

Ayvalık: May Chimney Month

"Industrial landscape of Ayvalık" defined by a specific geography, in the Western edge of the Anatolia is accepted on the tentative list of UNESCO in April, 2017 as an outstanding example of social and economic structure of 19th-century industry based on olive-oil production in Western Anatolia (UNESCO, 2017).

The late 18th and the beginning of 19th-century was the period of Ayvalık's development of international trade with the help of İzmir as a metropolis. Ayvalık became one of the important port cities which consists of Rum¹ population. The main activities related with the trade was **olive oil and its products** such as soap and olive pomace -pirina- in addition to **flour** (Bayraktar, 1998: 23). At that time, olive-oil and by-products were produced by using **primitive methods** in the workshop buildings which were called '**mengene**' (workshop) that are single-floored buildings as mentioned by Manisa (2013).

In the 19th-century, the north of İzmir region including Ayvalık was defined as '**olive region**'. In that period, due to the weakness of the Empire, Anatolia became an open market for the colonialist powers and Ayvalık was one of the important gates for penetrating to the economy. Thus, it drew the attention of foreign investors during the industrialization period by introducing the machines instead of the primitive tools in Ayvalık and İzmir. (Bayraktar, 1998: 16-17, 23). Accordingly, in the last quarter of 19th-century, industrialization period for Ayvalık have started by introducing the steam power and related equipments by foreign investors. It was a breakthrough for production method which was needed new requirements on production process.

¹ 'Rum' is defined as Greeks [Orthodox, East Romans] of Anatolia, Greek speaking- Christians under Ottoman rule. The word 'Rum' is derived from 'Romeus' (Roman_east roman_) (Türkçe Bilgi, n.d.). Throughout the study, it is used as 'Rum' when referring the Greek population under the Ottoman rule.

Power for the 19th century traditional production process was provided by steam power. Basically all steps were the same as primitive methods but with the new equipments that operated with steam power in the new constructed factories (See Figure 1).

To begin with, olive-oil factories in Ayvalık are two storied buildings. The first floors serve for preparation of olive oil process and main soap production process. The ground floors serve for preparation of soap production and main olive-oil process. In general the traditional 19th century production process follows these stages (See Figure 1):

