

A CITY SHAPED BY MODERNIST ARCHITECTURE: SÜMERBANK TEXTILE (COTTON) PRINTING FACTORY AND ITS WORKER SETTLEMENTS

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Abstract. At the turn of the 20th century, the ideas of the English garden city movement influenced the designers and the governments not only regarding the design of the cities but in different aspects, including the design of industrial settlements. The factories built in the early 20th century mostly employed the ideals of the modern movement and turned the factories into a social reform for workers and the cities where these factories were located. Nazilli Sümerbank Textile (Cotton) Printing Factory is one of these social factories, which can be recognised as a self-contained factory complex that was participating in the social transformation of the area. The aim of this paper is to conduct research regarding the impact of the social factories on the cities and society through the case study of Nazilli Sümerbank Textile (Cotton) Printing Factory and document its workers' settlements.

Keywords: modern movement, social factory, worker settlements, industrial heritage, Turkey, Nazilli, Sümerbank.

Introduction

Modernism was a multi-layered movement in history. One of its layers was its philosophical characteristic due to the rational and plan-based foundations of the Enlightenment. It was also economic due to the mass production and its consumption patterns (Çalışkan, 2003). However, one of its main features was its influential dimension, which had a social aspect with the property rights it brought to the citizens. This had a reflection on architecture as well. The modern movement can be regarded as one of the dominant architectural styles internationally in the early 20th century. It was not only an architectural language for the architects, but it was a different way of life and social reform.

Especially when the Bauhaus movement was put forward in Dessau, Germany, it generated a new lifestyle and changed the image of the city. As Moholy-Nagy (1975) states, Bauhaus was able to produce designs which had an influence not only on industrial production and architecture but also in the shaping of daily life. However, most of the time, the modern movement in architecture is accused of disconnecting society from tradition and memories, and its social impact is not given heed.

Even though it can cause that kind of a result from time to time due to its language, it can also shape new memories since it represents an era of its own. In the case of Turkey, the modern movement represents the architecture of the first decades of the foundation of the country. When the country went through the settlement process between the 1920s and 1930s, it tried to establish a new cultural identity, which was more peculiar than the Ottoman Empire (Doğan, 2020). As Bozdoğan (2001) states, at the time of the Republican period, the architectural discourse of the modern movement was appropriate to the discourse of the government because the intention of both was to create a Westernised and modern outlook. Furthermore, the emphasis on high-quality standards for the modern man and the social aspect was compatible with the ideals of Mustafa Kemal Atatürk. In that regard, using this architectural movement while constructing the new nation was inevitable. Especially in the design and construction of social factories, the modern movement was widely implemented in Turkey and other parts of the world. Led by Mustafa Kemal Atatürk, in 1933, a new public enterprise was envisioned, which is called Sümerbank (Arslan, 2022). The idea was to establish factories which would focus on production by using the country's existing raw material

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resources. However, the intention was not only to design factories and develop the industry but the modernisation of society. A revolution in the socio-cultural identity was tried to be achieved by building factories with social facilities such as ballrooms, libraries, workshops for job training, and research and development institutes for using the products in total capacity.

Furthermore, these factories also aimed at especially hiring female workers who were not active in working environments in the 1930s. Therefore, all these changes, which directly affected both the cities and the citizens, left a mark on the regions where those factories were built. In that regard, the social factories, which started to be implemented in various places in this period, can be considered as good examples of providing a new way of living for communities which work and live in these factories. An excellent example of a social factory is the Sümerbank Textile (Cotton) Printing Factory, which was launched on 9 October 1937 in Nazilli, Turkey.

In this paper, Nazilli Sümerbank Textile (Cotton) Printing Factory and its workers' settlements were used as a case study to perform analysis regarding the worker settlements of social factories and to understand the impact of social factories on the cities at the beginning of the 20th century. The first part of the article explains the creation of worker settlements and social factories in a broader context. Furthermore, it gives information regarding the social factories and their examples in Turkey. In the second part, the article focuses on the case study and the region where the factory was built. Moreover, it architecturally analyses the workers' settlements of the case study. Following this, in the third chapter, the paper assesses the social aspect of the worker settlements of the factory complex. Finally, the article discusses the visible impacts of social factories in general and in the case of Nazilli Sümerbank Textile (Cotton) Printing Factory and the current situation of the factory complex.

1. The creation of worker colonies and settlements

Providing housing for workers and establishing worker colonies or worker settlements have been a long tradition which goes back to the 18th and 19th centuries, especially in England and Germany (Bakar & Yamaçlı, 2017). After the Industrial Revolution, particularly in England, the migration towards cities increased, and people who used to live in the villages required new settlements in the cities. Therefore, the factory owners and the government began to build housing nearby the factories. However, some of these settlements did not contain healthy living environments since they were directly affected by the pollution of the factories. As a result, the management of the factories needed to offer better conditions.

According to de Gier (2016), in the example of the Krupp company from the early 19th century, the reason for providing welfare and all the company benefits to the workers was not only related to establishing better stand-

ards for the workers but also to find workers as well. It was not easy to find skilled or even unskilled workers then, and the idea was to convince the workers to stay at the company, prevent extensive turnovers of the workers, and convince them to be loyal. However, living in these settlements had a positive outcome for the workers as well. Due to living very close to the factory, they had the possibility to reach their working environments easily, and it was also cutting the transportation costs.

In these settlements, there tended to be a classification regarding houses based on the factory's hierarchy. The differences between these houses were not only the location of the house but also the size and the quality offered to their users. However, the life quality of the lowest-level workers was still not appalling and represented a standard as well. According to Bakar and Yamaçlı (2017), these standards for the workers would establish psychological, economical and sociological pressure on the workers since they would not want to leave any of the provided benefits and want their continuity. Therefore, it was still directly related to the interests of both parties. Because while the workers would have free accommodation, a school for their kids and social facilities, the factories would have loyal employees.

In the 1920s and 1930s, company-owned housing was predominant; however, the direct involvement of employers was reduced, and company-supported, municipal, or social intermediary-building societies started to be in control of the workers' housing in the following years. Therefore, the first examples of social factories started to be shaped in different parts of the world in the 1930s and in the Soviet Union before the era of Stalin (Dilek, 2021). According to Archer and Musić (2017), social factories were not merely a site of employment and production. They were an essential institution of political activity, routine, and leisure practices as well. Therefore, they were involved in a large part of the daily life of individuals and society. However, in the case of the Soviet Union, the social factories were more in the shape of monotowns, which were actively constructed as new production facilities in small and medium-sized towns, where such enterprises became town-forming (Permyakov & Krasnova, 2018). In that regard, it is crucial to have a division between the monotowns and social factories.

