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Early Period of Modern Architecture in Turkey – A Case Study of Eskisehir

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Abstract. Modern architecture in the Western World bore fruit at the beginning of the 20th Century in consequence of the process of modernity and seeking of the proper architecture for it. It was formed firstly towards the end of the 1920s. The main reason of this nonsynchronous development was the inadequacy of enlightenment and industrial revolution during the Ottoman Empire and the lack of formation of an intellectual infrastructure which provides the basis of modernity. However, the Ottoman Westernization occurring in the 19th century constituted the foundations of the Republic modernity founded in 1923. The earliest modern architectural designs in Turkey were first practised by European architects after the foundation of the Republic and internalised and practised extensively by the native architects afterwards. The early modern architecture of Turkey, named as “1930s Modernism”, continued until the beginning of the World War II. This period was formed in between the periods of first and second nationalist architecture movements. The early modern architecture period of Turkey was a period which high-quality designs were made. It was practised and internalised not only in big cities such as Ankara and in Istanbul, but also in the medium and small cities of the country. This situation was not just about a formal exception but about the internalisation of modernity by the society. Eskisehir is one of the most important pioneering cities of the Republic period in terms of industrial and educational developments. The earliest modern buildings were built as the public buildings by the state and non-citizen architects in the inadequate conditions of the country in terms of economy and professional people. The earliest modern houses of the city designed by these architects were the prototypes for the later practices which offered the citizens a new lifestyle. The modern houses were the symbols of prestige and status for the owners and the dwellers. The features of early modern buildings of Eskisehir as a medium-size city of Turkey will be examined in this study within the scope of the early modern architectural period of Turkey.

1. Introduction

The process of modernization in Turkey began with Westernisation movements in the 19th-century Tanzimat (political reform) period of the Ottoman Empire. However, unlike the West, not having experienced the Enlightenment and industrial revolution, in Turkey the modernity has remained very limited and superficial. The modernization movements after the establishment of the Republic in 1923 are the continuation of Ottoman Westernization and modernization process. However, the scope of the Republican reforms and the radical changes distinguishes the Republican period from the previous periods [1]. The main difference between Ottoman Westernization and Republic period modernity is that the first one was limited to a small group of upper-class wealthy people, while the other one spread



to the medium class of the country. Modern architecture has been accepted as the symbol of Republic modernity and Ankara and Istanbul were the pioneering cities of modern architecture. On the other hand, it is important that how modern architecture has been practised out of these centres to measure the level of modernity reflecting whole society in all over the country. At that point, practices of modern architecture in medium-size and small cities of Turkey gain importance. The objective of this work is to put forward the features of early modern buildings of Eskisehir as a medium-size city of Turkey.

2. Modernism of the 30's

The early years of the Republic, defined as the transition period, were marked by major changes and transformations that took place by removing the Ottoman political structure through the implementation of the Republican reforms [2]. The Industrial Incentives Act issued in 1927 became an initiative to support the intention of creating a contemporary architecture for the Republic. It envisaged sending people abroad to train staff and inviting progressive staff of Europe to the country for educational purposes. This was also true for architects. These foreign architects, mostly German and Austrian, such as Holzmeister, Egli, Taut, Jost, Jansen, Elsaesser [3], identified the main education methods of the educational institutions as well as their contemporary practices, and tried to make more modern architectural breakthroughs develop in Turkey by disrupting the classic historicist practices in the Turkish architecture [4]. They also spearheaded the adoption of this understanding by young Turkish architects. Thus, the first modern structures of Turkey began to emerge after 1927. This first modern architectural period of Turkey was called "1930s modernism". The first generation of architects of the Republic was those who started architecture education with the Republic and those who grew up in these new environments and influences. Although there were initially very few of them, as the numbers of these architects increased, they began to have more say in the architecture of Turkey [5]. Young Turkish architects greeted modernism with great enthusiasm and noticeable predisposition [2]. The year 1933 is significant in terms of being the year when Turkish architects won international project competitions: Seyfi Arkan for the Ministry of Foreign Affairs Pavilion and Sevki Balmumcu for the Ankara Exhibition House. Thus, the period for Turkish architects to prove their level of competence had begun [5].