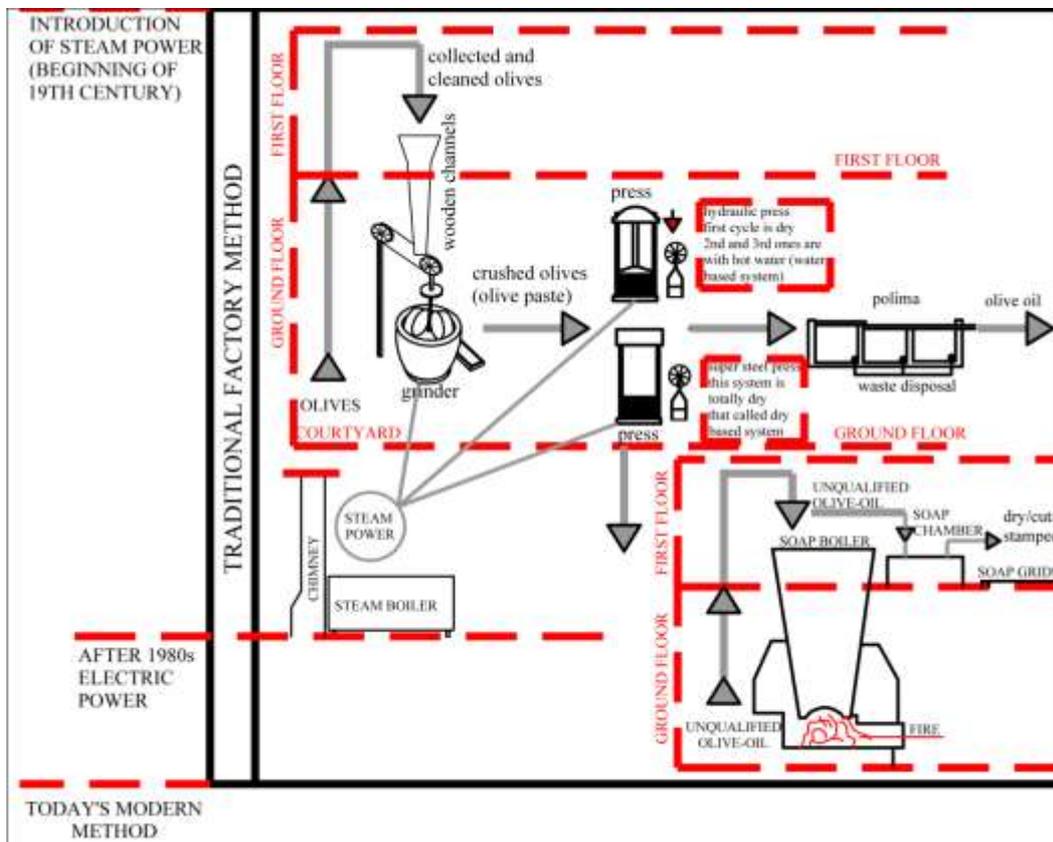


Figure 1: Traditional Factory Production Method in Ayvalık (source: Yıldız, 2017; prepared according to the interviews² made with inhabitants and site investigations)

² Individual Interview with A. Servet Ertem on January 16, 2016; individual interview with Hakan Doğan on January 17, 2016

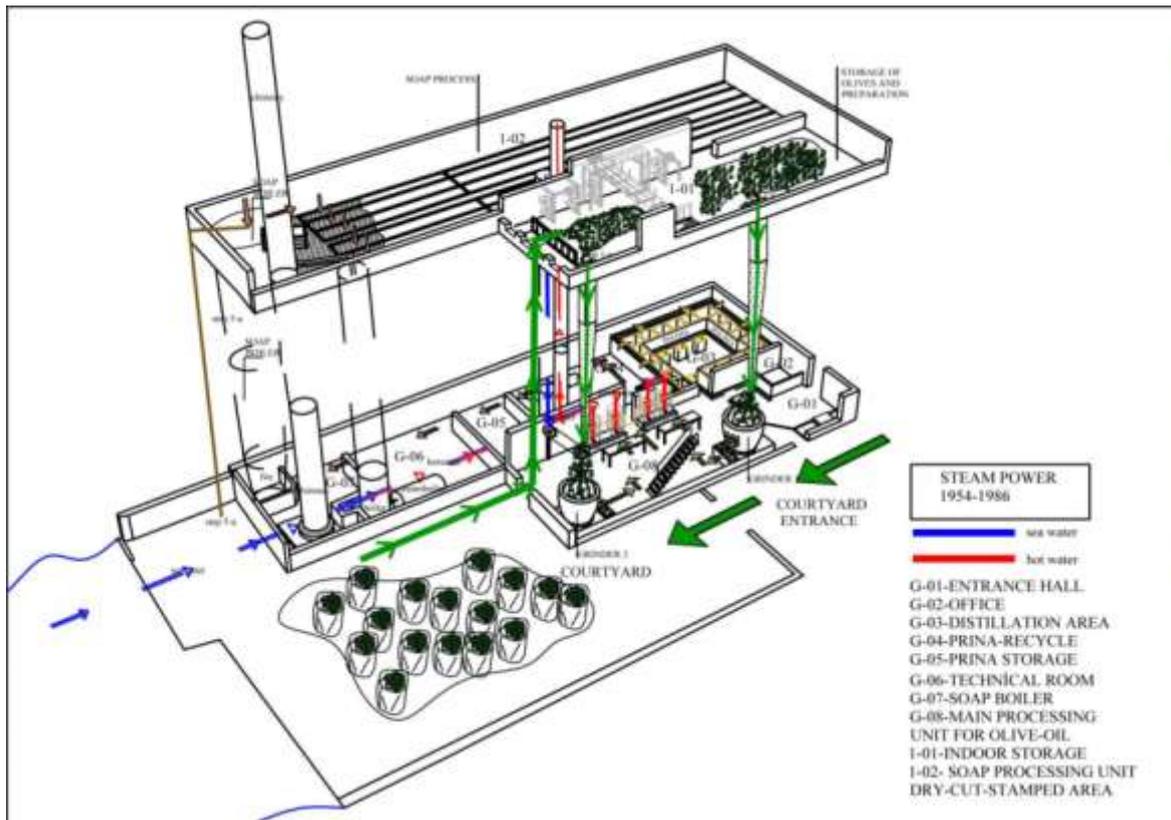


Figure 2: An example of 19th century traditional production process in Ayvalık [Ertem Olive Oil Factory], source:Yıldız, 2017