1.1. The concept of social factories and their examples in Turkey

In his book "The Political Consequences of Modernization", Kautsky (1972) states that the aim of modernisation was to provide industrialisation of societies. Therefore, it might be possible to state that one of the primary outcomes of modernisation can be the factories which were built by its impact. Especially in the Early Republican period, the government paid great attention to industrialisation to achieve economic freedom and to accelerate the development of the country. However, due to the Great Depression, which was affecting the world at the time,

finding private companies which might invest in factories was not that easy (Kepenek & Yentürk, 1996). Therefore, the government started its own program and began to construct factories all over the country, which mainly were social factories.

As Aydın and Aksoy (2020) state, social factories had specific characteristics which made them different from any other type of factories. They were not only designed for production and earning money from the products, but they also focused on social development, and they were set as an example of a living model. The activities that were carried out in the factory complex for the workers, which would help the workers to socialise and improve themselves both socially and culturally, were also open for the citizens of the city where the factories were located. For example, Eskişehir Sugar Factory had a stage, that the Eskişehir City Theatre was also performing at when they were newly established and were having difficulty in finding stage for their performances (Yıldız, 2016). Furthermore, the social factories also focused on protecting the rights of both white and blue-collar employees. In most cases, the factories had their own unions, which protected the rights of the employees when they were actively working but also when they retired as well. On the other hand, they were also aiming to help the citizens. Even in some examples, it is known that, from time to time, the factories would provide free products to the people who lived nearby. The power stations which were used for the production would also provide electricity for the cities as well (Aydın & Aksoy, 2020). Therefore, they were part of the social, economic and technological transformation of the cities they were located in.

Even though the factory in Zonguldak was not designed as a social factory, its workers' settlements can be given as an earlier example of worker settlements, which were designed by Seyfi Arkan for the well-being of the workers. The factory in Zonguldak was built in the 19th century; however, there was not a particular settlement for the workers until after the Republican period of Turkey because the workers were not working full-time, and they used to spend most of the year in their villages with agricultural work (Findıklı, 2017). However, when the machine started to be used more in the production process, a requirement for housing for the workers occurred. According to Akbulut (2011), one of the main principles of the design of these workers' settlements by Seyfi Arkan was not to divide the relationship of the workers with nature and keep them connected with agricultural works. The settlements involved housing, service buildings which have a public kitchen and a laundry facility, cinema and theatre buildings, primary schools, tennis courts and large gardens (Apaydın, 2020). Therefore, the workers' settlements designed for the existing factory had everything the workers needed and at the same time, gave them the possibility of transition between being an agricultural worker to industrial worker.

One of the first designed social factories in Turkey can be regarded as sugar factories with their enriched architectural programs (Özkul, 2020). In the sugar factories, the

first domestic production started in 1926, and by 1935, there were four factories, which were collected under the Turkey Sugar Factories Corporation (Veldet, 1958). In these complexes, there was a well-defined division between the private and public space, which created the concept of independence. Their plans were comprehensive, which did not only involve the production zones but also involved structures that provided the requirements for the housing, educational and social demands of the individuals and their families (Sönmez et al., 2019). Some of these structures were restaurants, cinemas, guest houses, mosques, canteens, retail stores, civil servants, nurseries, primary, secondary and high schools, hospitals, infirmaries, sports fields and swimming pools. Therefore, the workers who were members of these factory communities satisfied all their modern society needs in these factory complexes.

The workers' settlements in Nazilli also had these gardens in the housing area, which is similar to Seyfi Arkan's design and the garden city ideals of the early 20th century. It was one of these social factories, which was not just aiming at production but also aiming at improving society in a positive way. It was a state-owned enterprise which was established to earn profit from the natural and national resources that were disregarded. Even though it was a government-owned facility, it had the characteristics of a social factory, and it was one of the good examples of workers' settlements in Turkey. The factory, with all the other buildings inside the complex, was listed as cultural heritage in 1998. In the listing process, keeping the factory with the machinery inside as a museum was advised (Zeybekoğlu, 2002). Therefore, in 2002, after actively working for 65 years, the factory was closed. Although, instead of becoming a museum, the complex was given to Adnan Menderes University, and some of its faculties moved to the factory buildings. However, in its new function, the power plant and the main factory buildings with their machinery were not used, and they were left abandoned. Furthermore, the workers' settlements were demolished. Currently, the space of the workers' settlement is used as an urban park.

2. Case study: Nazilli Sümerbank Textile (Cotton) Printing Factory

In the first five-year industrial development plan, which was effective between 1934 and 1938 (prepared in 1932 and started to be implemented in 1934), the government in Turkey announced the idea of opening a factory in Nazilli (Uzunoğlu, 2008). The main aim was to produce the most common consumer goods by domestic manufacturers, which involved the production of food and textiles (Polatoğlu, 2021). The construction of the complex started in 1935, and it opened in 1937 (Zeybekoğlu, 2002). The loan for settling the factory was provided by the Soviet Union, and all the machinery and furnaces were brought from there as well, except cloth printing machines. The factory was the first fully equipped industrial complex in Turkey (Uzunoğlu, 2008).

According to Sırma (2022), one of the most interesting facts about the factory and the agreement with the Soviet Union was regarding the loans. The loan was not paid in cash to the Soviet Union, but it was paid back with citrus fruits, which are one of the main products of the Aegean region. Therefore, this agreement was beneficial for both parties.

Nazilli is a town in the western region of Turkey, which is part of the city of Aydın. Due to its geographical position, it is well located in a district with access to the harbour of Izmir but at the same time to the inner parts of the country. Furthermore, the railway from Izmir to Aydın, which was built in 1865, also extends to the city (Bigat, 2017). Therefore, regarding logistics, the area is more convenient than the other towns in the region. The region has fertile soil, which makes it possible to grow high-quality cotton and other products. It also has easy access to irrigation opportunities since it is located in the middle of the Meander Valley. Moreover, the population and the workforce were convenient in this region for settling a new factory. However, after the factory started to work in this area, the population increased as well. According to Doğan (2022), while in 1935, the population was 12005, in 1955, it was 31487. Therefore, the factory not only affected the industrial production in the city, but it had an impact on the population growth.

