by a vertical central access core. The axis of the corridor of the Spa Hotel designed by Oerley was used as a guide for the new hotel, and the axis was continued to create the horizontal access axis ensuring the connection between the buildings. The stairs of the Spa Hotel are at one end of this axis and the stairs and elevators of the new hotel at the other (**Figures 27c, 27d**). The end of this axis at the new hotel side has been left open to the exterior as it is with the Spa Hotel end to allow for the penetration of light, and for the customers to enjoy the view. The said axis has become the backbone of all the buildings. The axis provides horizontal connections on two levels: the ground and third floors.

The ground floor of the new hotel contains the reception desk, patient treatment units, clinics, pharmacy and administration units; the basement contains the therapeutic pools; the roof floor has a restaurant and rest areas and the other floors have the accommodation units.

The sloping topography of the land allows for terracing in the open areas. Hence, the outdoor pool and its annexes have been organized on the terrace next to the Spa Hotel.

An indoor pool, a connecting open treatment pool, short term accommodation units, restaurants, and a bottling facility for the water directly connecting to the road have been designed in the area of the

**Figure 28.** The Spa Hotel and additional building (Tuzla Mineral Springs archive).

**Figure 29.** The flow of spring water in the canals. (Tuzla Mineral Springs archive, 1986) There was a special type of fish here until recently. Unfortunately, they became extinct due to neglect and environmental pollution.



springhouse. Pathways and sports facilities have also been designed in open areas. It was decided to restore and conserve the buildings from the 1930s that have retained their functions, and to renovate the bottling facility and wooden porch in accordance with its new restaurant function.

Courses of treatment lasting three, seven and twenty-one days are available out at Tuzla Mineral Springs. Over time, visiting every year and taking these treatments has become a tradition. Hence, hospital units consisting of three blocks for those arriving for treatment, and a bottling facility have been designed in the Lesser Spring area (**Figures 12, 27b**). The vicinity of the spring has been designed and a new landscape design that integrates with the existing greenery has been prepared. The water flowing from the spring spreads within the terrain and is wasted (**Figure 29**). According to the new design, the water will be funneled to fish pools through canals. Thus a new living space will be created for the fish that were in the existing canal until recently, but have since disappeared due to pollution and neglect (**Figure 27b**). Moreover, sitting areas and WC units have been designed for those who come for one-day drinking treatments. The unit mentioned in the report dated 1928 and built at the same time as the springhouse will be assigned the function of a resting area / cafeteria for those coming for one day drinking treatments.

However, the continuity of these efforts was interrupted and remained at this phase when it was decided that some İstanbul neighborhoods would be included within the scope of “renovation areas” and the projects in these areas would be assigned to “The Directorate of İstanbul Renovation Areas and Cultural Heritage Regional Control Board”. The Directorate of Renovation Areas was constituted with the decision number 2006/10875 dated 23 August 2006 of the Council of Ministers. The Borough of Tuzla was included in İstanbul Renovation Areas by the council, and published in the Official Gazette dated 4 December 2008.

## CONCLUSION

Tuzla Mineral Springs have maintained their existence conserving their “original function” and “original architecture” to the present day. Therefore, they are of “sustainable” and “historical” value. The Mineral Springs bear traces of “Early Republican Period Architecture” with buildings dating from the 1920s and 1930s. Hence, the springs are an important natural and cultural heritage and need to be carefully preserved as a whole. The fact that the site has maintained its spa function until now enables it to withstand the adverse effects of the serious deterioration in the area.

With its establishment and development phases as a health and thermal facility of the young Turkish Republic, the site is a living document, and major evidence of the modernization efforts of the period that can be bequeathed to future generations. It also raises grounds to query why, although the infrastructure was to a great extent established in the Republican period, health and thermal tourism made no headway in this country and did not attain modern and scientific dimensions as it did elsewhere. The medical as well as architectural excellence in the scientific approach attained at the springs at the time of their establishment and development is an exemplary process.

The adverse effects of time have influenced the springs and resulted in the aging and deterioration of the buildings. Therefore they need to be



meticulously restored. The architectural products of the springs built during the process of their organization as a thermal facility were affected step by step during the early years of the Republic. These should be meticulously restored and conserved. Renovation projects loyal to the originality of the buildings should be prepared for those whose current functions will be changed.

Another aspect that needs to be reviewed is the fact that although mineral waters have been used for therapeutic purposes since ancient times, it no longer has the accommodation and therapeutic facilities that can answer present day needs. Therefore, the springs have to be handled according to the approach used in the most modern thermal facilities of the world.

