



WORKERS' SETTLEMENTS REVISITED: THE ORIGINS AND INTERPRETATIONS IN EARLY REPUBLICAN TURKEY

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Abstract

In the face of urban and social problems brought about by the industrialization, the 19th century has witnessed various efforts in both housing and urban space; and beginning from the late 18th century, but more in the 19th century, the first workers' settlements have emerged in Western Europe as a response to these problems. In particular, the workers' settlements such as factory-towns and company-towns built in the suburbs, have created a special solution not only to meet the housing needs of the workers, but also to provide the labour supply; furthermore, along with the conditions of the settlements and production, they were assigned to change the social structure and to create a new industrial society.

In Turkey, however, the industrialization has begun nearly a century later than the European countries; and it was carried out within the framework of the modernization project adopted by the Republican ideology. By rapid industrialization and modernization process during the first half of the 20th century in Turkey, the workers' settlements of the Western cultures, as in many other realms, have been considered as the representations of the modernity, and have been reinterpreted and built on the basis of political, social and cultural circumstances of the country. In early Republican Turkey, the reinterpretation of workers' settlements was used as an important tool for the transformation of the society by means of reshaping the housing culture, as well as the relations of production and spatial practices. And these settlements have constituted the embodiment of the modern industrialized society, in the urban space.

In this sense, the aim of the article is to re-evaluate the emergence of the workers' settlements in the context of social background; and to discuss their roles in the architectural and urban modernization, as well as in social and cultural modernization of Turkey. Beginning with the problems brought about by industrialization in 19th century Europe, the emergence of workers' settlements as a social phenomenon are discussed and exemplified. Subsequently, the early models of the workers' settlements in Turkey are discussed both in the context of their predecessors in Europe and of the social background of the period. Hereby, it is expected to evoke further discussions on the cross-section of architectural, urban, and social transformations and to deepen the studies on the history of the early Republican architecture.

Keywords: company/factory-towns, early Republican Turkey, industrialization, modernization, workers' settlements, working class housing.

1. INTRODUCTION

Although thinking on housing identified by the need for shelter is as old as thinking on architecture (Tanyeli, 2016, 62); "housing" in today's context, had not been included in the architectural practice until the 19th century. Before the 19th century, for the housing to be the object of architectural practice was only possible either the owner was a member of the privileged classes or the house was a "palace, palazzo, villa, chalet, or mansion". The houses of the ordinary people, who were not the members of the privileged class, were built "with the habitudes, the artisanal craftsmen had accumulated for centuries" (Bilgin, 2002), and simply "through bringing together the necessary building materials and equipments, in a common solidarity of individuals" (Alsaç, 1993, 80). This mode of production had led the ordinary people's houses and settlements to be excluded from the idea of design as being 'ordinary' spaces that formed spontaneously.

However, beginning from the end of the 18th century, two social consequences of industrialization, brought the architectural practice closer to housing design: the emergence of a wealthy bourgeois class and the population explosion in cities. (Bilgin, 2002). These circumstances caused housing to become a part of not only the architectural practice, but also of the social problematic in 19th century, by exposing an unexpected need for shelter both in quantity and quality (Batur, 1978, 22). Since industrialization defines not only a new mode of production, but also new social classes and class distinctions, it has inevitably led to a new urban lifestyle. By changing the meaning and context of housing, this new lifestyle necessitated the production of new housing forms to meet the new requirements; and also new arrangements and organizations in the

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urban space. In this context, throughout the 19th century, the industrialized European countries have become the scene of various efforts both at urban and housing practices, and the housing of the working classes has become one of the most significant aspects of these efforts. Therefore, various workers' settlements were built as a specific response to the urban and social problems, in order to not only meet housing needs of these new social classes, but also to construct modern industrial communities and industrial cities.

Industrialization practices which led the early-industrialized European societies to face with urban and social problems and to begin a quest of new approaches in the urban space by late 18th century, have emerged in Turkey, nearly a century later. Hence, also the search for a new form of housing of the new society has emerged in the first half of the 20th century, related to the industrialization policies of the early Republican period, which required an urban and social transformation. As the early Republican era lacked either a modern industry, a modern society, or a modern lifestyle, these attempts of industrialization have intended also to transform the society that still preserved its traditional patterns, and led to the formation of a new working class, and also to rearrangements in urban space. In this sense, as in many other fields, the centuries-old accumulation of Western countries has been adopted to early Republican Turkey, to construct a modern industry and also a modern industrial society. Within the framework of this ideology, the workers' settlements of the Western Europe, which emerged with the Industrial Revolution, have been reinterpreted and built on the basis of political, social and cultural circumstances of the country. And this reinterpretations of workers' settlements in the early Republican Turkey, have been used as the major agents for the social and cultural modernization, by means of reshaping the housing culture as well as the relations of production and spatial practices; and represented the spatial embodiment of the modern industrial society.

2. THE INDUSTRIAL LANDSCAPE, EMERGING NEEDS OF HOUSING AND COMPANY/FACTORY TOWNS AS A SPESIFIC RESPONSE

The most primary aspects of the industrialization are to increase the need for labor force unprecedentedly and to lead a rapid urbanization process. Industrialization, which caused a mass migration from rural to urban areas, resulted in the population of urban centers to grow several millions at the end of the century, which could be measured by tens of thousands in early 19th century. And the inadequate housing and living conditions of the working class, who increasingly accumulated in cities to work in factories, have been the origin of the modern urban problems.

As of the middle of the century, British cities, which were the first to witness the modern problems of industrialization, attracted more than half of the country's population due to the employment opportunities. And the only housing option for the crowds migrated to the cities, was congested houses built by local landlords and builders around the factories, that were lack of lighting, ventilation, infrastructure and urban facilities (Rykwert, 2002, 79). The rents, which increased as "*the property owners have realized that the more tenants lived in a building, the higher amount they earned*" (Ragon, 2010, 18), have also brought on sub-tenancies which were created by dividing the housing units into smaller ones and renting those separately (Bilgin, 1990, 125). The most of these jerry-built houses in England having a family living in almost every room, which did not meet even the minimum living conditions, were built as adjacent or row houses in order to save on land (Ragon, 2010, 23). Besides, even the cellars were used as dwelling units; and moreover, lodging houses were built, which allowed maximum number of people to dwell in a minimum space, each room accommodating men and women mixed about 20 people (Ragon, 2010, 24).