It seems that the structures designed in this period abandoned the historical understanding of the First National Architecture movement and came under international influences. The general design conception of architects in this period can be summarised as follows:

- Functional planning, grouped functions
- Rectangular plan with rounded corners (usually in entrance, balconies and terraces)
- Horizontal band windows, corner windows
- Horizontal band fill between windows
- Continuous, uninterrupted sill lines
- Continuous horizontal balconies
- Terrace roof or hidden roof applications [5]
- The use of half cylinders with pure geometric shapes in the masses [6]
- Specialised residential spaces since the early 1930s
- Prevalence of reinforced concrete
- Using edelputz gypsum in the German technique (a kind of spreading plaster) on the surfaces of the front façades [2, 5]

During this period, especially public buildings were built in large numbers. In the direction of the reconstruction program established in the first years of the Republic, the foundation of the new capital Ankara, the establishment of service buildings and industrial buildings throughout the country, and the production of models for hospital and school buildings were the main priorities [2]. The design of certain public buildings by architectural competitions first started in the 1930s. The railway stations built for the Anatolian cities emerged as the first modern structures in many centres. Large factories, all built

between 1934 and 1939, were examples reflecting modern architecture because of the development of their form according to functionality and compulsory space organisation [4, 2]. Modern houses are completely distinct from traditional Turkish houses, in terms of planning, outward openings, and mass/façade designs. No trace has now left of the traditional Turkish house in the plans. Despite the traditionally inward-looking exterior of the courtyard walls, these are different plans with large glass façades and outward-facing structures [6]. European-style furniture and home furnishings used by the upper income and cultural groups during the Ottoman period forced the plan schemes of the houses while spreading to the middle classes after the Republic. Thus, from the beginning of the 1930's, the traditional housing plan, which consists of uncharacterized rooms, has been turned into housing plans consisting of shaped and dimensioned spaces according to their features and functions. The plans were created by designing geometric volumes functionally. The plan was developed around a large central hall, which is not just a distribution space [5]. Corridor use is low. Service volumes were grouped together. Circular plans reflected on the exterior were often used in living and dining areas and terraces. Towards the end of the modernist period, there was a transition to the use of wide eaves and symmetrical arrangements [2]. The housing architecture of the 1930s, destined to be destroyed in many cities today, is exemplified by some buildings worth consideration and analysis. Except for a few, almost all of these examples are designed by native (Turkish) architects.

The reasons for the rapid adoption of modern architecture in the country vary. These reasons can be briefly summarised as follows:

- The arrival of foreign architects was an important factor in the beginning of modern architecture in the country.
- Demand for buildings extending from houses to public buildings, from factories to hospitals [2]. This structure overlapped with modern architecture, since it excluded the styles of function and comfort, and brought the use of typified uniform features.
- The role of Republican staff, new directors, high bureaucrats and technicians and a part of the promoted national bourgeoisie played an important role in the adoption of modern architecture in the country. These groups, which were relatively well-earned and sought to reach European standards, found in the modern architecture what they were looking for: the new, contemporary features that did not remind the past [5].

When this early period of modern architecture, which is generally called "1930s Modernism" in Turkey, is analysed, it is remarkable that it was adopted and accepted in a very short time and quality modern designs were created [6]. Early modern architecture in Turkey lost its momentum at the end of the 1930s. The death of Atatürk in 1938 and the beginning of the Second World War in 1939 marked the beginning of a new era. With the abandonment of modern architecture, a new era of national architecture, which would last about ten years, had started.

3. Buildings of 30's modernism in Eskisehir

Eskisehir is a medium-sized city situated in the mid-west of the country. It is both a commercial centre and an industrial city due to its location on the Baghdad-Berlin Railway and the fact that it was one of the cities where public investments intensified in the first years of the Republic [7]. The population of the city, which was 32,000 in 1927, reached 70,000 in 1940. New public buildings, new roads and new houses [8], which constitute important signs of modern development initiatives, emerged as the first modern development initiatives in Eskisehir. The first modern buildings of the city were public buildings. These structures, few of which still remain today, were functionally oriented towards education, culture and health. Apart from public decisions, residential buildings are striking because they show the tendency of local people to modern architecture and lifestyle. The newly-opened roads and residences in the neighbourhoods were made in a modern way. The process of transition from the

traditional houses to the modern ones was very easy for people due to the comfort and prestige offered by the modern houses.

