

# Materiality of Sanitation in the late Ottoman Empire: Urla (*Klazomenai*) Quarantine in Izmir

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**Abstract.** The port cities of the Eastern Mediterranean such as Izmir (Smyrna), Salonica, and Beirut, where the first municipalities in the Ottoman Empire were founded, were also its major trade hubs. As one of the most important among them, Izmir saw immense and fluctuating flows of people and goods in the nineteenth century. By drawing on Ottoman archival sources, this paper examines the materiality of sanitation in Urla (*Klazomenai*) Quarantine in the late period of the empire. In particular, it focuses on the establishment and evolution of the quarantine facilities and on the usage of sanitation technology, particularly of sterilization machines (*etiv*) to reduce the spread of epidemic diseases such as cholera and plague. Attention is also paid to the role of the quarantine as an impulse for the building of urban infrastructures aimed at improving the city's public health.

## 1 Introduction

The nineteenth-century world saw the professionalization of medical services and sanitary applications, and the development or systematization of various methods to prevent the spread of contagious diseases' outbreaks. These methods included the construction of new places for quarantines, the establishment of sanitary cordons, and the usage of sanitary technologies. The International Sanitary Conferences [1] held in Europe throughout that century fostered the standardization of health policies to curb pandemics and contagious diseases in general. Since outbreaks of plague and cholera occurred frequently in the Ottoman Empire, local authorities genuinely attempted to follow the contemporary and global sanitary practices. The International Sanitary Conference of 1866 convened in Istanbul<sup>1</sup> [2, 3] was one example illustrating that Ottoman officials aimed to improve sanitation policies in the Empire and establish, institutionalize, and secure public health (*sıhhat-i umumiye*) through quarantine stations specifically constructed in the port-cities where maritime trade activities were dense.<sup>2</sup> [4, 5, 6, 7]

With the help of steamships and railways, trade networks expanded in the nineteenth century, resulting in an increase not only in the exchange of goods and the flows of people,

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<sup>1</sup> In this international conference, the Ottomans accepted to send a health commission to Hijaz during the *Hajj*.

<sup>2</sup> In the International Sanitary Conference of 1851 held in Paris, the Ottomans were in the group of "quarantinists", those who supported strict quarantine regulations, as opposed to the "hygienists", those who proposed their relaxation or suppression.

but also in the spread of contagious diseases from cholera to plague. Therefore, the security policies of maritime borders and the role of customs and sanitary interventions became more important than ever before. The implementation of sanitary policies in the Ottoman Empire included the construction of quarantine stations, starting with the one in Istanbul in 1831, and the usage of new technologies such as sterilization (*etiv*) and disinfection (*pulverizatör*) machines. Port-cities such as Izmir, Salonica [8], and Beirut, which had busy maritime trade in the nineteenth century, were among the first places to construct the quarantine stations and implement sanitary practices and technologies.

## 2 Izmir Quarantine in the 19<sup>th</sup> century

After Istanbul, Izmir was the first city with a professional quarantine organization in the Ottoman Empire. [9, 10] Its quarantine station was constructed in 1846, close to the city center, but it burned down in the fire of 1848. Between 1866-1869, the quarantine (*Tahaffuzhâne*) was relocated to Klazomen Island, today Urla, at the entrance of the Gulf of Izmir. [11, 12] Urla Quarantine became an important part of the quarantine network in the Eastern Mediterranean. After Kavak Quarantine in Istanbul, Izmir's Klazomen Quarantine was the first one to be equipped with new sanitation technologies, such as a sterilization machine that used 110-degree vapor pressure (*tazyik-i buhar ile tathir ve tebhir*) to disinfect clothes and other personal belongings, in a process that took about 17 minutes. [13, 14]