The factory arranged workshops for its workers on a regular basis regarding their work; however, the workshops also involved topics such as reading and writing courses, which citizens had the possibility to attend as well. Furthermore, facilities such as the cinema and the ballroom were also used by society. Especially in the 1930s, the participation of women in social events such as balls or parties was not that common. In that regard, it can be stated that the factory helped females to find their solid place in society. Furthermore, the choir, which focused specifically on classical Turkish songs, had various concerts in the cities nearby, which influenced the spread of polyphonic music in Anatolia. On the other hand, the units such as the school, hospital, Turkish bath and power plant provided services to the whole city (Aritan, 2004). Therefore, it had a direct impact not only on social life but also on the development of the city itself.



Figure 1. Construction of the factory buildings (source: Bayındır, 2019)

The factory had a cotton research institute which provided work for researchers. The main aim of this institute was to perform research regarding cotton seeds, which are the most resistible and suitable for climate conditions, furthermore, which are efficient and have high quality. However, the approach towards research, innovation and training was not only about cotton, but it was one of the strategies of the factory in general. As Zeybekoğlu (2002) states, even during the construction of the building, the engineers from the Soviet Union provided training for the Turkish engineers; therefore, they could lead further projects by themselves (Figure 1). In that regard, the factory was part of a development plan of the government in industry, economy and society.

The project for the factory was prepared by the Russian architect and engineer Ivan Sergeevich Nikolaev (Eldeş, 2019). The location of the factory complex was further away from the city centre and was near the southern border of the city at the time. When the factory was constructed, a direct train line was also built to the city centre from the factory (Figure 2). The train line was known as “Gıdı Gıdı” by the workers and the citizens, which got this nickname due to the sound it makes while riding (Özkan, 2021).

With the help of this train line, the workers who lived in the city centre had the possibility to reach the factory easily, but at the same time, the products were transferred



Figure 2. The view of the train line, which is currently out of use (photos are taken by the author in 2023)



Figure 3. The view of the checking point (photo is taken by the author in 2023)

to the main railway faster as well. This line was actively used until 2006, even though the factory was closed. Nowadays, it is only used once a year at the celebrations of the day when the factory was first launched. The factory complex contains many buildings with different functions and various sizes. It can be stated that the checkpoint structure near the train station is one of the most remarkable modern movement structures in the city. Even though it is a small cabin, it is a good representation of the modernist language with a slanted roof (Figure 3).

The site of the factory can be divided into two different quarters. One of them is the living quarters, and the other one is the production quarters (Figure 4). When factory was first built, it had an electric power plant, warehouse, repair workshop, train station, fire station, a specific warehouse building for storing raw cotton, cooling pool, buildings for threads, weaving and printing, an officer's club, an administrative unit, a small-scaled hospital, school, kindergarten, library, ballroom, cinema, primary school, bakery, canteen, a small stadium, sports facilities such as roller skating tracks, apartments for workers, officers and engineers (Bigat, 2017). Therefore, with its two quarters, the facility was like a small city.

The production quarters were located on the western side of the main axis, which connected the city centre to the factory complex. In a sense, this axis was dividing production from daily life. However, some of the facilities, such as the housing for the management, open-air cinema, stadium, canteen, ballroom and kindergarten, were still within the borders of the production area due to their convenience (Figure 5).

The housing for the management was between the stadium and the open-air cinema, which was inside the garden walls of the factory plant. These structures had a dominant modernist architecture which can be regarded as Bauhaus aesthetics, with their horizontal railings and white cubic forms (Figure 6). Even though most of the buildings which were built to provide housing for both the workers and the administrative staff are already

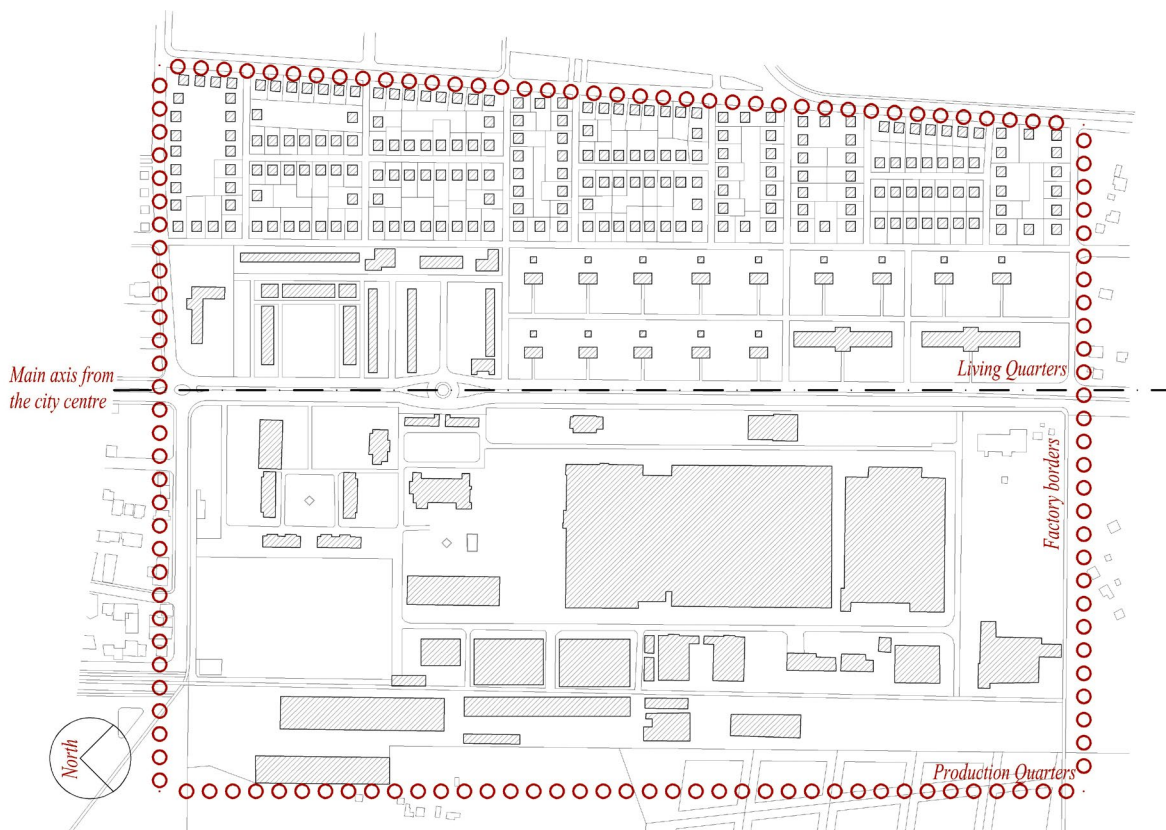
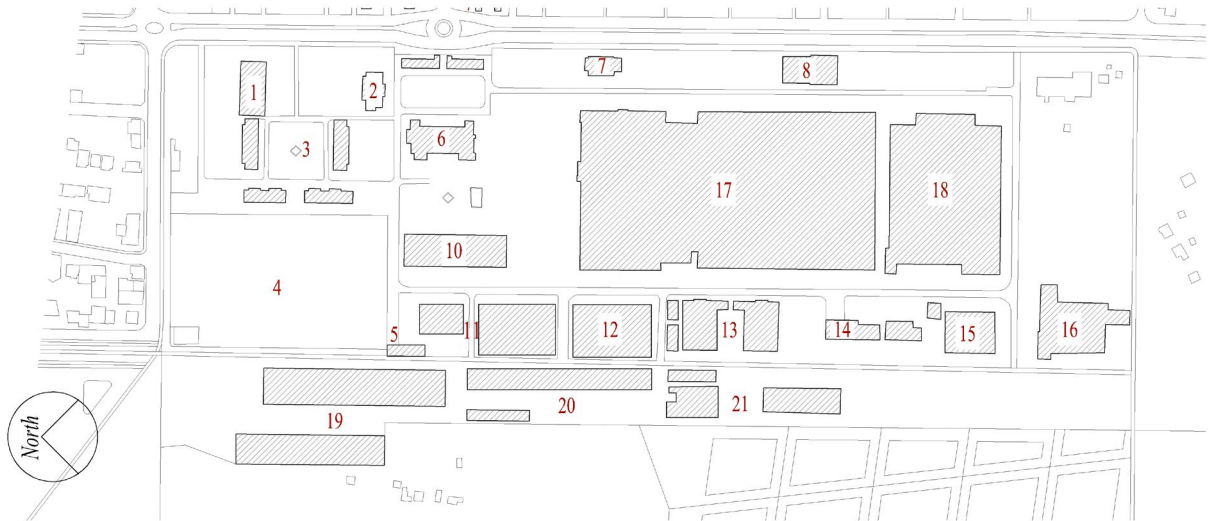


