

7. ULUSLARARASI MİMARLIK VE TASARIM KONGRESİ

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PLAN, FAÇADE AND ORIENTATION CHARACTERISTICS OF TRADITIONAL SARAYÖNÜ HOUSES⁵⁸

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Abstract: Located within the provincial borders of Konya, Sarayönü is a settlement where there are living examples of the traditional architectural heritage of the Konya region, where the history is under the ground and the adobe is the cornerstone of architecture. However, this settlement has started to lose its historical and traditional texture gradually due to rapid urbanization and inadequate conservation approaches. While the masjids and mosques, which are religious buildings, and the fountains, which are cultural landscape elements, are relatively less damaged by this destruction, the residential buildings that make up the majority of the settlement appear as the most damaged artefacts from this process. The damage and destruction of these houses, which were built with hundreds of years of knowledge in a tradition that is suitable for the climate, topography and cultural characteristics of the region, indicates that the building design and construction information of the region is in great danger. For these reasons, in this study, the plan, façade and orientation features of the historical and traditional houses in Sarayönü district center were tried to be revealed. As a result of the study, it has been determined that the plan schemes of the traditional Sarayönü houses mostly show the "inner sofa" plan type feature. It has also been observed that the façade and orientation features of the houses are also intensely related to each other. It has been determined that the dominant direction in terms of façade orientation in residential and room structures is the south façade, which is also the most advantageous direction in the context of the regional climate. In terms of façade typologies of residential buildings; It has been determined that they have façade types in "çardaklı", "cumbalı", and "kademeli" types.

Keywords: Konya, Sarayönü, Traditional Architecture, Plan Scheme, Façade Typologies

INTRODUCTION and THEORETICAL FRAMEWORK

Sarayönü district and its surroundings is a region that has always been in the spotlight since it has been on the route of important roads since ancient times. The mounds and ancient settlements within the boundaries of the district also appear as historical evidence confirming this situation. Sarayönü, which contains a very rich spectrum in terms of cultures along with its deep-rooted history, is a small example of the mosaic of the Anatolian Peninsula, the cradle of civilizations, with this diversity. Located within the provincial borders of Konya, Sarayönü is a settlement where there are living examples of the traditional architectural heritage of the Konya region, where the history is under the ground and the adobe is the cornerstone of architecture. However, this settlement has started to lose its historical and traditional texture gradually due to rapid urbanization and inadequate conservation approaches. While the masjids and mosques, which are religious buildings, and the fountains, which are cultural landscape elements, are relatively less damaged by this destruction, the residential buildings that make up the majority of the settlement appear as the most damaged artefacts from this process.

⁵⁸ This study was created from a part of the master's thesis named "Traditional Domestic Architecture in the Historical Sarayonu Centrum", which was prepared by Mehmet Bahadır Tosunlar under the supervision of Associate Professor Dr. Arife Deniz OKTAÇ BEYCAN and accepted on 30/12/2015

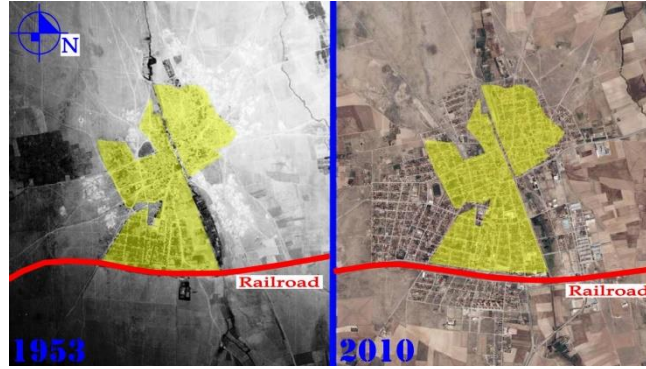
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The damage and destruction of these houses, which were built with hundreds of years of knowledge in a tradition that is suitable for the climate, topography and cultural characteristics of the region, indicates that the building design and construction information of the region is in great danger. For these reasons, in this study, the plan, façade and orientation features of the historical and traditional houses in Sarayönü district center were tried to be revealed.

SCOPE

In terms of scope the study was carried out within the borders of Sarayönü district center. The material of the study consists of historical and traditional houses located in Sarayönü district center. For this purpose, it was necessary to determine the traditional settlement boundaries in a healthy way. The year of 1953 aerial photograph of Sarayönü, which is the oldest accessible aerial photograph, was used as a base for the determination of the traditional settlement boundaries. The boundaries of the built-up area in this aerial photograph were digitally matched with the boundaries of the built-in area in the aerial photograph of 2010, and the approximate boundaries of the traditional settlement were determined (Fig. 1). After this step, residential buildings with both historical and traditional features were focused on within the boundaries determined. In the field investigations, it has been determined that 23 houses and 3 rooms within these borders represent the historical and traditional house features with different aspects.

Figure 1. The settlement boundaries of Sarayönü settlement in 1953 (left), The settlement boundaries of Sarayönü settlement in 2010 (right) (H.G.K. 1953, 2010).



METHOD

Survey studies and photographing applications were used as a method in the study. In the survey studies, the plan schemes, façade forms and orientation characteristics of the structures examined by using spirit level, laser meter, tape measure and compass were determined. The data obtained after this step were drawn and mapped in the CAD environment (Fig. 2). In the photographic works, the exterior and important interior units of the buildings were visually documented.

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Figure 2. Layout drawings and photographs of the examined structures (Tosunlar, 2015).