It is important to approach the subject of the effective and sustainable usage of Tuzla Mineral Springs in two different aspects: the springs themselves and their environmental value. According to the information provided by the Ministry of Culture and Tourism (2011), there are sixty-five "Thermal Tourism Centers" that have been certified in accordance with the Tourism Incentive Law number 2634/4957, and which are in operation to date. Tuzla Mineral Springs are not among these centers. However, it is necessary that they be included among the certified centers due to their therapeutic value, as well as for their long past, and their architectural and cultural value and the sustainability of these values.

In its thermal tourism cities project, the ministry is also aiming to correlate thermal tourism with different types of alternative tourism. Natural, historical, archaeological and socio-cultural tourism, thermal, winter, hunting and water sports as well as health tourism and other existing tourism potentials are being considered within this scope.

In order to achieve this, Tuzla Mineral Springs must be integrated with the existing natural, cultural and archaeological potential in the vicinity. Therefore, first of all, the Tuzla (Kamil Abduş) Lake located close to the Greater Spring (**Figure 26**) must be included in the project. This shallow lagoon is a natural habitat for both migratory and sedentary birds. The lake that was a birds' paradise until 1969 was also famous for its variety of fish, and the mastic (*pistacia lentiscus*) trees that are not found in İstanbul, but grow on Sakız (Mastic) Island which is located in the lake. However, the lake started to deteriorate with the construction of the shipyard, lost its natural balance and dried up completely in 2001. The lake and its vicinity were proclaimed first and second-degree natural site with the decision taken on 26 January 1993/3019 and 16 July 1997/4535 (İstanbul Valiliği, 2005).

Both of these natural entities, the mineral springs and the lake must be considered together. The project to be prepared must also consider the redevelopment of the eco-biological features of the lake and the preservation of the mastic trees. The lake must also be organized as a research laboratory for the relevant departments of the universities. Tuzla Municipality has begun working on this subject. However, in order to be successful, this should not be limited to local efforts but should be taken up for Tuzla borough as a whole, and particularly within the scope of a Thermal Tourism Center.

Finally, the antique breakwater and its vicinity, Sakız Island, İncirli (Glykeria) Island and the center of Tuzla include natural and archaeological sites. If handled in this manner, it will offer tourists coming to the springs an interesting setting as modern approaches towards thermal tourism now

also encompass cultural activities and activities related to nature. Hence the area will be successful within the scope of a “health and thermal tourism center”.

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**Anahtar Sözcükler:** Tuzla İçmeleri; doğal, tarihi ve mimari miras; Erken Cumhuriyet Dönemi Mimarisi; Robert Oerley; sürdürülebilir kullanım.

## ROBERT OERLEY ve TUZLA İÇMELERİ

İçmeler, İstanbul'un Tuzla İlçesi'nde konumlanmaktadır (**Figures 1, 2**). Tarihi açıdan da oldukça eski dönemlerden beri bilinmekte ve faydalanılmaktadır. Tuzla İçmeleri'nin sağlık açısından değeri bilinmekle birlikte, mimarlık tarihi açısından sahip olduğu önemi anlayamamıştır. Günümüzde, İçmeler'de yer alan tesisler Cumhuriyet döneminde inşa edilmiştir. Bunların içinde en önemlisi Robert Oerley'in projelerini hazırladığı Kaplıca Otel'i'dir. Tesisteki diğer yapılar yönetim binası, restoran, bekçi kulübeleri, kaynak binaları, kafeterya, ahşap sundurma, küçük otel, bungalov ve tuvaletlerden oluşmaktadır. Bu yapılar, özgün işlevlerini sürdürmeleri nedeniyle korunarak günümüze dek ulaşmışlardır.

Bu çalışmada, hem tarihi ve mimari açıdan önemli bir yere, hem de içerdiği mineraller açısından önemli bir maden suyu potansiyeline sahip olan ancak yeterince değerlendirilmemiş bir kaplıca merkezi olan "Tuzla İçmeleri" çalışma alanı olarak seçilmiştir. Bu kapsamda, Tuzla İçmeleri'nin bugün bilinmeyen mimari ve kültürel değerlerinin ortaya çıkartılması hedeflenmiştir. Bu amaçla buradaki mevcut yapıların ve yeşil dokunun oluşum dönemi ve süreci, mimari açıdan önemi ve özellikleri, günümüzdeki durumları belirlenmiştir. Günümüzde, Büyük ve Küçük İçmeler olarak birbirinden kopuk iki bölümden oluşan İçmeler'in yeniden değerlendirilerek hem sağlık hem de ülke ekonomisine katkısı açısından sürdürülebilir kullanımı için mimari bakımdan yapılanlar ve yapılması gerekenler irdelenmiştir.

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