## "Company Towns" out of the Residential Patterns of Industrial Cities: The Campus of Eskisehir Sugar Factory

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Abstract: Industrial facilities are not buildings containing only machines, but are the means of the presentation and dissemination of a new life style and its culture to the society. The industrial facilities can be taken as the common space of the societal transformations from the class structure generated by the modern industry to the relations in the working place. In this context, the founders of the industrial facilities that became widespread with the expansion of the places of production after the industrial revolution, created the Company Towns in order to present the workers more efficient conditions. In the present article, the development of the Company Towns that emerged in the West during the 1800 and became widespread in Turkey with the proclamation of the republic will be summarized and as a case of Company Town, the Sugar Company Campus in Eskisehir will be exemplified.

Key words: Company town · Industrial facilities · Sugar factory · Housing typology · House

## INTRODUCTION

The Company Towns that came to the fore starting from the 1800's as a part of the labor market and generally developed outside of the cities due to the demands of the capital owners, are residential patterns composed of residences, social places and working places offering better living conditions created partially because of humanistic reasons and partially in order to achieve the goal to increase the productive capacities of the workers.

The reasons of establishment of the company towns and the opportunities they provide to the employer and worker can be summarized as follows:

By the places for education (nursery, different school levels), health (health care centers, infirmary, private hospital) and places for socialization (parks, picnic areas, clubs and night-clubs, sports-ground), the potentiality of the worker family's self-reproduction reaches the maximum point and therefore more fertile work forces within the process of production and the healthy working conditions with the qualified work force are all provided. Within the frame of the worker demand created by the factory and the housing deficit, the worker and therefore his/her labor becomes subjected to the factory by inexpensive or free housing. As a result, an

environment of options becomes created which reduces employer's risk for finding workers and worker's risk of resignation [1].

The company towns gave their first examples in mining sector in Europe and USA and the iron-steel industry and other production factories (textile, machine, wagon etc.) followed this process.

The Saltaire Village near Bradford in England built by manufacturer Titus Salt between 1850-1863 is the first planned industrial city model. Saltaire is a settlement pattern organized according to a rectangular net plan organized for 4350 people, which contains hospital, nursery, school, factory and open recreation places [2].

The other large scale application is the Pullman Settlement. George M. Pullman founded the Pullman Palace Car Company in 1867. The Pullman city was designed by architect Solon Beman and landscape architect Nathan Barret. A major part of the city has been completed between 1880-1884. The city, which takes place on a compact grid plan, consists of buildings in the Queen Anne style, an artificial lake and numerous parks. The residences include the *modern comfort elements* in terms of the 1880's circumstances such as sewage system, water installation and gas. In the settlement different shops and public utilities take place and there are bank, library,

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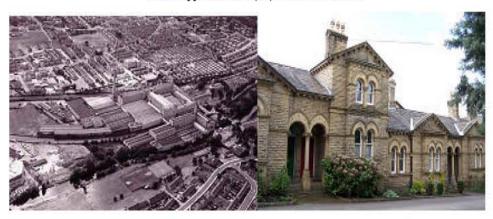


Fig. 1.1: Saltaire Village www.bbc.co.uk /.../ bradford /gallery\_1.shtml An example of Saltaire residences (http://en.wikipedia.org/wiki/File:Saltaire Almshouses.jpg (02.12.2009)

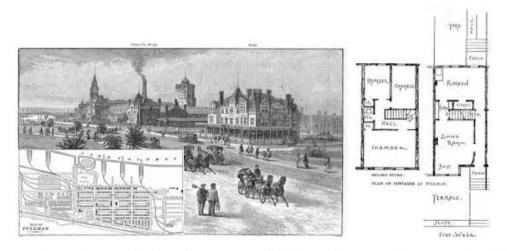


Fig. 1.2: Pulman Town, An example of a Housing Plan and Settlement Planwww.library.comell.edu/ Reps/ DOCS/pullman.htm (10.11.2009)

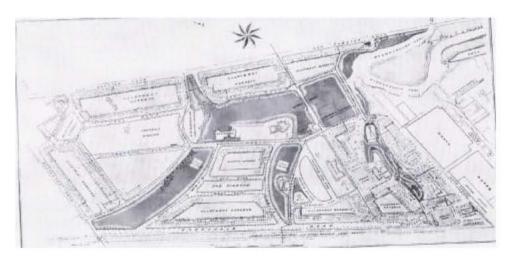


Fig. 1.3: Port Sunlight Settlement 1902 (Beeson, E.W., 1911, Portsunlight The Model Village Of England, THe Architectural Book Publising Company)





Fig. 1.4: Port Sunlight Settlement – Residences (Beeson, E.W., 1911, Portsunlight The Model Village Of England, THe Architectural Book Publising Company)

theatre, post office, church, parks and recreation places. The Pullman Town is planned for the 6000 workers of the company and when their families are included for 1200 people. In 1894, the strike in the steel industry in Homestead and Pennsylvania caused the bankruptcy of the Pullman factory [3, 4].