In this study, 8 buildings are examined. Six of the examples which are all designed by the architect Izzet Baysal, do not exist today, are achieved from “Arkitekt”, the first and only architectural journal of the 1930s. Two of the examined buildings originally remain, but the designers of these buildings are unknown. All buildings are examined in terms of their mass and plan organisations and features of their facades.

3.1. Eskisehir Aviation School (1935, Izzet Baysal). It is a building built near the railway line. It consists of classrooms and workshops belonging to the radio, electricity, machinery and photography departments and departments of the command office [9]. It consists of a two-storey, two-column, rectangular plan with separated functions, perpendicularly connected to each other by a corridor. Although the eaved roof does not overlap with the general characteristics of the period architecture, the corners in the entrance section reflect the modern style with rounded stair steps and balcony, corner column, horizontal band windows, continuous sills and plain façade (figure 1). This structure does not exist today.



Figure 1. Exterior and plan of Eskisehir Aviation School [9].

3.2 Eskisehir Community House (1935, Izzet Baysal). Situated on the corner of Sivrihisar Street and Koprubasi Street, one of the most central spots of the city, its rear overlooks the Porsuk Creek. It is a horizontally positioned, two-ply linear structure on one side. The plan diagram is in the form of an "L" and the corner of the structure at two intersections is rounded with expressionist effects. The main entrance and the stairs on the side of Sivrihisar Street are located in the middle part. On the ground floor there are shops, and on the upper floor, there is a showroom for 250 people along with backstage spaces, activity rooms, book and reading room, and a buffet [10]. The horizontal band windows emphasise the horizontalness of the mass (figure 2). The roof terrace is a hidden steeple. The construction technique is reinforced concrete carcass. All these features carry typical modernist features of the era. However, part of it has been demolished and the rest of it has been divided into different ownerships, undergone unqualified changes and thus lost its architectural character.

3.3. Eskisehir Air Force Hospital (1939-48). It is a 600-bed hospital structure that was built in 1939 and completed in 1948. The structure consists of a two-fold symmetrical mass in the form of a "T", symbolising the tail part, and a symmetrically arranged composition of another three-fold mass in the vertical direction, symbolising the wings of the aircraft, inspired by the aircraft form [11]. Different branches in the mass represent different functions. The main entrance was placed in the administrative area on the axis of the tail which is located on the axis of symmetry, and the clinics have been placed on the wings. Vertical windows and massive voids were formed in the tail section. Here, the different vertical window layouts also emphasise different functions. In the wings where the clinics are located,

there is a layout dominating the floor slabs horizontally by reinforced concrete column arrays with balconies continuing along the façade in front of the vertical window arrangement.