RESULTS

Although the space forms of traditional Sarayönü houses vary according to the number of floors of the buildings, it is seen that the "inner sofa" plan type is used in both single-storey housing structures and two-storey housing structures. It was determined that the "inner sofa" plan type was used in 22 of the 23 housing structures examined (Fig. 3, 4). In the plan types of room structures; a transition space “mabeyn” and a room formation associated with “mabeyn” are seen (Tosunlar and Oktaç Beycan, 2016) (Fig. 4).

Figure 3. “Inner sofa” views



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In terms of space usage according to elevations, it has been determined that single-storey residences and room structures are used entirely for residence purposes. In two-storey residential buildings, it is seen that both the ground and upper floors are mostly used for residence purposes (Fig. 4). It was determined that the ground floor of the building was used as a warehouse in only one example of the two-storey houses.

In two-storey houses, the opening of the upper floor sofas with "cumba" to the outside is a characteristic plan feature of Sarayönü traditional houses (Fig. 4-5). This arrangement has been interpreted as a sign that the upper floor sofas were at the forefront of the space hierarchy in the past.

Figure 5. "Cumba" forms in houses with code number Sry-001 and Sry-016, whose plan schemes are presented in Fig 4



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It has been observed that the façade and orientation features of the examined houses are intensely related to each other. In other words, it is evaluated that the building design and construction processes are created by considering the façade features and the climatic effects depending on the direction of the façade. In this respect, it has been determined that the dominant direction in terms of façade orientation in residential and room structures is the south façade, which is also the most advantageous in the context of the regional climate (Tosunlar, 2015).

In terms of façade typologies of residential buildings; It has been determined that they have façade types in "çardaklı", "cumbalı", and "kademeli" types (Tosunlar and Oktaç Beycan, 2020).

While the façade formations connected to the entrance stand out as a "çardak" space in one-story residential buildings, it draws attention as "cumbalar" and "kademeler" in two-storey residential buildings. Entrance "çardak" in one-story residential buildings are characteristic façade formations that also affect the plan schemes of the buildings (Fig. 6). When the directional relations of the examined houses with the plan schemes are evaluated, it has been determined that the entrance "çardak" are mostly opened towards the south direction.

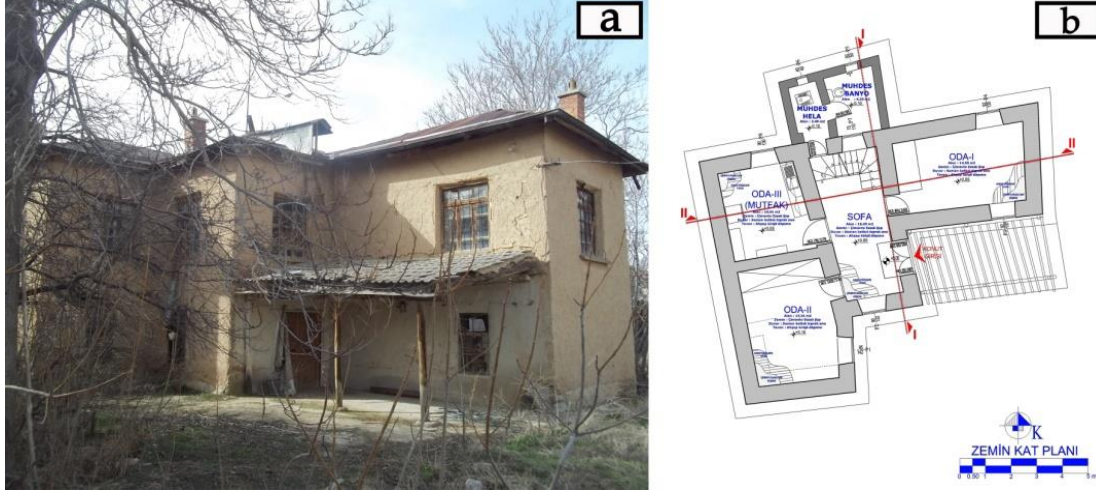
Figure 6. The entrance "çardak" of the house code number Sry-010



It is evaluated that the relations with the regional climate are taken into consideration in a decisive way in the "cumbalı" and "kademeli" façade types found in two-storey residential buildings. Especially "cumbalı" and "kademeli" gradations that face south form an approach that expands the exterior surfaces of the buildings in this direction (Fig. 7). Due to this approach, heat and sunlight can reach the interior spaces of residential buildings more effectively.

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Figure 7. Façade gradient of the house with code number Sry-008; a) façade photograph from southeast, b) ground floor plan of the building



RESEARCH RESULTS

When the plan schemes of the traditional Sarayönü houses are evaluated in terms of the plan typologies of the Turkish House, they can be classified in the characteristic "inner sofa" plan type. When the houses in question are compared to Berk (1951) in terms of plan schemes of traditional Konya Houses, they have largely similar features. In the plan types of room structures; a transition space "mabeyn" and a room formation associated with "mabeyn" are seen.

In terms of space usage according to elevations, it has been determined that single-storey residences and room structures are used entirely for residence purposes. In two-storey residential buildings, it is seen that both the ground and upper floors are mostly used for residence purposes.

It has been observed that the façade and orientation features of the examined houses are intensely related to each other. In this respect, it has been determined that the dominant direction in terms of façade orientation in residential and room structures is the south façade, which is also the most advantageous in the context of the regional climate. In terms of façade typologies of residential buildings; It has been determined that they have façade types in "çardaklı", "cumbalı", and "kademeli" types.

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