Firstly, olives were collected and cleaned if necessary. They were moved to the courtyard of the factories. As a second stage, they were transferred to the first floor of the factories by cranes. After, the olives were sent through channels to the grinders that were located on the ground floor. And the main process was started. The other steps were operated in the ground floor. The olives were crushed in the grinders and became olive paste.

For the next step, in water based system, **hydraulic press**³ was used that operated in three cycles: first cycle was dry and the others were generated with hot water. For this type of press, olive paste was put into the bags which were envelope shaped (Ünsal, 2003).

³ The hydraulic press system that was invented by Joseph Graham in 1795, was the significant development for olive-oil production as mentioned by Balatsouras (1986).

After that, the liquid extracted from press that composed of olive-oil and water were sent to the distillation pools called 'polima'. The olive-oil was separated with the collecting tools and the waste was discharged to the sea. During this process, the remains of the press bags as pomace (pirina) were used for fuel for the steam boiler. Thus, the system was working sustainably.

In addition to that, for the ones which also includes soap production, firstly unqualified olive-oil extracted through the olive-oil process was put into the soap boiler which is located in the first floor of the factories. This boiler was fired through its furnace which is located in the ground floor. After the boiling stage, obtained liquid that is soap, was poured into the soap basin. And it was poured into the drying grids that called 'sabun tavlasi'. As a final step, they were cut and stumped.⁴

All these aforementioned stages were provided by the steam boiler, steam engine and furnace which necessitate a technical space and a chimney in order to evacuate combustion gases and smoke. Thus, this development on production method caused the construction of new factories in Ayvalık which are two or more floored, large volumed structures located in the sea shore with their chimneys. They also housed **soap production** as by-product of olive which is based on the boiling the olive oil with coal, were spread in Ayvalık in time and they became symbol of Ayvalık with their characteristics (Uçar, 2014: 25).

Chimneys, are the most important aspect of the city which are considered as a symbol and a landmark of the settlement pattern which constitute the main silhouette of Ayvalık as an industrial heritage place. In addition to this, they have very crucial place in the collective memory of the local people. In Ayvalık, usually chimneys are made out of brick with stone base in conic shape without decorations except some examples such as hexagonal with cross decoration. They are mostly 20-25 m high, while some higher examples are seen due to evacuate toxic waste of soap production which

⁴ All these information were obtained through the interviews with the inhabitants and site investigations in January 2016.

may cause danger for the human life. Therefore, the factory complexes which include the soap production and independent soap factories have long and tiny chimneys.

From 19th Century To Today, Chimneys in Ayvalık

Today, 19th century traditional factories are more than twenty as a building stock in Ayvalık, which were kept functioning from the 19th century to the end of 1970s by making modernizations to adapt the latest olive-oil production technology by passing from steam power to the electric, and modern tools or by making partial renovations. Although after the relocation of the industrial activity that caused the abandonment for these industrial buildings, majority of the chimneys are deteriorated and their upper parts were partially demolished, but a great number of them -at least skirt of the chimneys- are present currently.