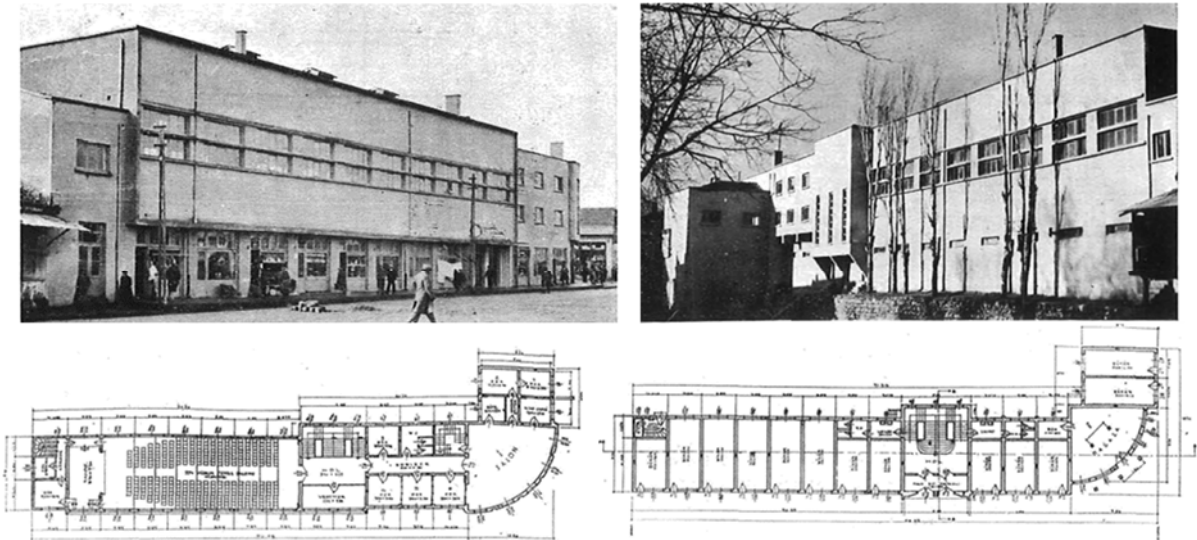


Figure 2. Exterior and plan of Eskisehir Community House [10].

In the tail section of the structure, there are hidden roofs with a terrace roof, and wide eaves in the wings (figure 3). The construction technique is reinforced concrete carcass. Although the structure has a symmetrical design and vertical window arrangement, it bears the characteristics of the modern architectural sense of the period, such as the horizontal and vertical balance of mass, occupancy vacancy rates, and reflection of functions in mass and façade [12]. It has survived until today without any changes.



Figure 3. The exterior of Eskisehir Air Force Hospital [13].

3.4. Tulomsas Factory Entrance Gate. It is the entrance gate of the factory which is the first industrial plant of the city. The facility was established as a railway repair shop to meet the steam locomotive and wagon repair needs for the Anatolian-Baghdad railway line, which was built by the Germans in 1894. It was developed as a locomotive and wagon factory during the Republican era [14] and was added new structures over different periods. Although the entrance gate, the year of construction and the architecture are unknown, it bears the typical characteristics of modern architecture of the 1930's. It consists of a horizontal single-story block and a clock tower at its end. The side surface of the section where the tower is located is rounded. On the horizontal block, the two spaces in which the carrier columns are exposed are opened and the entrance and exit points are formed, and the mass between

these spaces is used as security. The top of the horizontal mass is covered with a terrace roof forming a fringe. The tower rises as a vertical element that stabilises the horizontal effect (figure 4). The construction technique is reinforced concrete. The structure remains unchanged today.



Figure 4. The exterior of Tulumbas Factory Entrance Gate

3.5. Residence-1 - Madam Feride House (1935, Izzet Baysal). It is a building with two floors and a basement, located on a corner plot on Istasyon Caddesi (Station Street). The single family residence consists of two rooms with kitchen and WC on the ground floor, two rooms (one of which is large), a bathroom, a WC and a balcony on the upper floor, and a launderette and a coal storage on the basement floor. The staircase is positioned at the back of the structure. The rooms on both floors branch out from the centre hall in the middle. There is an entrance from the middle point of the structure, connecting to the middle hall from the apron. The entrance is pulled inwards and the corners of the rooms next to each other are rounded on the façade. The entrance on the balcony emphasises the entrance but also strengthens the symmetrical effect of the façade. The building was completed with a roof terrace, supporting cubic design (figure 5). It is a design that reflects the basic features of the period architecture [15]. The structure has not survived.

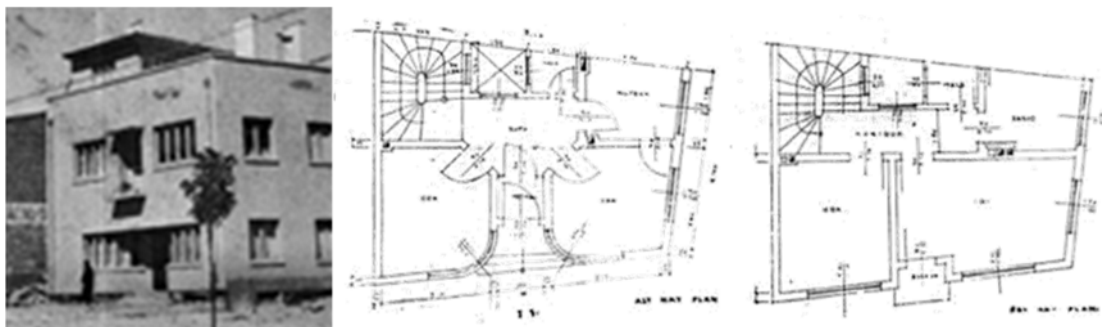


Figure 5. Exterior and plan of Madam Feride House [15].