In Germany, the housing option offered to the crowds, instead of row houses, was the rental tenements formed by the transformation of military barracks into housing units. These rental tenements, called *Mietskaserne*, were not very different from their counterparts in England in terms of their uncontrolled sprawl in the city, with their lighting and ventilation-lacking narrow courtyards, excessive number of people per apartment unit and unhealthy living conditions (Akcan, 2009, 50).

These unhealthy conditions and the problem of housing of the poor have become one of the most vexed issues of the industrial cities in the 19th century, and the efforts to solve this urban-social problem have dominated the whole century. The search for better living conditions, which was started with various individual initiatives in the early industrialized countries, especially in England, has focused primarily on improving the physical quality of the urban space such as building roads, sewerage and drainage system, and thus, to prevent outbreaks of epidemic diseases, and to enhance the working conditions (Rykwert, 2002, 81). By mid-century, the efforts devoted to the problems of industrial cities of railways, factories and rudimentary shelters, have focused mainly on a social scale, and several regulations have been realized to improve housing conditions (Frampton, 2014, 21). In addition to these regulations, a group of private *model dwelling companies* have been established with the purpose of upgrading the conditions of working class housing. However, all these efforts remained insufficient to solve the problem of the housing of workers.



Another attempt to improve the working and living conditions of the workers, was to build “workers’ settlements” such as company-towns and factory-towns, including a wide range of communal facilities along with the housing units. Particularly in England and France, various attempts which mostly carried out by manufacturers, offered “model towns” as an alternative to the problems of the industrial city (Rykwert, 2002, 85). These model towns in the form of garden cities or satellite cities, have created a specific solution to ensure the labor supply by locating the houses around the factories; furthermore, they aimed at changing the society and creating new industrial communities. Therefore, the planned factory-towns built to accommodate all social facilities and workers’ houses, also envisioned to construct new industrial communities, along with the living spaces of these new communities.

The early examples of industrial communities were New Lanark (Scotland) Textile Factory-town founded in 1815 by Robert Owen, who carried out a series of reforms in order to rationalize the production, based on the fact that the productivity of the workers was directly related to the living and working conditions; and Saltaire Textile Factory-town near Bradford (England), built by Sir Titus Salt in 1852 (Frampton, 2014, 22; Roth, 2007, 492). Just as New Lanark of 3000 people, which would constitute a model industrial community for the future factory-towns, the city of Saltaire also “*was a paternalistic mill town, complete with traditional urban institutions*” such as stores, schools, churches, almshouses, public baths, and parks (Frampton, 2014, 22).

These factory-towns were built mostly in urban peripheries, in suburbs¹ which were like refuges that “amidst the nature” and “away from the rush of the city”. Although before the 19th century, these countrysides mostly characterised with the urbanites’ second houses surrounded by greeneries; by the 19th century they started to be embraced by the working class who has been excluded from the urban centers. With the evolvement of railway networks, the city fringes were expanding and new workers’ settlements were emerging around the stations and coal mines in the suburbs; thereby, living in the suburbs have become ordinary. Thus, the problems encountered in the urban centers in the first half of the century, this time continued in the suburbs, and “*the suburbs turned into a new disease for the city.*” (Ragon, 2010, 270). And the solution offered by the urban planners was the establishment of garden cities in the suburbs.

To this end, Frederic Le Play, considered to be the founder of the garden city theory, has proposed the construction of workers’ settlements including vegetable gardens, based on the idea that workers should carry out both industrial production and agricultural activity in cooperation (Ragon, 2010, 272). Although Le Play’s ideas have led to the establishment of hundred of thousands of workers’ gardens in France, Austria, Germany and Belgium, they had not have any significant effect on improving the living and housing conditions of workers (Ragon, 2010, 273). Similarly, John Ruskin, influenced by Le Play’s ideas, founded a guild called Saint-George (England), in an attempt to exclude workers from the city center. Although these attempts did not succeed, nevertheless they created prominent models for their successors.

The other significant factory-towns established as garden cities in the 19th century, were Port Sunlight near Liverpool (Figure 1) founded in 1887 by M. Lever, who moved his soap factory hereby, and the Bournville outside Birmingham founded in 1889 by the chocolate manufacturer Cadbury (Figure 2, 3). In both settlements, row houses in different typologies and social urban facilities such as public buildings, schools, playgrounds, parks and clubs were included; and to create a charming picturesque atmosphere of a pre-industrial English village, the houses were arranged on landscaped and winding roads (Roth, 2007, 492; Ragon, 2010, 273). Also, the vegetable gardens at the backyard of the houses in Port Sunlight allowed workers to maintain their agricultural activities and rural life (Ragon, 2010, 273). On the other hand, Bournville, which differed from the other factory-towns by including “*a variety of different and distinct house types*”, also including houses for the bourgeois, was “*the first model settlement to provide low-density housing that was not restricted to factory employees*” (Bailey & Bryson, 2007, 89, 98).

¹ This approach defined by the idea that “the big cities should be replaced by a synthesis of the city and the countryside”, would later form the basis of Ebenezer Howard’s *Garden City* theory.

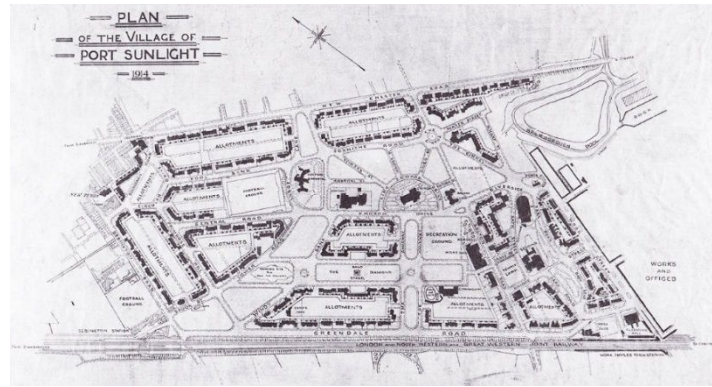


Figure 1: Port Sunlight, site plan (URL-1).