The settlements built in USA in the end of 1800's and in the beginning of 1990's, include pattern designs by architects and planners. These residential patterns in USA became a source for housing units for workers in Germany and England in Europe. Their content was changed by Ebenezer Howard's "Garden City" theory on 19th century. In this context, the Bourville settlement designed for workers of the Cadbury Family's chocolate factory in England and the Port Sunlight settlements designed for a soap manufacturer in Liverpool by William Owen, between 1886-1889, are the cases for the company towns adopting the principles of the "garden city" theory [5].

The reason for the extensiveness of company towns in the iron-steel and mining industry is because of the mines of these enterprises are found out of cities and there is need for the worker and his family to maintain their life near these mines in comfort. The Virginia Coal Town (1902) constitutes one of the cases that includes hospitals, hotels, recreation rooms, schools and shops for the miners and their families where paid medical staff and teachers work. Between the housing units that continue on a linear route between the mountain and the brook there are settlement patters differentiated according to the class, ethnic and racial differences. Pink Town is the place where whites settle, Hunk Town is that of East Europeans, Colored Hill is that of African Americans and Quality Hill is the place where the company officers live. While the old coal housing units has been designed for the single workers, after the 1910's, for the workers to be permanent, the housing units were built mostly appropriate for families. This situation affected the size of the residences and enabled the activities for children to be varied.

Churches for Protestant and Catholic workers were built and credit facilities were provided for electrical goods such as washing machines, radio, stereo for company employees [6].

The greatest importance of the residential patterns of company towns, whose examples can be varied, is not only their being industrial places for production but at the same their small unity within the city necessary for the social life of the factory workers and their families. Another interaction comes from the influence of these patterns on the city life and their becoming a model. The Company Town Cases have served as a model for the generation of the urban fabric. New living spaces have been developed in the immediate surroundings of the campuses and the people living and working in the company towns have found opportunities to invest in these living spaces with their savings. The campuses designed to include spaces for production, socialization, education, residing, recreation, have been a source for the large scale collective housings built in 1900's.

The Pulman Town has been taken under protection in 1973 and the buildings of the campus have been brought into the use of public in different functions (hotel, restaurant etc.). The Saltaire Village has been chosen into the "World Heritage List" of UNESCO in 2001.

The "Company Towns" which started to be seen in Turkey as well after the proclamation of the republic have examples in the city Eskisehir. In the following chapters of the present article the Eskisehir Sugar Factory will be analyzed in terms of the Company Town.

Eskisehir the Industrial City: Eskisehir, known as Dorylaion in the first and middle ages, is a city in the crux of important roads. Dorylaion gained an urban structure basing mainly on agricultural features and due to its position on an accessible area the city's commercial function developed easily [7].



Fig. 2.1: Location of Eskisehir in Turkey (www.ezo.org.tr/EskisehirIlHaritasi.aspx)

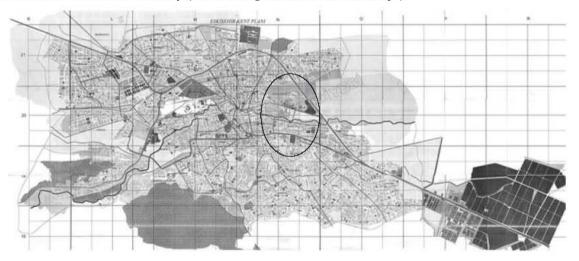


Fig. 2.2: Location of the Sugar Factory in the City Map of Eskisehir

Beginning from 1860, the outlook of the city started to change. The main reason of the mentioned change was the migrants settled in the city after the Russo-Turkish War 1877-1878 and the Berlin-Bagdad railway, which was commissioned in 1894. These migrants brought with them new agricultural techniques, methods and new plant species unknown in Anatolia. In addition to the population growth, these developments and mobility in the agriculture resulted with the increase in the trade in the city. The impact of the railway on the city was not limited with the extension of the settlement areas but led to the alteration of the functional structure of Eskisehir. By its connection to Istanbul and other regions of the empire, the city gained its commercial function back and adopted the role of a commercial organizer as a result of the accumulation of the products coming from near villages. The mentioned developments brought with them the economic progress.