Figure 4. Site plan of Nazilli Factory Complex



1. Open-air cinema, 2. Administrative building, 3. Housing for the management, 4. Stadium/Football Field, 5. Train Station, 6. Cinema and Canteen, 7. Kindergarten, 8. Dining Hall, 9. Water Station, 10. Warehouse (Food and Grain), 11. Cotton Gin Workshop, 12. Warehouse (Administrative), 13. Workshops, 14. Fire Station, 15. Quality Control, 16. Power Station, 17. Tread and Weaving Plant, 18. Folding Plant, 19. Warehouse (Fabric), 20. Warehouse (Materials), 21. Carpentry Workshops

Figure 5. Site plan of production quarters

demolished, the housing of the management still stands. However, it is believed that it is not due to their architectural characteristics and appreciation for it, but it is more related to the location of the housing, which is in the production quarters rather than the living quarters.

Besides the housing for the management and the other social facilities, the production area consists of various buildings for the manufacturing and storage of both raw materials and end-products. The manufacturing area was illuminated by natural light by its specific curvilinear roof system, which allowed the northern lights to reach directly inside the production hall and assisted in the ventilation of the factory. According to Peri (2006), the semi-vault and the northern light windows were insulated with rein-

forced concrete and bituminous material, which reduced the fire risk. In that regard, it can be stated that there was a safe and healthy environment provided for the factory employees to work while they were indoors (Figure 7).

The same environment was also tried to be provided in the living quarters as well. However, staying in the living quarters had some regulations for the continuity of a healthy environment. In the regulations announced in 1942, regarding the acceptance of the workers, it is stated that the newly arrived workers should visit the Turkish bath first, and their clothing should go through the incubator. Furthermore, they should have a buzzcut of their hair (Doğan, 2022). Therefore, keeping healthy standards both in the working environment and the living quarters was one of the priorities.



Figure 6. Housing for the management (photo is taken by the author in 2023)



Figure 7. Manufacturing hall (photo is taken by the author in 2023)

The housing for the officers, engineers and workers was located on the other side of the main road from the factory, which was in the form of social housing. Especially the housing for the workers followed the garden city ideals of the modern movement with a grid plan scheme. According to Zeybekoğlu (2002), these one-floor masonry structures were one of the first social housing constructed in Turkey. However, it should be noted that, even though it was not designed together with the factory, Seyfi Arkan's workers' settlements for the factory in Üzülmüş, Zonguldak, were designed and constructed earlier, in 1934 (İmamoğlu, 2003). The living quarters had various structures for different users. However, the common characteristics of all different buildings were their direct access to the garden and the natural environment, which were believed to have a positive impact on both the physical and social state of the workers (Mortaş, 1944). Therefore, the worker settlements of the factory were one of the unique features of this social factory.

2.1. Architectural analysis of the worker settlements

The worker settlements of the factory were on the eastern side of the factory plot. The Russian experts who designed the factory suggested in their reports to build living quarters since they concluded that Nazilli might not provide enough workforce and there might be a requirement for places to stay for the workers to come. Furthermore, when the factory was first opened, the citizens were indifferent to working in a factory as well since they did not have much knowledge regarding industrial facilities work. Moreover, they were used to work as farmers in their fertile lands (Doğan, 2022, p. 85). The living quarters contained pavilions for single workers and single officers, two-story apartments for the workers and their families, smaller houses with gardens, apartment blocks for officers and engineers, a bakery, a supermarket, and a primary school for the children of the settlement (Figure 8).

2.1.1. Apartment blocks for the officers and engineers

Apartment blocks for the Officers were located next to the primary school at the living quarters. There were three different blocks with two entrances each. All the blocks had two stories with eight flats on each floor. Therefore, there were 48 flats in total. The floor plan of the apartments was relatively simple, which contained an entrance hall, kitchen, bathroom, living room and bedroom (Figure 9).