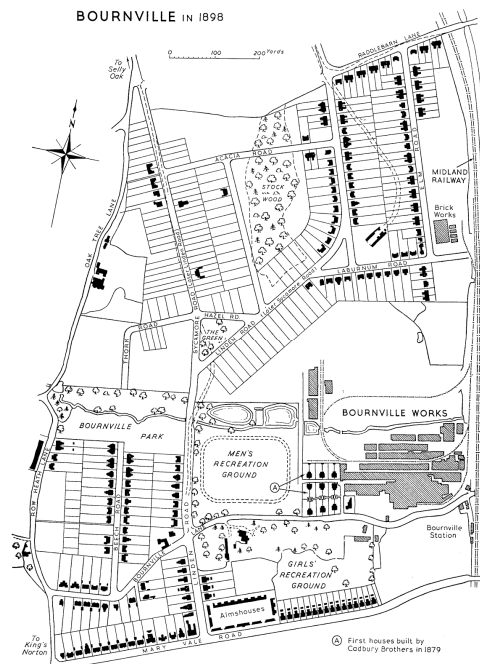


Figure 2: Bournville, site plan (URL-2).



Figure 3: Bournville, photograph, 1909 (URL-3).

Beyond England, as well as in other industrialized countries of the 19th century, various factory-towns were built in Germany, France and the United States. The ones built by Schneider in Creusot (France) and the Westend built by Krupp in Essen (Germany), had a wide-range of housing typologies for the workers in reference to their professional hierarchies; such as multi-storey houses for office workers and formen, single-storey houses or multi-storey communal buildings for workers (Ragon, 2010, 271, 273).

None of these settlements, however, have had the radical vision of Charles Fourier's article "New Industrial World", published in 1829. Fourier's non-oppressive society was depended on the establishment of the ideal communities, namely the "phalanxes", living in *phalansteries*, and the economy of these communities was predominantly agricultural and supported by light manufacturing (Frampton, 2014, 22). Fourier also has described the physical features of phalansteries, which he called "social palace". In the

phalanstery, which Fourier depicted as a double-winged building, resembling to the Versailles Palace, the central part was reserved for the public functions such as dining hall, library, winter garden, etc., while one of the wings was reserved for the workshops and the other for the visitors' accommodation (Frampton, 2014, 22; Ragon, 2010, 52). The closest realization of Fourier's critique of the industrialized production and of the social organization was Familistère, built by J. P. Godin around his factory in Guise (France), between 1859-70 (Frampton, 2014, 22). Following Fourier's ideas closely, Godin had decided to build a phalanstery in order to "provide opportunities to workers equivalent to that of the wealthy -even that they deserve more than them" and had built a settlement called "Familistère de Guise" for the workers of the cast iron heating and healthcare equipment factory (Ragon, 2010, 105). In this settlement, which was built on a woodland, the factories and workers' houses were located on opposite sides of the river Oise separated by greenbelts; and only connected by two bridges (Figure 4). Besides the workers' houses; public amenities such as hospital, nursery, kindergarten, elementary school, theater, gymnasium, playgrounds, pools; as well as laundries, fruit and vegetable gardens, shops, offices and libraries were included (Batur, 1978, 23). Housing units were placed in groups of three, around large courtyards with a central glass dome (Figure 5). The buildings had water, gas, sewage and heating systems, as well as garbage collection systems (Batur, 1978, 23). Godin's Familistère, certainly was not a real town, but was a small model-town with its well-designed internal circulation, indoor passageways and social facilities.



Figure 4: Phalanstère de Guise village (URL-4).

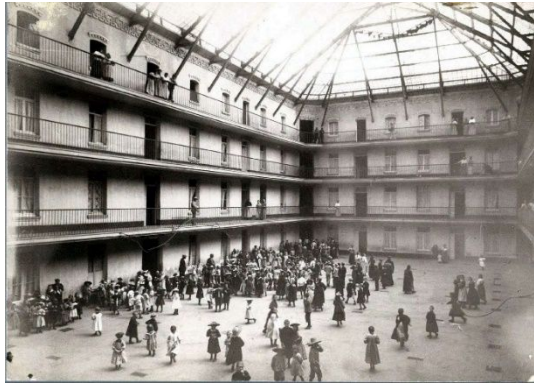


Figure 5: Phalanstère de Guise, courtyard of the housing units, undated (URL-5).

Distinct from the garden cities in Europe, the workers' settlements in the United States have emerged as satellite cities.² These satellite cities, which referred to the new settlements around the industrial plants in urban peripheries, were considered as alternative models to the undesired urban sprawl of early industrialized American cities, such as Chicago and Saint-Louis. One of these "ideal industrial towns" was Pullman City, built in 1879 by Pullman Cars, outside the Chicago, on an area of 1,500 hectares (Ragon, 2010, 271; Figure 6). In order to prevent the settlement to be only a dorm-city, Pullmann had moved his ateliers from the Chicago center (Ragon, 2010, 271), and combined the housing units with social facilities, such as a theatre, a library, schools, parks and playgrounds. As Frampton (2014, 27) states, the Pullman City was much more elaborated than any other factory-towns of its contemporaries, such as Guise, Bournville and Port Sunlight.

² The introduction of underground railway in 1863, electric tram in 1884, and commuter rail transit in 1890 connected the city centres to suburbs (Frampton, 2014, 26).