3.6. Residence -2 – Mister Salahattin House (1935, Izzet Baysal). The building was on the Hukümet Caddesi (Government Street, now called 2 Eylül Street) designed to provide office and residential functions for the property owner. The plan layout is in the form of an "L". It consists of two floors and a basement. The ground floor has guest rooms, a hall, a kitchen and a WC, the upper floor has three rooms, a hall and a bathroom, and the basement floor has a maid room, a launderette and a wood-coal storage [15]. The entrance is highlighted with a balcony on the upper floor by retracting it inwards. The office entrance is provided from a separate door. Different window sizes on the façade emphasise functional differences. The construction technique is reinforced concrete carcass. On the façade, the carrier system is emphasised by leaving the columns open at places. The roof is concealed behind the parapet on the façade, creating a terrace roof effect, while the façade is designed to form a fringe on the other façades (figure 6). With all these features, it reflects the design concept of the period. The building is not available today.

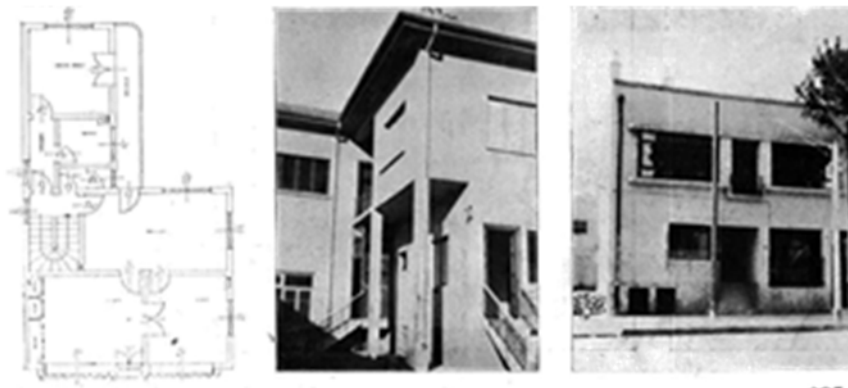


Figure 6. Exterior and plan of Mister Salahattin House [15].

3.7. Residence -3 (1935, Izzet Baysal). The building on the İstasyon Bulvarı (Station Boulevard) is located on an adjacent-style parcel of 96 square meters. It is designed with a cubic design concept and consists of two floors and a basement. The two floors are designed as two separate residences, and the housing entrances are provided from two independent doors [16]. The residences consist of three rooms, a kitchen, a bathroom and a WC. Guest room entrances are separated from the living area of the family by letting them from the stairwells. A symmetrical order on the façade is dominant. The entrances are in the centre of the façade and form the axis of symmetry with the balcony on the top. On the rear, there is a balcony along the upper floor giving a continuous, horizontal effect. The roof of the building is concealed behind the parapet on the façade, creating a terrace view and finished on the back with a fringe (figure 7). The construction technique is reinforced concrete carcass. The building does not exist anymore.

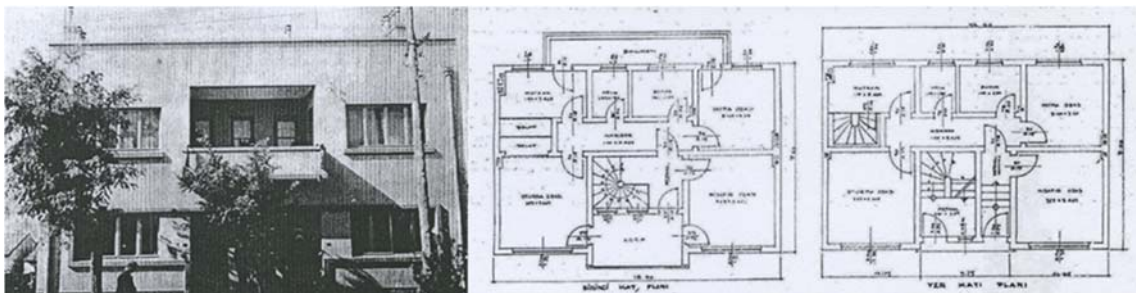


Figure 7. Exterior and plan of Residence -3 [16].