Eskisehir, which gained the role of the commercial organizer, later became one of the unique Anatolian cities that showed an industrial development in the Ottoman era with the "Railway Repair Workshop" (Cer Atölyesi) founded by Germans as the establishment of the first industrial facility before the republic. Therefore, the years 1923-1950 correspond to the period in which different industrial facilities were established in the city. The only pre-republican industrial establishment Railway Repair Workshop of State Railways played an important role in the development of the industry by training qualified workforce. In addition to the experted workforce, the other factors in the development of the industry are the raw material procurement from the nearby areas for the requirements of the other establishments except the Aircraft Maintenance Workshop and Railway Repair Workshop (such as the tile factory with a stone and clay based production and flour and sugar factory based on

production from agricultural raw materials) and the marketing of the manufactured goods within the country via the railway [8].

As a result of these positive conditions for the development of the industry, the process started with the Railway Repair Workshop, socialized in1924, sustained by other state establishments such as the Aircraft Maintenance Workshop in 1926 and the Sugar Factory in 1933 and the flour and tile factories founded by private sector on the same period took place in the structure of the city [9].

Eskisehir Sugar Factory Campus (1933): The Eskisehir Sugar Factory, which has important role in the development of Eskisehir, was founded in order to produce grain alcohol and secondary materials as well as to produce and raise the products required for the beet and sugar industry. The process from the decision for the establishment of the factory on 1 October 1932 to the end of the examinations for the following two months, ended with ordering the machines and the steel to be used in the construction to the German corporation 'Maschinenfabrik Buckau R.Molf Aktein Gesellschaft Magburg' and the developments continued with the primary activities such as the determination of the area to build the factory and the organization of the construction and transportation procedures. On 1 February 1933 the establishment of the factory were laid, the installation operations were started on 1 Nisan 1933 and after completing the construction in six and a half months the first operations started on 20 October 1933, the opening ceremony of the factory was made on 5 December 1933 [9].

From the present settlement plan of the factory, which was constructed on the north and south of the Eskisehir-Ankara highway, it is understood that the productive functions of the factory were settled on the north side of the road, whereas the social units such as the management units, mass housings, sports areas, school and hospital were positioned across the productive units in the dense green texture. The part of the factory extending to the Porsuk Creek is used as beet farm. In the campus there are mass housing, guesthouse, sports areas, dining hall, houses for single workers, factory buildings, warehouses, repair shop, stores, workshops, carpenter's shop, girl's dormitory and repair workshops. In the first years of the factory, the hospital was offering health services to the public in Eskisehir. This building is used as sorority in our days. The building, which serves as dining hall at the present day, was built as a cinema. The present guesthouse unit was used previously as the administrative building.

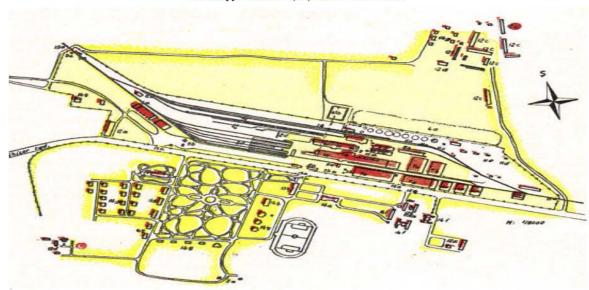
The factory building with its plain structure including solid surfaces and small windows reminds with its mansard roofs its contemporaries built that time in Europe in a "modernist" design. The plainness and order as an income of the function of production appear also in the social spaces of the factory. The productive and social functions of the factory, as parts of the same design, have been built in a rational, modernist manner. The landscape including the social units has a controlled order that is organic and meticulously designed without strict geometrical lines. The dense green fabric in which the whole complex take place and which serves at the same time as the recreation space, can be considered as the reflection of the healthy city design to the space in Eskisehir.

The mass housing of the factory is placed on the south side of the factory complex. The housing units attract the attention by their rational, functional, less-storey design within the dense green texture in the housing plans. The housing units are settled surrounding a side road enclosed by trees. The small gardens in front of each of the units enable the inhabitants to deal with their own soil in their garden during the leisure time. These features of the settlement resemble the garden-city cases.

From the different residences built in different periods, it is possible to gather knowledge about the housing culture in the city beginning from the 1933. The construction of the residences by a German contractor firm brought new approaches to the housing typologies.