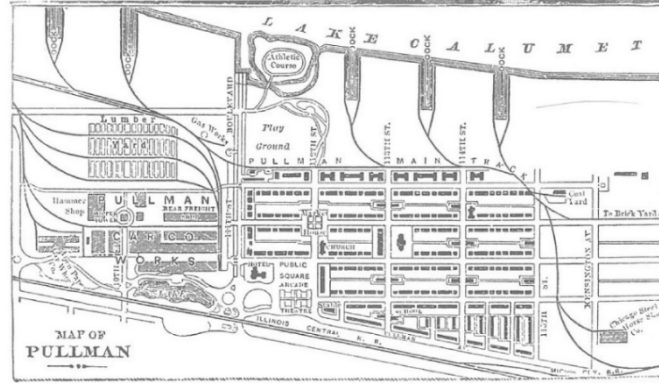


Figure 6: Pullman City, site plan (Roth, 2007, 493).

These workers' settlements, either garden cities or satellite cities, which emerged as a response to the problem of the housing of urban poor have appeared to succeed by the end of the century. In particular, the factory-towns established by manufacturers had several advantages for both the workers and the factory owners. First and foremost, workers would be able to avoid living in poor conditions such as inadequate standards of comfort and sanitary facilities, and primitive infrastructures; and would have the opportunity to live in 'villages' that were equipped with amenities such as schools, social facilities, recreational areas, etc. Moreover, the housing units with backyards would allow to maintain their agricultural activities, besides their work in industry. On the other hand, factory owners would take the advantage of the shift work in the production system in a quite effective and cheaply way by locating the housing units in a close proximity to the factory.

The fact that workers could only benefit from these opportunities by being factory employees, has entailed the workers to work in the factory through the living conditions offered by the factory-cities. This dependency meant for the industrialists to easily find the workforce to be employed in production and for the workers to be 'included' into the urban life. Above all, the new social structure formed by industrialization has reformulated the urban space; and the modern urban planning theories, which would identify the modern cities of the 20th century, have grounded on the differences of the this new social structure and paradigms of industrialization. Thereafter, the discussions on how society should live, and how the architecture of housing should be, would dominate the agenda of modern architecture, worldwide. In this regard, the workers' settlements of the West have been regarded as expressions of the modernity and transferred to early Republican Turkey, which would be in a rapid industrialization and modernization process in the first half of the 20th century.

3. MODERNIZATION OF TURKEY AND THE INTERPRETATIONS OF WORKERS' SETTLEMENTS IN THE EARLY REPUBLICAN PERIOD

Turkey's industrialization process was not realized by the transformative impacts of social dynamics as it was in the early industrialized countries in Europe; but rather within the framework of a modernization project adopted by the new Republic. Although this modernization ideal has referred to a cultural and social transformation, it was based on catching up with the superior scientific and technological progress of the Western societies (Bozdoğan, 2002, 131). Accordingly, disassociation from a traditional way of life and construction of a modern society, just like its predecessors in the West, would only be possible by industrialization.

In this respect, especially in 1930s, one of the most fundamental realms in which the modernization program of the Republic embodied has been the establishment of industrial complexes of modern production. In addition to connecting all Anatolian cities to each other by railway networks, the aim of establishing factories in these cities was not only to expedite the industrialization of the country but also to lead these cities to develop a modern identity. Therefore, considered to be one of the most important tools of the modernization program, factories were planned to be established in new Anatolian cities and towns which *would be the symbols of the modern culture*, instead of the old Ottoman capitals -Bursa, Edirne and Istanbul-, which were the symbols of the traditional culture.

The construction of industrial buildings in Anatolian cities, a typology foreign to Turkey, has brought the construction of workers' settlements around them, another typology foreign. Workers' settlements built around the factories and established within the context of the state's industrialization policies, have emerged in the architectural practice of Turkey as a new "mass housing" alternative. Indeed, these factories had an important role in transporting *modern culture* to Anatolian cities and towns by bringing



not only new building typologies, but also new ways of production and lifestyles associated with these modes of production (İmamoğlu, 2009, 133) and the new forms of housing.

Beside, the social structure of the early Republican years was identified by traditional patterns, inherited from the undeveloped professional, social and productional organizations of the Empire. Therefore, this pre-industrial structure of the Ottoman Empire, based on agricultural production, had been determined by economic stagnation and lack of professionalism and geographical integrity; and no demand for realizing a large-scaled industrial production (Toprak, 1986, 1343). As a consequence of these economic and social circumstances, no working class has been formed, who work for a certain wage, as required by the industrial production.

Although there were workers in wage labor before the 19th century, they were only individual groups gathering together with a certain purpose such as the construction of Süleymaniye Mosque and then dispersing. The concept of wage labor, which would become widespread with the factories in the 19th century, had not yet gained full presence even in the last years of the Ottoman Empire, in the beginning of the 20th century. Indeed, in this period, some factories had to be shut down due to lack of qualified workers and wage labor in industrial production as rare as in agricultural production (Güven, 2017, 893-894). Even in the late 1920s, a significant number of workers in the Zonguldak coal basin had been working shifts in coal mines for temporary periods of at least 2 days and up to 20-25 days a month, according to the planting and harvesting times -in a flexible working pattern between industry and agriculture- and temporarily dwelling around collieries during the working periods (Gürboğa, 2007, 60). Therefore, even in the early 20th century, in Turkey, a working class who was completely dispossessed, and independent of agriculture, has not risen yet.

Within the context of such a social structure, the realization of the industrialization attempt of the Republic have depended primarily on the creation of a working class. Therefore, in the first years of the Republic, a series of social policies have been introduced in order to attract wage labor and increase labor supply (Gürboğa, 2007, 62). In this context, the factories established within the scope of the industrialization project, had to take a number of measures, in addition to using every means of employment in order to provide, stabilize, discipline and ensure the reproduction of the qualified workforce required by industrial production.

The most significant of these social measures was building settlements such as workers' quarters and factory-towns around the production fields (Gürboğa, 2007, 59). By improving the living conditions of the workers, "modernizing" their lifestyles as well as the production, has taken a major place in the programs of the enterprises. In the report prepared by Sümerbank Construction Science Committee (*Sümerbank İnşaat Fen Heyeti*), which has financed many of these settlements, the importance of workers' quarters in establishing a permanent working class was stated as follows: "...as a result of workers who are employed at the same factory, living together in new neighborhoods having all social facilities, a harmony develops between the workers, and in this way a worker does not even consider quit the factory he works for, unless he has a very significant reason. As thoroughly explained above, construction of workers' houses, which is the major reason for the workers to develop attachment to the factory, and of workers' quarters that include all kinds of modern facilities at each factory, are the main issues that Sümerbank emphasizes with great importance" (Sümerbank İnşaat Fen Heyeti, 1944, 9).