3.8. *Residence -4 (1935, Izzet Baysal)*. With three façades one of which is an adjacent façade, it is located next to a bazaar in the city centre, at the intersection of three roads. There are three shops on the ground floor, a floor designed as a residence on the upper floor and a smaller terrace floor. Its total area is 200 square meters. It is arranged in a row with trapezoidal geometry, and the upper floor plan is arranged to form spaces with right angles to the exit and balconies [16]. The entrance hallway leading to the stairway has a kitchen, a room and a bathroom, while the other four rooms open to the hall space connected to the entrance. These rooms also connected to each other by a corridor. In the plans, it is seen that the function of the rooms is not specified but indicated only as a "room". On the façades, corner windows were created in the corbel spaces. The continuity of the windowsills and the horizontality of the balconies and terraces are emphasised in the façade with the parapet. The building is finished with a terrace roof (figure 8). The structure is reinforced concrete. The building has not survived.

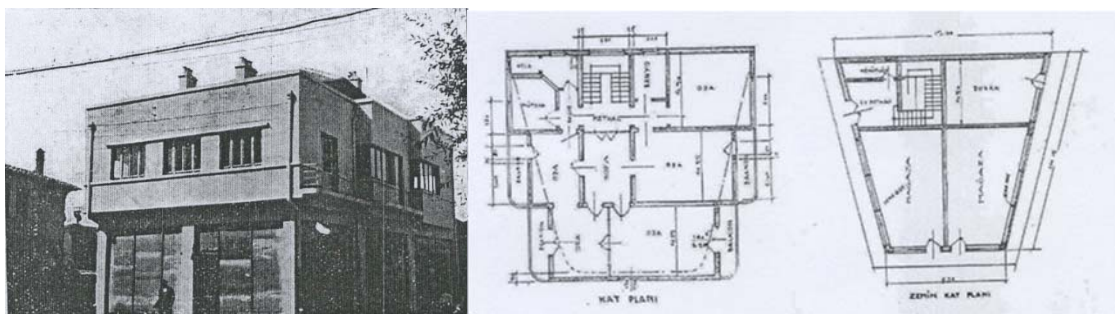


Figure 8. Exterior and plan of Residence -4 [16].

4. Conclusions

In this study of the early modern architecture of the period of 30's in Eskisehir, eight buildings (four public and four private) are analysed. Public buildings offer education, industry, culture and health public services, and as such overlap with the fundamental factors that constitute the infrastructure of modernity. Two of these eight structures remain unchanged today, but a majority of them were destroyed and modified, others were completely destroyed. The information about these buildings can only be retrieved from architectural magazines or old photographs. The common feature of public buildings is that they do not consist of a single prismatic monoblock but that the different functions are expressed in different mass movements and reflected in the layout of the façade. In the masses and façades, there is the balance of contrasts such as horizontal accent, horizontal-vertical, and fullness-space. It appears that asymmetrical design as well as symmetrical understanding is represented. Roofs that are hidden behind the terrace roof or parapet and common rooftops, rounded corners, continuous sills, corner windows are the common features. Although there is a similar approach in the houses, small-scale and cubic mass conception is dominant. In some of the plan drawings, room functions are specified, but in others, they are not. From here it can be deduced that the spaces are not completely specialised. The opening of the rooms into a middle hall resembles the anteroom space, which is an important feature of traditional houses. Unlike the anteroom, however, the hall is a central space functioning as a circulation area that facilitates warming up with the stove, rather than being a space for the gathering of the family. The separation of the entrance doors of different houses in the same building, the separation of the guest room entrance from the other parts of the house emphasises the importance attached to the privacy of the family. When it is evaluated in terms of social change, while essentially carrying the formal features of modern architecture, these features reflect a transitional society that bears the traces of both traditional and modern life. Another characteristic of these buildings is that the number of architects in the country was low in the limited conditions of the period. Therefore, the first important modern constructions of the city were designed in this context by architects from outside of Eskisehir. The important point here is that these buildings were accepted and adopted in the modern sense in a medium-sized Anatolian city,