Figure 3: Top: When the factories were active in 1923, Bottom: After relocation of industrial activities in 2005 (source: Şahin Güçhan, 2008)



Figure 4: Ayvalık in 1950s (source: Efe et al., 2013)

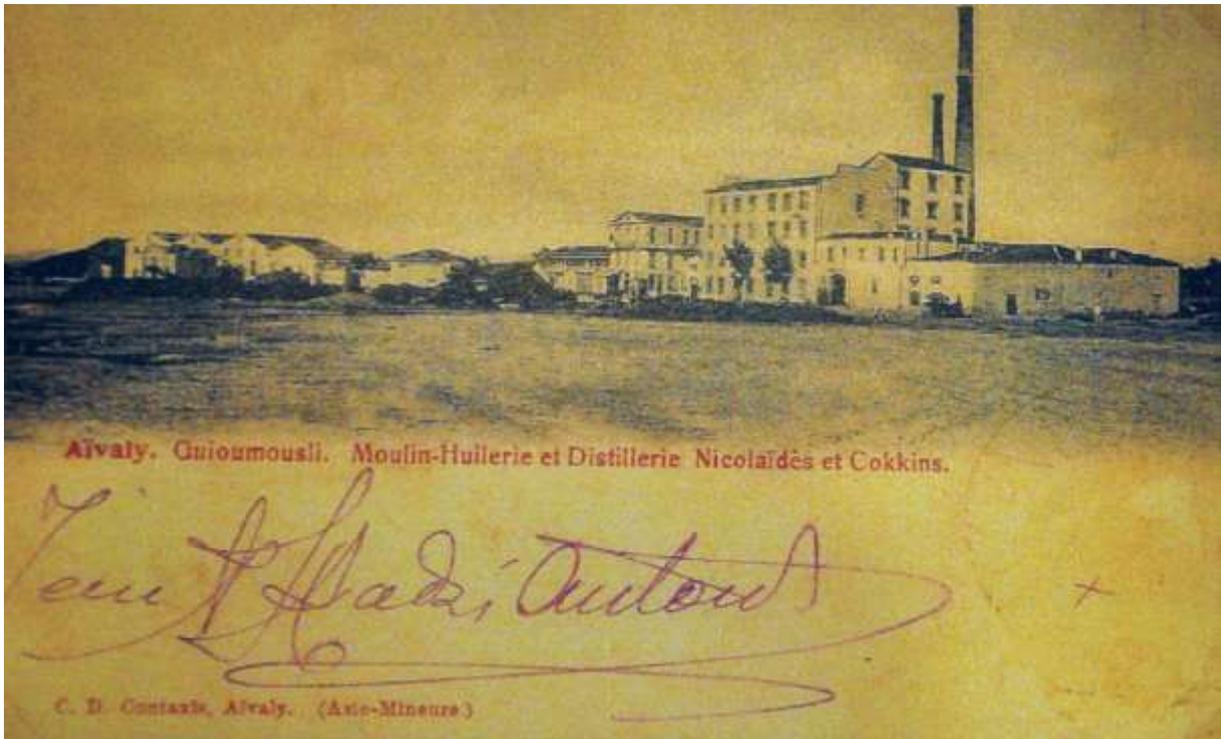


Figure 5: Beginning of the 1900s, Gümüşlü Factory owned by Nikolaides and Cokkins (source: Efe et al., 2013)

EXISTING FACTORIES AND THEIR CHIMNEYS IN AYVALIK

KOMILI OLIVE OIL FACTORY



source: Efe et al., 2013

SEZAI ÖMER MADRA
OLIVE OIL FACTORY-1



source: Efe et al., 2013

SEZAI ÖMER MADRA
OLIVE OIL FACTORY-2



source: Efe et al., 2013

Figure 6: Existing factories, with their chimneys

EXISTING FACTORIES AND THEIR CHIMNEYS IN AYVALIK	
MUSTAFA SÖNMEZ OLIVE OIL FACTORY	 <p style="text-align: right;"><i>source: Efe et al., 2013</i></p>
ERTEM OLIVE OIL FACTORY	 <p style="text-align: right;"><i>source: Yıldız, 2017</i></p>
ERMAN SOAP FACTORY	 <p style="text-align: right;"><i>source: Efe et al., 2013</i></p>