However, although there was a significant emphasis on improving the housing conditions of workers, realized projects remained insufficient when compared to the Europe (Aslanoğlu, 2001, 45). The workers' quarters designed by Jansen in Ankara and Adana master plans, the quarter of four hundred units built by the municipality in İzmir, Zonguldak and Kozlu workers' quarters built for Zonguldak mining workers, and the factory-towns constructed by Sümerbank such as in Kayseri, Nazilli and İzmit³, were some of the few examples of "mass housing projects for workers" of the period (Aslanoğlu, 2001, 89-90).

3.1. Zonguldak Hard Coal Enterprises and Workers' Settlements

Two workers' quarters in Zonguldak coal basin built by Türkiye İş Bank,⁴ -although the projects were not completely constructed- were some of the leading initiatives in terms of their comprehensive architectural context and social facilities. Within the scope of social progress, the improvement of workers' living conditions has been at the top of the bank's program, in which the main objectives were defined as "technical progress" and "social progress": "When the bank has just undertook the project, the Turkish laborer had

³ However, Jansen's workers' quarter in Ankara could not be built, while the quarters in Zonguldak and Kozlu were partially-built; Sümerbank would be achieved to meet housing needs, only after the 1940s.

⁴ Türkiye İş Bank founded two companies in Zonguldak Coal Basin; Zonguldak Mining and Coal Works Turkish Joint Stock Company (*Türk-İş*) in 1926, and Kozlu Coal Works Turkish Joint Stock Company (*Kömür-İş*) in 1929.



been living and working under very inadequate and primitive conditions, therefore the bank has put increasing the welfare of the laborers and improving their living conditions to forefront of its program." (Anon., 1937).

In this regard, one of the first actions of the bank was to commission Seyfi Arkan to prepare two projects for improving the housing conditions of the workers. And these two projects -Zonguldak Türk-İş and Kozlu Kömür-İş Workers' Settlements- designed by Arkan, between 1934 and 1936, were the most prominent and qualified examples with their contemporary designs. These settlements, besides leading the early Republican Turkish architectural practice in terms of the scale, program, and design (İmamoğlu, 2009, 143); were also of great significance in the architectural history on universal scale, as the embodiments of the idea of workers' settlements of the period. Moreover, commissioning one of the major modernist architects of the era⁵ to design the projects, has represented a strong expression of the modernization ideal of the Republic, which developed almost synonymously with the discourses on modernist architecture and housing production.

In the Türk-İş Workers' Settlement, Arkan developed diverse housing typologies for single and married workers, and also planned public facilities such as shower rooms, a laundry, a public kitchen and school buildings (Arkan, 1935, 255). In the settlement, there were 30 houses for engineers, 60 houses for married workers, 65 houses for civil servants, 7 workers' blocks for single and seasonal workers, a service building for the workers, a primary school and a movie theater. (Akbulut, 2011, 11). The buildings were placed around the grove at the lowest level of the topography, while the greenbelt extending radially from the center to the upper levels was distributed among the buildings (Figure 7). The main planning principle of the settlement that each housing unit having its own garden, has referred to the garden city theory of the era.

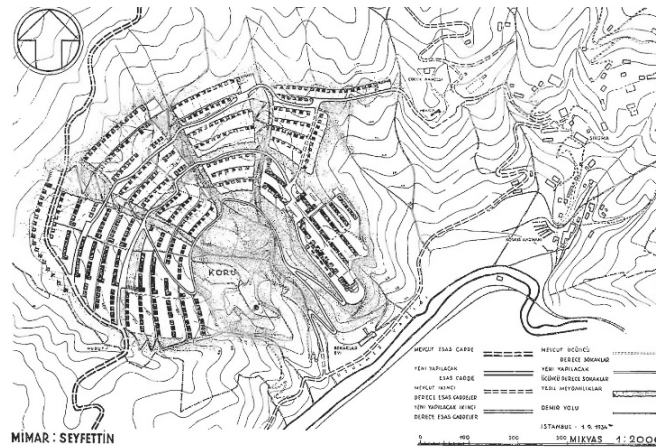


Figure 7: Zonguldak Türk-İş Workers' Settlement, site plan (Arkan, 1935, 253).

All buildings in the settlement have a modest, cubic and simple morphology, which dominated the modern architecture of the era (Figure 8, 9). The drawings of the housing type for married workers show that the units were designed in minimum, very functionally and rationally (Figure 10). Therefore, the design bears the traces of modern architectural thought not only in terms of stylistic approach, but also of the design idea. These traces were the result of architectural understanding of Seyfi Arkan, "the most brilliant modernist architect of the 1930s", in which he keeps universal values above local values (Gürel & Yücel, 2007, 52).

Mainly two distinctive housing types were designed: two-storey and three-storey houses in gardens for the administrative staff, technical personnel, civil servants and married workers, who were also qualified workers; and dormitories for single or seasonal workers, where they lived communally during the working shifts. While these dormitories were consisted of only wards, basic needs such as taking showers and eating were met in the service building next to the dormitory. Therefore, the settlement was allocated to the administrative staff, technical personnel and civil servants rather than mine workers (Gürboğa, 2007, 62). Workers' dormitories and service building were located nearby the road to mine quarries, to minimize the circulation of single workers in the settlement (Fındıklı, 2017, 667). The planning decision of the settlement responding to the spatial needs of the nuclear family proposed by the Republican ideology as an alternative

⁵ "In Berlin, he became a student of Professor Hans Poelzig, who influenced and partially shaped his architectural understanding and practice when he also worked in his office. Upon Atatürk's invitation Arkan built Çankaya Presidential Residence in the new capital city of the Turkish Republic, Ankara. On his accomplishment he was appointed to build many other official and governmental buildings in Ankara." (Gürel & Yücel, 2007, 48).

to the traditional large family, resulting in isolating and detaching singles⁶ both spatially and socially (Fındıklı, 2017, 665) was frequently repeated in the other workers' settlements of the era.