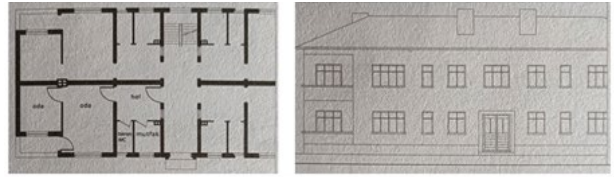
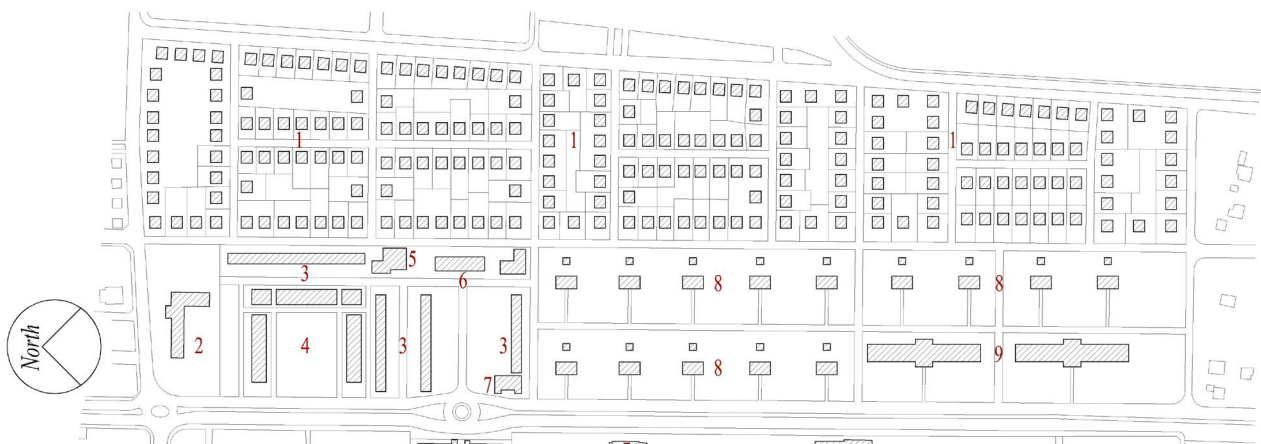


Figure 9. Plan and façade of the apartment blocks for the officers and engineers (source: Uzunoğlu, 2008)

2.1.2. Apartment blocks for workers with families

Apartment blocks for the married workers with families contained fourteen buildings. While five of these buildings were at the front near the main street, the other nine were at the back. The front structures were built prior to the other nine buildings. Each apartment block had a semi-basement floor and two floors on top (Figure 10).

Even though these apartments were appointed to married workers at the beginning, after the 1950s, workers moved to houses with gardens. Therefore, the officers and the engineers were located on the first and second floors of these buildings. In each building, there were six flats, which had one bedroom, a living room, a kitchen and a bathroom. These apartments had a specific design, which was called TYPE A2, and it was repeatedly used in various Sümerbank factory workers' settlements. In the original plans, the buildings contained only four flats, and the basements were used for storage areas. However, it is believed that the basements were converted to apartments



1. Workers' houses, 2. Primary School, 3. Barracks, 4. Apartment Blocks for the Officers and Engineers, 5. Bakery, 6. Guesthouse (Single Officers' Pavilion), 7. Supermarket, 8. Apartment Blocks for Workers with Families, 9. Single Workers' Pavilion

Figure 8. Site plan of living quarters

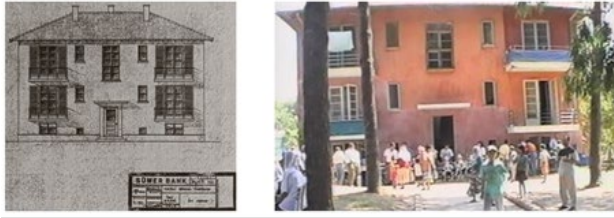


Figure 10. Façade drawing and a photograph of the apartment blocks for workers with families (source: archive of İlhan Öden, 2023)

during the Second World War when there was huge immigration to Nazilli from the Aegean islands (Bigat, 2017, p. 172). Therefore, the newly moved unskilled workers and their families were located in the semi-basement of these apartment blocks. Around this period, wooden barracks were also built with the purpose of locating immigrants.

2.1.3. Single officers' pavilion

The building block changed its function a few times during its lifetime. In the original project of 1937, the building was called the Single Officers' Pavilion; however, in 1945, it was called the Master Workers Pavilion, and in 1970, it was called the guest house (Bezirci, 2001). When it is compared with the pavilion for single workers, it can be stated that the pavilion for the officers was more spacious when it was first designed (Figure 11).

The structure had 32 rooms which contained approximately 10.2 meters of square space (Figure 12). The rooms were located around a corridor, and the bathrooms were next to the staircase, which was in the form of a shared bathroom. When the structure was converted into a guest-house, small sinks were added to each room, which made it more convenient for its guests.

2.1.4. Single workers' pavilion

In the original project, the main idea was to create a sleeping setting for single workers, which would be convenient and easy to manage. Therefore, four pavilions were designed for this purpose. However, only two of them, which were closer to the main road, were built in the first phase of construction (Figure 13).

They contained two wings which were symmetrical from the entrance axis. While the entrance had two floors, the wings had only ground floors, which had six large rooms in total to use as a dormitory. It is believed that the upper levels of the entrance might be used for controlling purposes, while the ground floor of the entrance axis might be used for bathrooms and toilets (Doğan, 2022, p. 94). In 1940, it was decided to convert this dormitory setting into nineteen flats with spare entrances from the garden (Figure 14). Therefore, while the buildings were aimed at providing a living environment for the seasonal workers without their families, eventually, they were started to be used by more settled workers with their families.



Figure 11. Single Officers' Pavilion (source: archive of İlhan Öden, 2023)

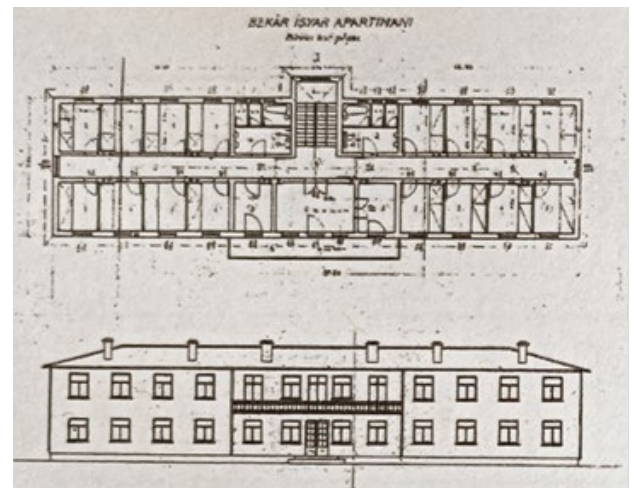


Figure 12. Drawings of Single Officers' Pavilion (source: Doğan, 2022)



Figure 13. Single Workers' Pavilion (source: archive of İlhan Öden, 2023)

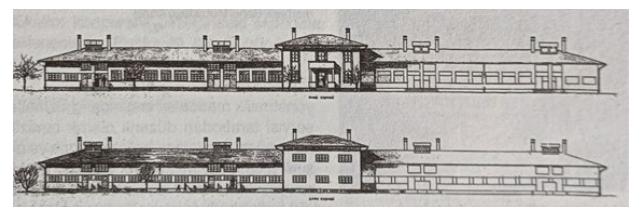


Figure 14. Drawings of Single Workers' Pavilion (source: Doğan, 2022)

2.1.5. Workers' houses

The workers' houses were added to the factory complex in the 1950s when the worker population increased, and instead of seasonal workers, more settled employees started to be part of the factory, and a new housing setting was required. According to Peri (2002, p. 15), in total, 228 single-unit houses with three different types were implemented in the plot provided for the construction (Figure 15).