Except the houses for single workers, there are 6 different types of residences. As in the case of western company town cases, the residences were designed and grouped according to the differences between living areas, company executives, managers, engineers and workers [10].

With the establishment of the sugar factories as one of the first industrial facilities, new organizations also occurred in the city's housing and business features. The major contribution of the factory is understood as its offering a space for socialization with the texture it brought to its environment as well its being a space for production. In this respect, one of the important changes brought by the industrial production system is the differentiation of the working hours and leisure activities. Among the leisure activities, the cultural and sports events organized by the factories can be counted. These activities became a mediator in the socio-cultural sense for the public and factory workers come together.



1.factory plant, 2. silos, 3. w ater supply facilities, 4.pools, 5.central, 6.workshops, 7.bins, 8.garages, 9.scales, 10.auxiliary facilities, 11.fuel tanks, 12.agricultural plants, 13.administrative buildings, 14.social facilities, 15.gates

Fig. 3.1: The Layout Plan of Eskisehir Sugar Factory Campus (Eskisehir Sugar Factory Archives)

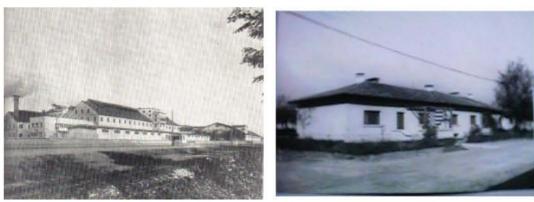


Fig. 3.2: Eskisehir Sugar Factory in 1930s, A General Gaze to Eskisehir Sugar Factory Settlement and Images from the Years of the Construction of the Housing Units (Eskisehir Sugar Factory Archives)

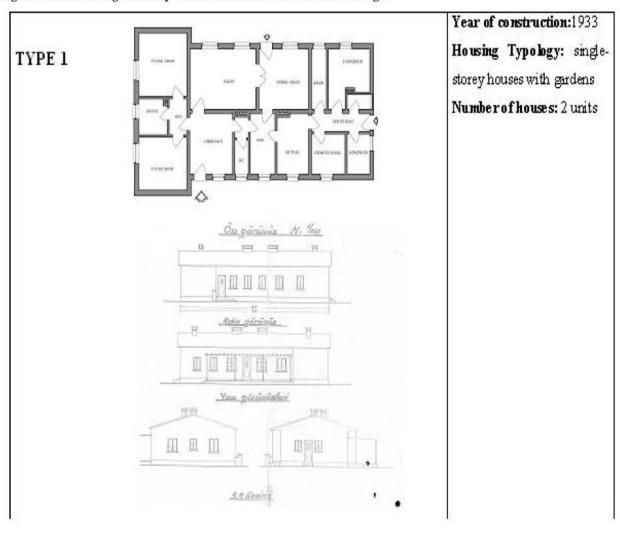


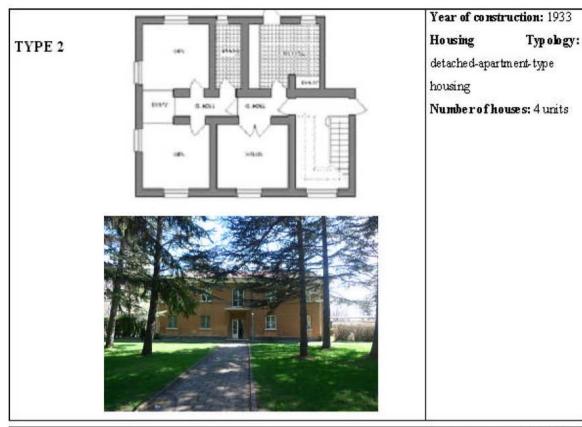


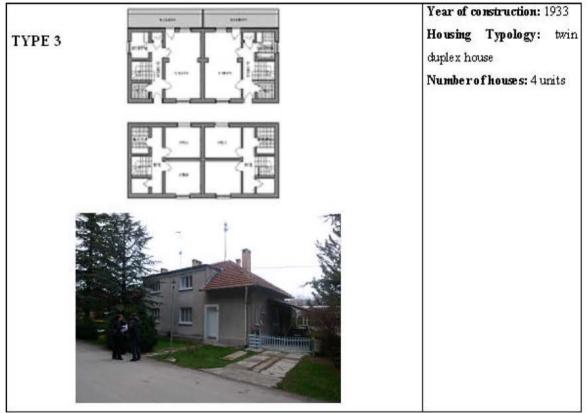
Fig. 3.3: The Dining Hall of the Eskisehir Sugar Factory, People waiting for the sport competition to begin at the grandstand of the stadium of the Eskisehir Sugar Factory in 1950(Eskisehir Sugar Factory Archives)