Figure 7: Existing factories, with their chimneys

EXISTING FACTORIES AND THEIR CHIMNEYS IN AYVALIK

HULUSİ ZARPLI OLIVE OIL FACTORY



source: Efe et al., 2013

EMİN KANTARCI
OLIVE OIL FACTORY



taken by Gözde Yıldız, 2016

Figure 8: Existing factories, with their chimneys

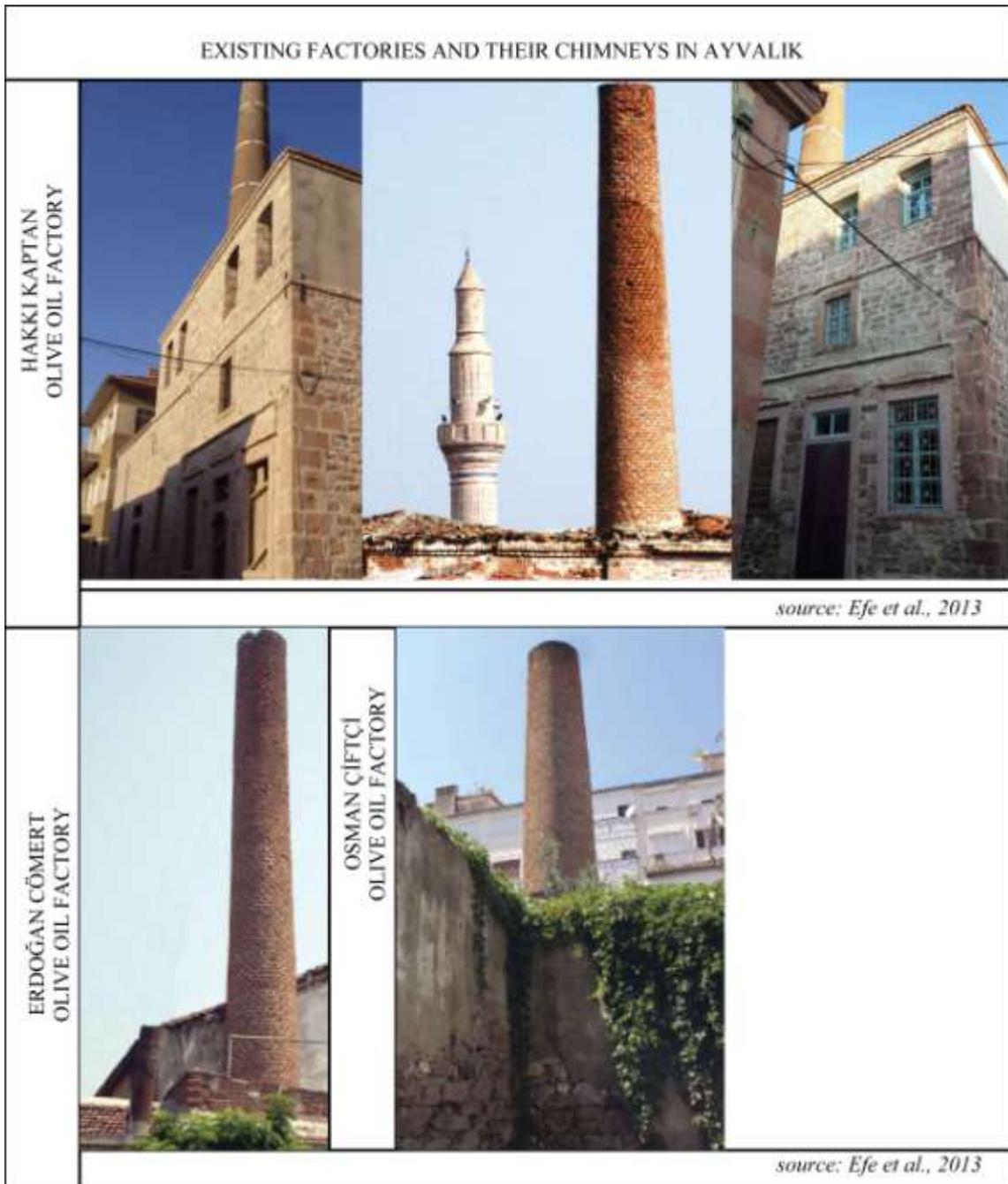


Figure 9: Existing factories, with their chimneys

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