The plot was situated at the east end of the factory borders behind the other apartments for the employees. The houses were small, and they only had one floor (Figure 16). They were assigned to various levelled workers according to their sizes. They contained one or two rooms, depending on the typology. Each house had its own garden and had a simple planning scheme. According to Zeybekoğlu (2002), these individual worker houses were formed in line with the needs of the employees, and they reflected the rational functionalist attitude of the period (Zeybekoğlu, 2002).

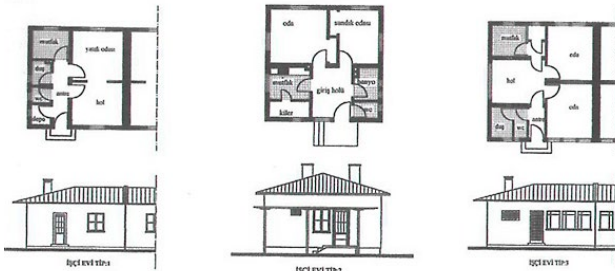


Figure 15. Plan scheme of three different houses (source: Zeybekoğlu, 2002)



Figure 16. Photographs of the Workers' Houses (source: archive of Ilhan Öden, 2023)

2.1.6. Wooden barracks

The wooden barracks were built for the immigrants coming from Kos Island in the 1940s (Bigat, 2017, p. 193). They were temporary structures which were housing families with children. The residents used to call these structures as train carts due to their forms (Figure 17). They did not contain any bathrooms inside; therefore, their residents had to use the Turkish bath nearby. They had well-maintained gardens, which were sometimes used for growing vegetables. These buildings were demolished due to the decay of the structures and a decrease in the workers' population.



Figure 17. Barracks (source: archive of Ilhan Öden, 2023)

3. Social aspect of the worker settlements in Turkey and in Nazilli

Sümerbank, with its different factories, was one of the social factories all around the country, which affected the urban identity and, at the same time, assisted the growth of the phenomenon of industrial society in Turkey. While this phenomenon first emerged in Europe, with the new dynamics of the world in the early 20th century, subsequently, it began to be seen in developing countries as well (Aron, 1973). Therefore, agricultural societies evolved into industrial ones, which affected the social structure and stratification. Social structure can be distinctive but, at the same time, it can be the balanced arrangement of institutions whereby people in a society interact and live together (Wilterdink & Form, 2023). It can shape the daily life of the people by the institutions, such as the family, norms, roles and different hierarchies. As Durheim states, in industrial societies, differentiation and individuality can increase due to the division of different jobs, and solidarity is being replaced with mechanical ones (Bottomore & Nisbet, 2014). Therefore, it can influence the behaviour and the attitude and establish a new structure. In this new structure, while people learn how to act individually, they also learn to work as a group like a machine. On the other hand, the division between the jobs can assist people to realise that, even though there are various stratification in the group, they can still have equal education, health services and social activities. In that regard, it might be possible to state that the daily routines of the worker

settlements can have a more prominent social aspect, which can change the whole society itself and the culture.

In the Early Republican period in Turkey, when a factory was built in a city, it was not only the factory that was constructed, but a national identity was shaped in the form of space (Zeybekoğlu, 2002). Therefore, when a factory complex with its working settlement is built, it does not only have an impact on the lives of the families who inhabit there but also on the city and its citizens (Bakar & Yamaçlı, 2017). In the example of Karabük, Barutçu and Özdemir (2017) stated that most of the interviews they performed with the citizens in the present included a longing for the old days when the factory and its social facilities were active. In the case of the Karabük factory, it can be stated that the city was not even a municipality before the factory was constructed (Apaydın, 2020). Therefore, it is possible to assume that the impact might be different on the inhabitants of the city if it is compared with the Nazilli Factory. However, the yearning for the old days can also be mentioned in the case of Nazilli as well. The association, which is called “Nazilli Sümerbanklılar Derneği”, has more than 11.000 followers on social media and still actively posts facts about the factory and its workers on daily basis. Furthermore, there are initiatives from the same association to open a private museum. In that regard, the existence of the factory can still be felt in the city, even though it was closed more than two decades ago.

When the location of the factory in Nazilli is analysed, it can be stated that the factory complex was not that close to the city centre. However, with the specific train line built for it, it had a good connection, and it assisted to establish a bond as well. The location of the factory was in an old neighbourhood, which was neglected regarding some of the services. Therefore, the factory complex guided the modernisation of the city, and it provided services which were not reached in that particular part of the city at the time. As a result, the factory reshaped the urban and cultural landscape of the city.

One of the impacts of the factory on city life was regarding the lifestyle of the citizens. Due to the First World War, the population of men decreased, and women had to be part of the working life. However, for women to be able to work like men, it is important that their social rights are covered, and that they would have the possibility to find a place for their children who are younger than school age (Dilek, 2021). Therefore, by opening its own kindergarten, the factory solved the issues of nursing the children, which created the chance for women to be part of the working life. Furthermore, with the primary school, library and social facilities, it affected the education level of the city and changed the approach of the citizens regarding education. It might be possible to state that it motivated this agriculture-dominant city to send their children to bigger cities for higher education. Even today, when the level of education is analysed in the Aydın region, Nazilli is in the third place by the ratio of faculty graduates to the population over the age of 15 (Kıyak, 2009). The first two in the

statistical data are districts which have tourism as their main income (Didim and Kuşadası). As a result, it can be stated that the social dynamics of the city began to be changed by the impact of the factory, first in the worker settlements, and subsequently, in the city.