Izmir was an important port city of the Ottoman Empire and became a major trade hub in the nineteenth century. The construction of the quay [15], harbors, and railway lines increased economic activities. The implementation of urban infrastructural projects including the construction of water pipes and sewage, street paving, and lighting accelerated particularly after the establishment of the municipality (*belediye*) in 1868. [16, 17, 18] On November 6, 1893, Bongofski Paşa, the Head of the General Sanitation Office and Head Chemist of the Ottoman Empire, visited and inspected Urla Quarantine and sent a report to the imperial central administration criticizing the poor material conditions and the lack of hygiene. [19] Bongofski Paşa stated that some of the water conduits in the quarantine were broken, so an eventual contamination could transfer germs to quarantine officials and to those passengers waiting to be disinfected, but the Ministry of Health denied his claims. In his report, Bongofski Paşa also drew attention to the sterilization machine (*etiv*) and warned that quarantine officials should physically separate items and clothes that had been infected from those that had yet to be disinfected.

In 1902, telegraph agents in Izmir were circulating the news about Mileyadi, a fourteen-year-old boy working as a waiter at one of the coffeehouses in Izmir, who had died of plague in Urla Quarantine. [20] The bacteriologists' confirmation of the cause of his death also created anxiety among local and imperial officials. Therefore, the Ministry of Health issued a decree stating that all ships leaving Izmir Gulf should stay in the reserve quarantine (*ihtiyat karantinası*) for forty-eight hours. Since no sign of plague had been seen in the city for fifteen days after Mileyadi's death and all the required scientific precautions (*tedabir-i fenniye*) had been taken, the reserve quarantine was subsequently abolished. The scientific precautions included disinfecting the items and clothes of maritime passengers who entered or exited the Izmir Port and the extermination of rats, blamed for transmitting the plague on ships. The Ministry of Interior emphasized that wherever Ottoman officials in localities saw any sign of suspicious diseases (*şüpheli hastalık*), mostly referring to cholera and plague, they should keep statistics showing the period of isolation and details about the treatment of those who were infected. The local officials in Izmir were "thanking God" for not seeing any other plague cases in the city after Mileyadi's death and underlined that the public health (*sihhat-i umumiye*) was safe and secure.

The archival documents indicate that imperial and local officials in the Ottoman Empire were closely following the maritime activities for any news or information about contagious diseases that occurred in the Mediterranean from Marseilles to Beirut. [21] Urla Quarantine was important for securing the imperial center from contagious diseases because almost every ship that had a passenger with a suspicious health issue was to drop anchor in Urla and be checked by officials. Its importance was repeatedly emphasized by the central authorities because this Quarantine played a crucial role in preventing the spread of contagious diseases along the sea route of the Muslim pilgrimage (*Hajj*) to Hijaz. Every year during the *Hajj*, thousands of pilgrims were isolated and treated in Urla Quarantine with the help of medical officials, and pilgrims' items and clothes were disinfected by the pressured steam of the sterilization machine. [22]

One of the major problems concerning the Urla Quarantine was its capacity, approximately five hundred people. [23, 24, 25, 26] Ottoman officials frequently discussed possible solutions to increase this limited capacity because of the increasing numbers of pilgrims passing through its facilities every year during the late Ottoman Empire. Due to budgetary issues, the officials decided, however, to use tents instead of constructing new buildings attached to the original Quarantine. [27, 28, 29]

### 3 Final remarks

Ottoman quarantines including Urla Quarantine were part of a larger network in the Mediterranean. [30] Quarantine stations were places for isolation, disinfection, and sterilization, and were also sites where new sanitation technologies were deployed and used to curb contagious diseases. The quarantines established in the Ottoman Empire in the nineteenth century with the aim of securing public health were also a result of the professionalization of medical practices, particularly bacteriology, as well as of urbanization plans, including infrastructural projects led by municipalities and local officials. Ottoman sanitation practices acted as an impulse for new urban planning and infrastructural works, particularly after 1894, under the leadership of Kasım İzzeddin, the head of Ottoman sanitation. [31] As seen in the example of Urla, the physical capacity and organizational and administrative structure of the Quarantine changed in the late Ottoman Empire. According to the reports drafted by Ottoman inspectors and engineers, the Quarantine needed to be repaired and some of the buildings in the complex had to be rebuilt in the first decade of the twentieth century. [32, 33, 34]

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