Fig. 3.4: Eskisehir Sugar Factory Settlement and Immediate Surroundings







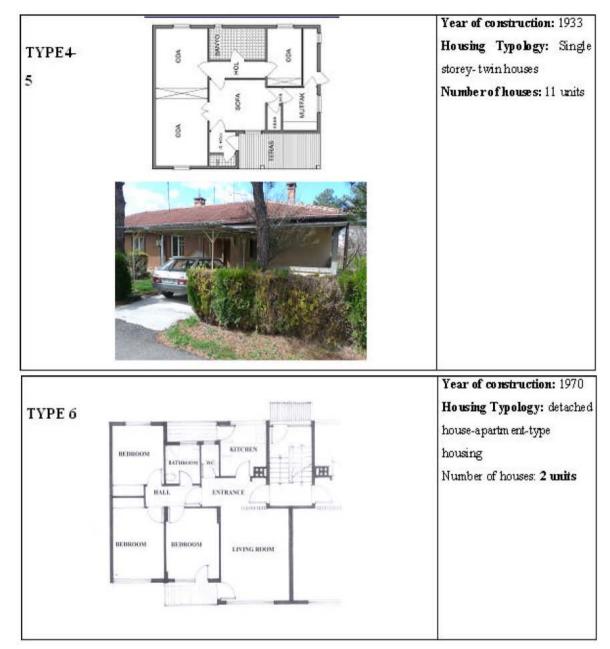


Table 1: Building Typologies of Eskisehir Sugar Factory Mass Housings (Ustun, B.2010)

The cinema and libraries of the factories, amateur theatre groups of the factory workers the balls organized in the multi-purpose halls offered a cultural service to the public and enabled people to take place within the social life by coming together. The green areas belonging to factory were also recreation places for people to come together and spend time. The rational and functional settlement plans of the industrial complexes can be evaluated as a reference for the enlightenment society in which the healthy individual is the keystone of

the healthy society and to the modern city o this society. In this context, the green areas constituted at the same time the breathing points necessary for the healthy society. In addition, the sports activities created for the leisure time of the factory workers and swimming pools, mini-golf ranges, ice rinks, tennis courts, football fields enabled the workers to deal with the sports they like. The sports clubs of each factory, carrying their names, provided the workers to develop a professional interest in sports [9].

## CONCLUSION

The company cities of the industrial period, in their time, as a part of a designed ideal, a "utopia" became a cultural product that makes the state's -factory or enterprise owner as an artificial person- or private entrepreneurs, briefly the employer enlighten the worker and his/her life and environment. From this respect, the worker residences in the factory area include important details about the physical environment and living conditions of the era they were built.

In this context, the settlements, which gave their first examples in the west, reflected on the Republic of Turkey even though it was not simultaneously. Many resemblances are seen as a result of their construction by foreign architects who experienced these settlements in the conditions of their own country. The sheltering and living conditions that were not familiar for the country affected the city life close to the industrial establishments positively.

The Campus of Sugar Factory poses one of the pioneer cases of the industrial heritage of our time in the functional and spatial sense. The campus that plays the role of a prototype for the city Eskisehir; as a multifunctional campus, is one of the first settlements that offers a micro scale city case for the social, cultural, educational and residential requirements of the workers. Particularly for the period of its construction in Eskisehir it became an important economic and social dynamic for the city, whose importance continued during the following periods.

Especially its mass housing fabric with garden resembles the "garden city" cases started to be seen in Europe of that time. The very feature has been carried to the city via the mass housings of the factory. As a result the spatial transformation nearby the campus realized in a short time and new mass housing units with few floors and gardens resembling the factory residences called "Sugar Houses" have been built. These developments have been extended in time to the whole city.

It is important for the Sugar Factory Campus, constructed in 1930's as of the first cases for the country and the city Eskisehir and has an importance for the memory of the city, to be protected and transferred to the next generations for the cultural reservoir as a result of its being an example for company town and a case for archeology of industry. These settlements that took their form with modernism and affected the development

of the city can be sources for the collective housing design, which is severely discussed in our days in terms of quality by their richness in terms of the housing typologies and residential patterns. In addition, they can form an example for the company settlements of our day serving in the periphery of the cities by their wholeness and quality in their content.

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