Another life-changing impact of the factory and its settlements was electricity. Before the construction of the factory, the municipality was providing electricity to a small part of the city (Tekin, 1997). However, when the factory was constructed, it had a power plant, which could be used both for production and for living quarters. Furthermore, this power plant also produced electricity for the rest of the city as well.

In the documentary called “Sanayinin Musikisi – The Music of Industry”, one of the ex-workers of the factory states that, most of the time, the employee of the factory spent time inside the factory complex, both in the living quarters and the production quarters, since almost all of their needs were fulfilled inside the complex (Özbe, 2020). Therefore, the factory itself was similar to a small city with its living standards, which satisfied its workers.

The EKONOMA building, which was the supermarket/shopping mall of the workers’ settlement, was also one of the important structures in the complex. It was not only selling food, but it also had household appliances. Furthermore, it used to provide free fabrics from time to time, not only for the workers but also for the citizens.

The cinema and canteen building was one of the most important social buildings of the production quarters. As stated by Doğan (2022), especially during the Second World War, providing free food and supporting the social activities of the employees were very valuable. As in the other social facilities, the cinema was also screening for the citizens as well. On the other hand, the building was also used for cultural meetings and for opera and theatre performances, as well as concerts. According to a memoir of one of the workers, which was printed in the newspaper in 1938, the worker states that, after living a life in a village with limited access to various things, living in a clean environment and improving himself as a citizen by cultural and sports activities and workshops is an incomparable feeling.¹ However, this was not only limited to the Sümerbank Nazilli factory, but also the other factories constructed at the time with worker settlements as well. In that regard, the impact of the social factories were visible all over the country.

Conclusions

When the first factories started to emerge after the Industrial Revolution, one of the disadvantages of these building types was the fact that they were not pleasant environments for the employees. However, the social factories and their working settlements had humans as their central

¹ Ulus Gazetesi. 1938. Bir Sümerbank İşçisinin Defterinden Notlar, From the archive of Ulus newspaper.

focus. They followed the discourse of the early 20th century architecture and the ideals of the garden city. It can be easily expected that living on the factory premises can result in a mixture of work life and daily life; however, the social factories managed to have the balance between these by providing the standards that the employees required in their own times. Social factories had an environment, which was similar to house production facilities due to the family environment they provided in their living quarters, but at the same time, they had a clear distinction between the living and production quarters in their functional scheme. Therefore, while the factory was working like a machine with its rational composition, the workers were made a part of the machine, which supports production. The social structure that came from traditionalism transformed into a modern structure with its stratification. In that regard, the factories which turned the resources into products not only revived the economy and industry but also started enlightenment and revolution in the socio-cultural identity of its community, but at the same time, the society where they were located in.

In the case of Nazilli, the primary school, library and social facilities in the workers' settlements were actively used by the people living in the surrounding area, which had an impact on the education level of the city. Furthermore, not just the education of the kids, but the trained staff working and living in these factories helped to change the behaviour and attitude of society. On the other hand, these complexes opened the route for women to socialise and gain economic freedom by introducing them into social life with the job employment created. The factory gave the possibility for the female to work in the region, and it provided jobs for the vast population who used to work as farmers. Furthermore, it had an impact on the city itself regarding the city planning, expansion of the city and population growth. The architectural objects of the factory are one of the few examples in the city which were built with the language of modernism. Therefore, it does not only carry the characteristics of a modern society but also the features of modern architecture. In that regard, it is possible to state that the factory in Nazilli achieved the ideal of constituting modern Turkish workers and modern cities. Furthermore, the factory has been a key point for the formation of the present modern identity of Nazilli.

However, at present, due to its new function as a university, the citizens have lost contact with the administrative buildings and the production area of the factory. Especially after the workers' settlement was demolished, the possibility of physically connecting with the structures of the factory was mainly abolished. Even though there is a yearning for the old days, and there is a part of the community that tries to keep the nostalgia of factory life alive, the impact of it is slowly deteriorating. In that regard, some urgent interventions are required.

References

- Akbulut, E. (2011). *Zonguldak kömür havzası'ndaki Seyfi Arkan yapılarının koruma sorunları* [Master's thesis, İstanbul Technical University]. İstanbul, Turkey.
- Apaydın, A. (2020). Zonguldak şehrinin kömüre bağlı tarihi ve tarihi üzerine bir inceleme. *Yer Altı Kaynakları Dergisi*, 8(18), 1–20.
- Archer, R., & Musić, G. (2017). Approaching the socialist factory and its workforce: Considerations from fieldwork in (former) Yugoslavia. *Labor History*, 58(1), 44–66. <https://doi.org/10.1080/0023656X.2017.1244331>
- Aritan, Ö. (2004). *Kapitalist/sosyalist modernleşme modellerinin erken Cumhuriyet dönemi mimarlığının biçimlenişine etkileri-Sümerbank KİT Yerleşkeleri üzerinden yeni bir anlamlandırma denemesi* [Doctoral dissertation, Dokuz Eylül University]. İzmir, Turkey.
- Aron, R. (1973). Sanayi cemiyeti üzerine dersler. In *Sınıf Mücadelesi* (E. Güngör, Trans., p. 84). MEB Press.
- Arslan, N. (2022). Kültür-Bellek bağlamında Sümerbank Porselen Fabrikaları. *Journal of Seramik Türkiye Bilim, Sanat, Teknik, Endüstri*, 1(1), 118–128.
- Aydın, D., & Aksoy, E. (2020). Endüstri yapılarında yeniden kullanılabilirlik; Nazilli Sümerbank fabrikasının sosyal tesis binasının işlevsel dönüşümü için analizler. *Journal of Social Sciences of Selçuk University*, 1(1), 1–14.
- Bakar, S., & Yamaçlı, R. (2017). İşçi evlerinin tarihsel gelişimi bağlamında eskişehir tülomsaş işçi evleri üzerinden bir değerlendirme. *Journal of Science and Technology of Düzce University*, 5(1), 34–49.
- Barutçu, A., & Özdemir, F. U. (2017). *Yüz karası değil, kömür karası, Zonguldak*. İletişim Yayınları.
- Bayındır, A. E. (2019). *Integration of industrial heritage areas into the city through urban design: The case of Sümerbank Nazilli Textile Factory Campus* [Master's thesis, Middle East Technical University]. Ankara, Turkey.
- Bezirci, İ. (2001). *Nazilli'de tekstil sanayi* [Master's thesis, Institute of Social Sciences]. İstanbul, Turkey.
- Bigat, B. (2017). *Kuruluşu ve ilk yıllarında Nazilli Sümerbank Basma Fabrikası* [Master's thesis, Adnan Menderes University]. Aydın, Turkey.
- Bottomore, T., & Nisbet, R. (2014). *Sosyolojik çözümlemenin tarihi*. Kırmızı Yayınları.
- Bozdoğan, S. (2001). *Modernism and nation building: Turkish architectural culture in the early republic*. Washington University Press.
- Çalışkan, O. (2003). Anadolu'da bir "Yarı-çevre modernite deneyimi": Kemalizm'in şehirciliği. *Planlama*, 3, 14–23.
- de Gier, E. (2016). *Capitalist workingman's paradises revisited: Corporate welfare work in Great Britain, the USA, Germany and France in the golden age of capitalism, 1880-1930*. Amsterdam University Press. <https://doi.org/10.5117/9789089645814>
- Dilek, D. (2021). *The impact of the social factory on workers: Nazilli Sümerbank Basma Factory* [Master's thesis, Adnan Menderes University]. Aydın, Turkey.
- Doğan, Ç. E. (2022). Nazilli Basma Fabrikası yerleşimi: Tarihçe ve yaşantı. In A. Cengizkan (Ed.), *Fabrika'da barınmak: Erken cumhuriyet döneminde Türkiye'de işçi konutları yaşam, Mekan ve Kent* (pp. 76–109). Arkadaş Publishing House.
- Doğan, H. A. (2020). Same language different dialects: Expression of the modern movement in Ankara and Kaunas. *METU Journal of the Faculty of Architecture*, 37(1), 153–172.
- Eldeş, I. Y. (2019). *Sümerbank doküma fabrikaları'nın dönüşümü (1935-2019): Kayseri, Ereğli, Nazilli, Bursa Ve Malatya*