both in terms of public and residential structural designs. Especially in the housing structures, the modern architecture practices would continue for a few decades by responding to local people's demand, which was crucial for the acceptance of modernity at the society level.

References

- [1] S. Bozdoğan, *Modernizm ve Ulusun İnsasi Erken Cumhuriyet Turkiyesi'nde Mimari Kultur* (Modernizm and Nation Building Turkish Architectural Culture in the Early Republic), Metis Yay., Istanbul, 2008.
- [2] A. Batur, "To be Modern: Search for a Republican Architecture", *Modern Turkish Architecture*, R. Holod, A. Evin, S. Ozkan (Eds), Chamber of Architects of Turkey, Ankara, pp. 69-96, 2005.
- [3] B. Ozer, *Rejyonalizm, Universalizm ve Cagdas Mimarimiz Uzerine Bir Deneme* (An Essay on Regionalism, Universalism and Contemporary Architecture), Doktora Tezi, I.T.U. Fen Bilimleri Enstitusu, Istanbul, 1964.
- [4] M. Sozen, M. Tapan, *50 Yilin Turk Mimarisi* (Turkish Architecture of 50 Years), Turkiye Is Bankasi Kultur Yay. 12, Istanbul, 1973.
- [5] A. Batur, "Cumhuriyet Doneminde Turk Mimarligi" (Turkish Architecture during Republic Period), M. Belge, B. Ozuakin (Eds), *Cumhuriyet Donemi Turkiye Ansiklopedisi* (Encyclopedia of Turkey in Republican Period), Ayri Basim, Iletisim Yay., Istanbul, pp. 1379-1420, 1984.
- [6] I. Aslanoglu, *Erken Cumhuriyet Donemi Mimarligi 1923-1938* (Early Republic Period Architecture 1923-1938), ODTU Mimarlık Fakultesi Yay., Ankara, 2001.
- [7] G. Koca, R. Karasozen, "1945-1960 Donemi Eskisehir Modern Kent Merkezinin Olusumunda One Cikan Yapilar" (Prominent Buildings in Formation of Eskisehir Modern City Center in 1945-1960 Period), *Anadolu University Journal of Social Sciences*, Cilt/Vol.: 10 - Sayı/No: 3 Eskisehir, pp. 191-211, 2010.
- [8] I. Bilgin, "Housing and Settlement in Anatolia in the Process of Modernization", *Housing and Settlement in Anatolia a Historical Perspective*, History Foundation Publications, Istanbul, pp. 472-490, 1998.
- [9] I. Baysal, "Hava Mektebi" (Aviation School), *Arkitekt*, 1936-03 (63), pp. 70-72, 1936.
- [10] I. Baysal, "Halkevleri Binasi" (People's House), *Arkitekt*, 1936-02 (62), p. 36, 1936.
- [11] <http://www.hvtd.org/htm/tarihce.html>
- [12] Karasözen, R., "Eskisehir Hava Kuvvetleri Hastanesi" (Eskisehir Air Force Hospital), *DOCOMOMO Turkiye Mimarliginda Modernizmin Yerel Acilimleri V*, (Local Evolutions of Modernism in the Architecture of Turkey), Dicle Univ., Diyarbakir, p. 40, 2009.
- [13] <http://www.eskisehirkulturenvanteri.gov.tr>
- [14] www.tulomsas.com.tr
- [15] I. Baysal, "Eskisehir'de Iki Ev" (Two Houses in Eskisehir), *Arkitekt*, 1935-10 (58), p. 285, 1935.
- [16] I. Baysal, "Eskisehir'de Iki Ev" (Two Houses in Eskisehir), *Arkitekt*, 1935-09 (57), pp. 250-252, 1935.