Figure 8: Zonguldak Türk-İş İşçi Workers' Settlement, houses of the civil servants, 1930s (Anon., 1937).

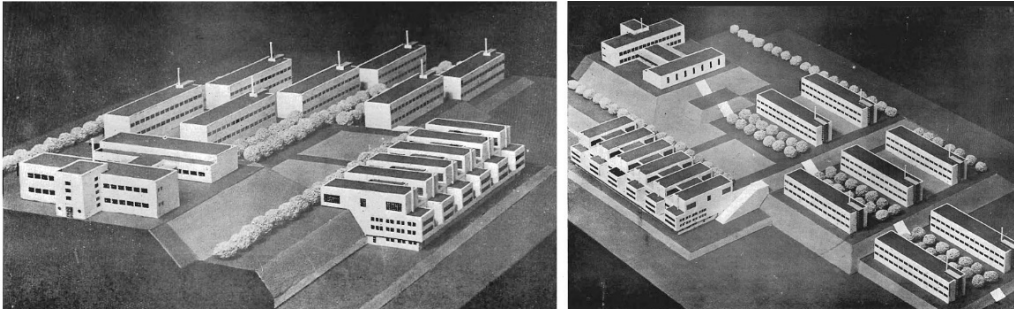


Figure 9: Zonguldak Türk-İş Workers' Settlement, dormitories and the service building, model (Arkan, 1935, 257).

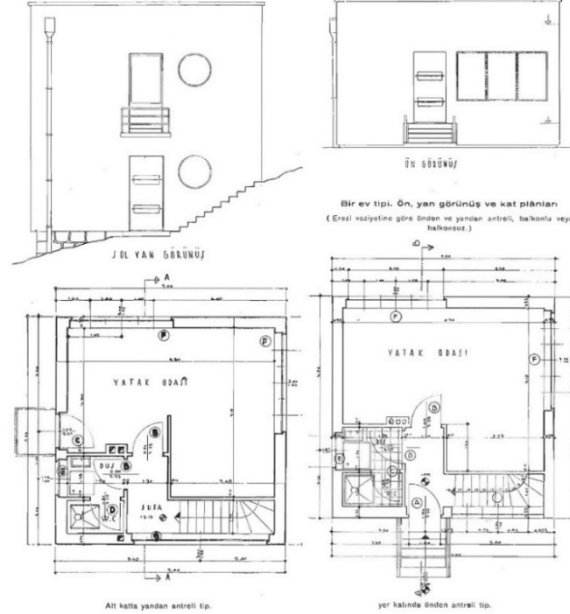


Figure 10: Zonguldak Türk-İş Workers' Settlement, a house type, plan (Arkan, 1935, 254).

In Kozlu Kömür-İş Settlement, which had a similar design idea, there were 85 houses for the engineers, civil servants and workers, and dormitories for single and seasonal workers, an administrative building, a primary school and a tennis court (Arkan, 1936, 9; Akbulut, 2011, 11). The planning decisions of the settlement were formed on the basis of social and professional hierarchies, and the buildings in the grid-planned gardens were placed on the topography according to this hierarchy (Figure 11). The manager's house was located at the top level of the topography, while the engineers' houses at the upper levels, civil servants' houses at the middle, and the workers' houses at the lower levels (Arkan, 1936, 9). Just as in Türk-

⁶ The concept of "single" in industrial settlements was not limited to workers who were not married. It also included regular and seasonal workers who were married with children, but did not prefer to live in an industrial settlement with their families (Fındıklı, 2017, p. 665).

İş Settlement, the design was dominated by a geometric and simple morphologic language; and gardened houses were allocated for the administrative staff, technical personnel and qualified workers, while the housing of single or seasonal workers were designed as dormitory blocks (Figure 12, 13).

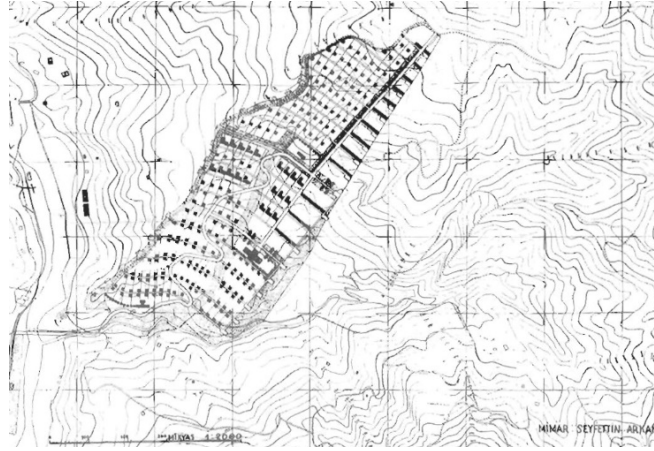


Figure 11: Kozlu Kömür-İş Workers' Settlement, site plan (Arkan, 1936, 9).

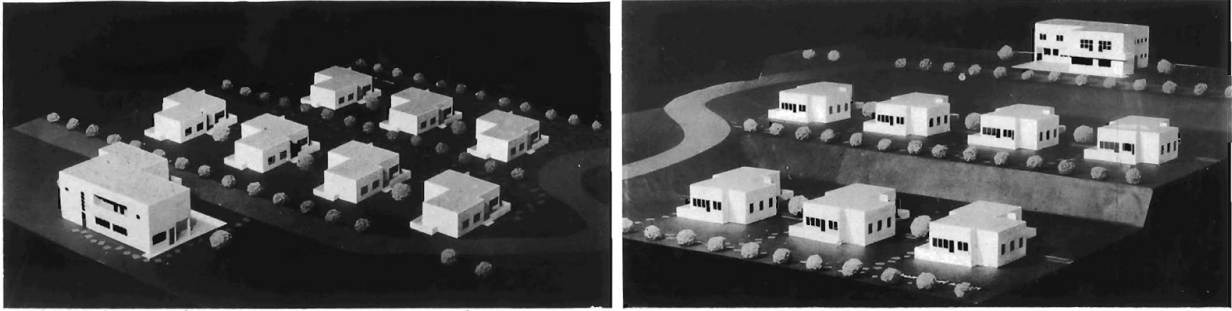


Figure 12: Kozlu Kömür-İş Workers' Settlement, model (Arkan, 1936, 10).