- Örnekleri [Master's thesis, İstanbul Technical University]. İstanbul, Turkey.
- Fındıklı, E. B. (2017). Karabük'te ağır sanayi ve barınma: mekânsal ayırışma ve disiplinler pratikler bağlamında bekâr işçi yurtları (1937-1951). *Uluslararası Sosyal Araştırmalar Dergisi*, 10(52), 660–675. <https://doi.org/10.5117/9789089645814>
- İmamoğlu, B. (2003). *Workers' housing projects by Seyfi Arkan in the Zonguldak coalfield: A case of modernisation in Early Republican Turkey* [Master's thesis, Middle East Technical University]. Ankara, Turkey.
- Kautsky, J. H. (1972). *The political consequences of modernisation*. John Wiley & Sons.
- Kepenek, Y., & Yentürk, N. (1996). *Türkiye ekonomisi*. Remzi Kitabevi.
- Kıyak, B. (2009). *Güney Ege bölgesinde eğitim düzeyinin mekânsal görünümü* (Report). Turkish Republic Güney Ege Development Agency (GEKA).
- Moholy-Nagy, L. (1975). *The new vision: Fundamentals of Bauhaus design, painting, sculpture, and architecture*. Dover Publication.
- Mortaş, M. (1944). Sümerbank amele evleri ve mahalleleri. *Arkitekt Journal*, (145–146), 9–13.
- Öden, I. (2023, August 1). *Personal archive and blog on Sümerbank factory in Nazilli* [Blog]. <http://sumerbank.blogspot.com/>
- Özbey, A. (2020, August 22). *Sanayinin musikisi / The music of industry, documentary* [Video]. YouTube. https://www.youtube.com/watch?v=MajTsJ31Zt4&ab_channel=T%C4%B0RETV
- Özkan, D. (2021). Tarihe tanıklık eden emektar “Gidi Gidi”. *Journal of Adnan Menderes University*, 1(1), 48–51.
- Özkul, K. (2020). *Reconstruction of establishment strategies on the current situation of the Ankara sugar factory* [Master's thesis, Tobb University of Economics and Technology]. İstanbul, Turkey.
- Peri, B. (2002). *Building the modern environment in early republication Turkey: Sümerbank Kayseri and Nazilli factory settlements* [Master's thesis, Middle East Technical University]. Ankara, Turkey.
- Peri, B. (2006). Kayseri ve Nazilli Sümerbank Fabrikaları. *Endüstri Mirası*, 45(1), 24–27.
- Permyakov, M. B., & Krasnova, T. V. (2018). Conceptual design of Russian modern monotowns' architectural space. *IOP Conference Series: Materials Science and Engineering*, 451, 1–6. <https://doi.org/10.1088/1742-6596/451/1/012153>
- Polatoğlu, M. G. (2021). Türkiye'nin kalkınmasında Sümerbank ve etkinliği (1933-1987). *Journal of Atatürk Research Centre*, 37(1), 261–306. <https://doi.org/10.33419/aamd.1015978>
- Sirma, Ş. (2022). Türkiye'de sıtma mücadelesinin işçileşme üzerindeki etkisi: Sümerbank Nazilli Basma Fabrikası örneği. *Journal of HAK-İŞ Uluslararası Emek ve Toplum*, 11(1), 196–216. <https://doi.org/10.31199/hakisderg.1134150>
- Sönmez, M., Gürol Öngören, P., & Özkul, K. (2019). Mekansal fonksiyonun kültürel yansımaları. In 4. *Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi* (pp. 28–41). Güven Plus Grup A.Ş. Press.
- Tekin, S. (1997). *Tanzimattan Cumhuriyet'e Nazilli* [Doctoral dissertation, Dokuz Eylül University]. İzmir, Turkey.
- Uzunoğlu, E. (2008). *The constitution of power relations in spaces of industrial production: The case of four Sümerbank Campuses in the Aegean Region* [Doctoral dissertation, Graduate School of Engineering and Sciences of İzmir Institute of Technology]. İzmir, Turkey.
- Veldet, T. (1958). Cumhuriyet devri ve ilk şeker fabrikalarımızın kuruluşları. In 30. *Yılında Türkiye Şeker Sanayii* (pp. 55–72). Doğu Press.
- Wilterdink, N., & Form, W. (2023). Social structure. In *Encyclopaedia Britannica*. <https://www.britannica.com/topic/social-structure>
- Yıldız, M. (2016). *Conservation and revitalization proposals for Eskişehir sugar factory social facilities area* [Master's thesis, Middle East Technical University]. Ankara, Turkey.
- Zeybekoğlu, S. (2002). *Erken Cumhuriyet dönemi sanayi komplekslerinin mekansal analizi: Nazilli, Kayseri, Bursa ve Eskişehir Örnekleri* [Master's thesis, Yıldız Technical University]. İstanbul, Turkey.