Figure 13: Kozlu Kömür-İş Workers' Settlement, dormitories, 1940s (Gürboğa, 2005, 439).

In the east of the workers' dormitory there was an administration hall and a lounge, a laundry and boiler room in the southeast, and a small service building containing a locker room, a small prayer room and a dining hall in the south. The basic needs such as eating and bathing have been met at these public buildings (Akbulut, 2011, 22).

These settlements have been associated with the German modernism, in terms of the cubist-purist language employed in their design (Aslanoğlu, 2001, 89-90), and of rational planning concepts and communal facilities such as schools, laundries and common kitchens. (Bozdoğan, 2002, 241). Herein, "the modernist ethic" that Arkan gained during the years he worked at Hans Poelzig's private office, as well as the modernist education he received at Berlin Technische Hochschule in Germany, must have been of great importance (Gürel & Yücel, 2007, 50). On the other hand, Bozdoğan (2002, 241) points out that, in contrast to the integrity of the individual units of row houses and residential blocks in Germany, Arkan's plan has



maintained the priority of the single house. İmamoğlu (2009, 145), attributes the main reason behind this design approach, to the fact that Arkan knew the collective character of the *farmer-miners*, -subjects of the design- yet have moved from farming to industrial work. Even if İmamoğlu's assessment is reasonable; as the main idea lying behind almost all settlements of the 19th century was based on maintaining the engagement of industrial workers with land and agriculture through gardens, it cannot only be attributed to Seyfi Arkan. The close resemblance of these settlements to Western predecessors in the 19th century, -in terms of the design approach-, is quite remarkable, indeed.

3.2. Sümerbank Karabük Iron and Steel Works and Workers' Settlements

Besides İş Bank, other organizations like Etibank and Sümerbank have built various housing settlements for state-owned enterprises in different Anatolian towns such as Nazilli, Hereke, Bursa, Kayseri and İzmit (Alsaç, 1993, 96). Among these organizations, Sümerbank has played a leading role in the transformation of housing and production practices, by not only financing workers' settlements but also by developing principles and regulations for their construction and operation (Fındıklı, 2017, 660).

The principal mission of Sümerbank, was introduced as making the heavy industrial investments necessary to achieve European-style modernization. Therefore, the establishment of Karabük Iron and Steel Works, which was the first heavy industrial initiative of Turkey, has constituted one of the most important initiatives within the industrialization thrust of the Republican era, and the settlement built within the factory complex has stood out as one of the most prominent workers' settlements in terms of its scale and scope. Moreover, the complex would constitute a model neighborhood where the modern Turkish society would grow, just as the new workers' settlements built in Zonguldak (Öktem, 2009, 158).

The establishment of the factory, would not only realize an important industrialization attempt, but also led Karabük to constitute a model for the modernization of all the Turkish cities. Wagner states the significant role of Karabük Iron and Steel Plants in the urban modernization as follows: *"The industrialization of the country (of Turks) was once only an imagination, and today we can see that great factories are springing out of this idea, and a natural consequence of this will be to build entirely new cities. Let's just consider the Turkish government's newest enterprise in Karabük. Both a modern city and a great steel factory will be constructed in the middle of nowhere. It is enough only to remind the various plans made for the modernization and modification of the medieval city forms of the Turkish country."* (Wagner, 1937, 276).

The construction of the plant, which started in 1937, was realized by Brassert, a British company, and the loan for the construction of the project was borrowed from England, while the internal financing was provided by Sümerbank (Fındıklı, 2017, 662). During the establishment of the plant, population growth and future housing needs were taken in consideration, and a modern workers' quarter that would include all the social facilities planned to be completed until 1939, in order to eliminate the problem of housing of the administrative staff, technical personnel and workers, before the factory began production. For that purpose, the land of Kapullu Village was expropriated in 1936; and Henri Prost was commissioned to make the master plan of the district called *Yenişehir* (New City) in 1938 (Fındıklı, 2017, 662).

The most remarkable feature of the settlement that consisting of two districts was the planning decisions based on social and professional hierarchies. One of the districts, called Ergenekon District, consisted of basic and small housing units was designed for unqualified workers; and the other, Yenişehir District was planned for senior workers, technical staff and managers (Öktem, 2009, 160). The general manager's house and the guest house were located at the upper levels of the topography, and followed by the houses of the managers, engineers, foremen and workers respectively to the downwards.

In the settlement, various different housing types have been built for the employees of the factory from 1939 to the mid-1960s (Öktem, 2009, 162). Apart from these housing units, the settlement also has included communal facilities such as a dining hall, a movie theater, clubs, a community center, a kindergarten, an elementary school and a high school, playgrounds, sports fields and a swimming pool (Öktem, 2009, 161), which were envisioned to develop a community life.

A solid social hierarchy is evident in the housing design, as well as in the main planning decisions of the settlements both in Zonguldak and Kozlu. Single houses in Yenişehir District, which were planned according to the basics of the garden city theories and allocated to the employees of high social and professional status, have indicated the importance given to the privacy of the family (Figure 14). The similarity of the district's name to Yenişehir District of Ankara, where the new public institutions such as the Grand National Assembly and Ministries, civil servants' dwellings, and wide boulevards were built in the context of modernist construction of the Republican capital, was noticeable. This noticeability has also a

strong reference to the Republic's ideal of modern society, composed of well-educated individuals such as civil servants and engineers.



Figure 14: Karabük Iron and Steel Works Settlement, Yenişehir District, undated (Öktem, 2004, 90).

The single-storey row housing blocks in Ergenekon District also represent the common typologies of the workers' settlements of the era built by Sümerbank (Figure 15, 16). These were gardened single-storey houses in minimum (Öktem, 2009, 162), which allows workers to maintain their engagement with the land. The housing typologies proposed for singles -independent of their social and professional status- were mass housing that prescribes a communal life: dormitories for single workers, and lodgements for both single civil servants and engineers. In these lodgements that consisted of rooms of 18 to 27 m², there were no kitchens; there was a dining hall instead, which was located in the service building right next to the lodgements (Öktem, 2009, 165).

By including the communal facilities needed in a modern housing settlement and by developing a modern community life, the settlement represents the same design idea of the contemporaries built by Sümerbank, whose aim were particularly creating a social modernization rather than a modernization in the production: "Factory-owned social facilities such as sports fields, gathering halls and movie theaters, are engendering very useful changes in the lives of worker families" (Sümerbank İnşaat Fen Heyeti, 1944, 9). Obviously, a significant role was attributed to the modern housing practices in terms of social modernization: "The cleanliness and beauty of the exteriors and interiors of the houses and the pleasure of using clean furniture increase the social standards of workers' families, day by day" (Sümerbank İnşaat Fen Heyeti, 1944, 9).



Figure 15: Karabük Iron and Steel Works Settlement, workers' row houses, undated (Öktem, 2004, 98).



Figure 16: Sümerbank Ereğli Textile Factory, workers' row houses of, 1940s (Sümerbank İnşaat Fen Heyeti, 1944, 9).



By segregating the houses of technical and management staff of high professional status, and the workers' houses, both typologically and spatially, these modern houses have reproduced the social hierarchies in the space. Actually, the planning principles of Karabük workers' settlement, communal facilities and the housing typology have all been entirely a natural consequence of Sümerbank's policy on workers' housing (Fındıklı, 2017, 667). In the report of Sümerbank Construction Science Committee dated 1944, the planning principles of workers' settlements were stated as follows: *"In the construction of workers' houses, a distinction according to the workers' professional statues is taken into consideration. The better areas of the neighborhood are reserved for the foremen, and then from more qualified to less qualified workers, respectively. Single-pavilions of the workers who come from nearby villages to work in factories, and those of unqualified workers, are built in the secluded areas of the neighborhood, as possible. A high attention is paid to isolate the single-pavilions from the houses of married workers, and moreover within a close proximity to the factory."* (Sümerbank İnşaat Fen Heyeti, 1944, 10-11).

The settlement of Karabük Iron and Steel Factory -and also the other settlements of the period built by Sümerbank- which envisioned to engage workers in agricultural activities, by means of the gardens adherent to the houses, could be easily associated with the company-towns such as Cadbury and Bournville. These English company-towns of late 19th century were also based on the idea of maintaining agricultural activities of industrial workers' in large gardens (Bilgin, 1990, 99). As well, the fact that stated in Sümerbank's report as *"Workers could benefit from engaging in the land in their leisure time, both economically and physically, by means of the gardens of the houses in minimum 250 m²."* asserts remarkably a similar approach.

4. CONCLUSION

The first workers' settlements have been embodied as alternative responses to the problems of housing, urban and social chaos, in the 19th century in early industrialized societies of the Western civilization, particularly in England and France. Improving the living conditions of the working class -the urban poor migrated from rural areas to urban- and meeting the growing housing needs have been the main efforts of the architectural agenda during the whole century. Therefore, the industrialization has also formed a deterministic threshold for the transformation of housing culture and architecture.

The essentials of these formations have been company-towns and factory-towns built by manufacturers at the urban peripheries as sophisticated introductions of garden cities or satellite cities, on purpose. The exclusion of the working class from the urban centers by means of these factory-towns, which have various communal facilities and urban opportunities, would counteract the social chaos, and also provide better housing and living conditions. Besides, industrial workers struggling in between rural and modern urban life would maintain their agricultural based routines. In this context, these planned factory-towns crystallizes the enthusiasm of creating an ideal industrial community. Although the industrialization attempts, and hence the factories and workers' settlements have emerged in Turkey only in the 20th century, more than a century later than Europe, the main characteristics of these settlements illustrate that the Western practices were taken as models and reinterpreted on the basis of political, economic and socio-cultural dynamics inherent in the Republican era.

The most identifying difference between the Western and Turkish experience, was that the industrialization process of Turkey has been realized by the state in a planned vision. Thus, projection of industrial plants, which were embraced as the agents of introducing a new lifestyle and culture, has also referred to the construction of a modern society and modern cities, as well. This indicates that the aim in building workers' settlements was realizing the social and cultural modernization, rather than answering the problem of housing. The spatial segregation on the basis of the social hierarchies, which was clearly evident in all these settlements, denotes the class order of the modern industrial society, and demonstrates the modernization ideal guided by the well-educated intellectuals of the new Republic, as well.

Similarly, the intention in segregating the houses of single workers from the houses of workers' with families in the settlements, must be associated with the conception of modern Turkish family, to which the Republican ideology has attributed a significant meaning in terms of modernization ideal. Furthermore, housing units designed in minimum functionally and rationally, following a modernist architectural approach, clearly demonstrate the aim of introducing the modern housing culture and infusing it into the society. Commissioning of Seyfi Arkan to design these settlements, known as the modernist architect of the era, instead of celebrated names that put *national architecture* to the forefront, is an another expression of that modernization ideal.

In this context, the industrial plants established in Early Republican era, went far beyond defining the modern means of production, and the settlements built within these, have introduced the modern



housing culture to the society. These settlements, also have played a crucial role in the evolvement of Anatolian cities into modern cities, in the modernization of the society, as well. Therefore, they could be regarded as the pioneers of both a social-cultural and an urban-architectural modernization. However, this modernization does not refer to a prevalent modernization nationwide; the workers' settlements and the new practices they introduced, have remained restricted to only some factory-based Anatolian cities, and does not mean large-scale urban and social transformations.

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