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SPATIAL and FUNCTIONAL TRANSFORMATION of UCTAE CHAMBER of ARCHITECTS of TURKEY AKSARAY OFFICE BUILDING (HISTORICAL İBRAHİM KAYA MANSION)

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Abstract

The aim of this study is to examine İbrahim Kaya Mansion, nearby Uluırmak located in the historic urban texture of Aksaray, by means of spatial and functional renovation and to define the transformation process into Chamber of Architects of Turkey [CAT] Aksaray Office Building in details.

Keywords: transformation, renovation, spatial and functional transformation, Aksaray.

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INTRODUCTION

Conservation is the endeavor to connect past and future of a society. Conservation of cultural heritage in its authentic condition and utilization for contemporary needs is the basic

element of conservation (Tapan, 2007). Re-use of cultural heritage delivers advantages of being economic, providing cultural and historical continuity and environment friendly energy consuming (Stas, 2007;Selçuk, 2006; Langston vd., 2007. It is also known that a transformation with permanent and suitable function results even better in both re-utilization and conservation of a building (Özen ve Sert, 2006; Oral and Ahunbay, 2005).

Transformation of historical residences to CAT offices is seen as a common practice in recent years. This approach and applications engender new spatial demands those mostly cause impacts which damage the authentic character of the building.

In this research in order to utilize historical İbrahim Kaya Mansion as CAT's Aksaray Office a requirement program is build depending on applied examples and new spatial demands. New spatial arrangements are done considering avoidance of existing deformations on building and the requirement program convenient for the new functional identity of the building. Conservation of authentic floor plan and façade considerations was aimed in the process. It is believed that this study will contribute to pass on an important value in Aksaray cultural heritage to next generations and an active utilization for modern days.

Authors are fully responsible for their papers, including references and proper credit for use of the work of others. Papers are accepted with the understanding that they have not been published elsewhere. All papers are to be electronically submitted in Ms Word document format.

Material and Method

Main material of the research is İbrahim Kaya Mansion, according to existing tablet, constructed in 1928, is an example of civil architecture built in early republic period style. Preserved as a II. Degree Monumental Artifact the building is property of CAT since 2003. Written and visual media about the history of the building are the forth material for research.

A two phase method was constructed in the research. First of them is to document the elements such as floor plans, façade organization, material choice which reflect the authentic character and to take photographs to archive. The second phase is to determine the spatial demands for the new function of the building.

Research Findings

İbrahim Kaya Mansion is an example of civil architecture located in Aksaray city, Central District, Meydan Neighborhood, Nevşehir Avenue, Minare Street, No:1 . recorded on Sheet 23, ward 493 and building site 24, constructed in 1928, the mansion is an example of civil architecture which is built in early republic period style. Preserved as a II. Degree Monumental Artifact the building is purchased by CAT in 08.12.2003 (Figure 1).

Figure 1. *Kaya Mansion, beginning of 20. Century. (delivered from Aksaray Municipality Archive)*

The building is constructed and have been used as a mansion until 1970 (Sezer and etc., 2009). Although the building was used as residence in following years depending on the reasons like change in user profile and hiring for more than one customers the building had significant physical changes. According to Karadayı Yenice (2012) the building is classified as an interior sofa plan type in which the street connection is directly from sofa, in traditional Aksaray houses. In this plan type sofa is directly reached from street and ends with a garden gate facing the main entrance (Karadayı Yenice, 2012). Yet there is a difference in this building. The entrance of the building is located in east. The garden gate supposed to be in west direction is located in south. That makes the sofa an "L" plan type. But like in other buildings sofa on ground floor provides passage between the garden, rooms and street.

İbrahim Kaya Mansion nearby Uluırmak, is a two floor masonry construction. There is also a basement in the building. The basement floors seen in almost every traditional Aksaray houses are locally called "Zembil" and used commonly as cellars actually serve to provide air circulation in the houses located by the river (Karadayı Yenice, 2012). The basement floor walls are made up with straight cut stone work for 150 cm under ground floor level, quarry stone work with lime mortar under (through -3.20 level) and irregular stone work under levels. These stone works expands 5 to 10 cm through inferior levels. There is also a well in the southeast corner of basement (Figure 2).

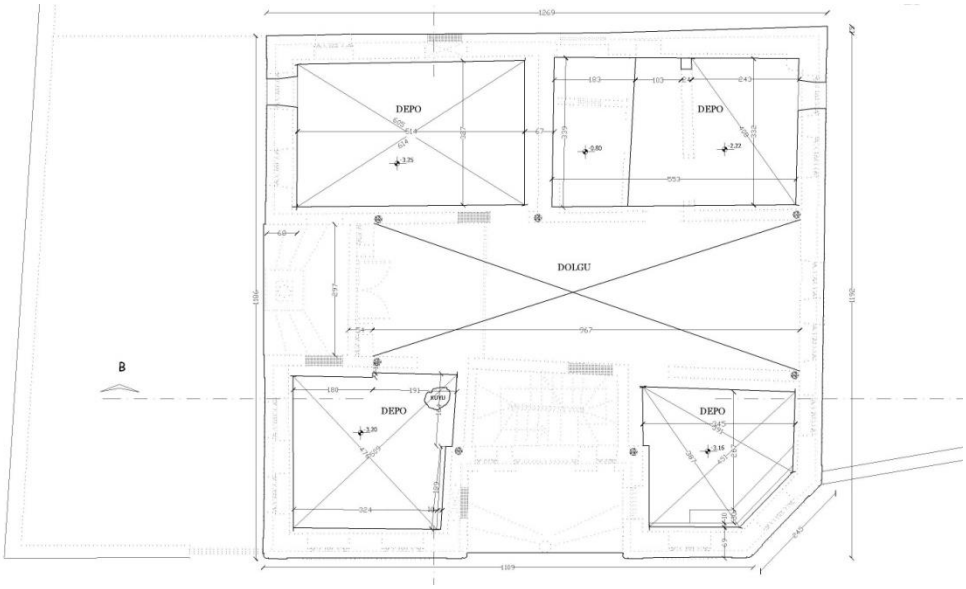

Figure 2: *İbrahim Kaya Mansion Basement Floor Plan-Surveying Project (Karadayı Yenice, T., Dülgerler, O.N., 2007)*

On ground floor the rooms are located at four corners. During surveying process it was noticed that middle sofa' inferior was filled, reinforced concrete slabs were supplemented to the building and in this area kitchen, bathroom and toilets were supplemented. It is detected that after this renovation the southeast room was enlarged. In later period because of ownership unbundling two floors were separated and to reach upper floor metal frame stairs were added to the south façade of the building. In the interior a new staircase right in front of the east entrance was installed. It is observed that during these renovations most of the authentic elements (like window, door frames) were altered (Figure 3).

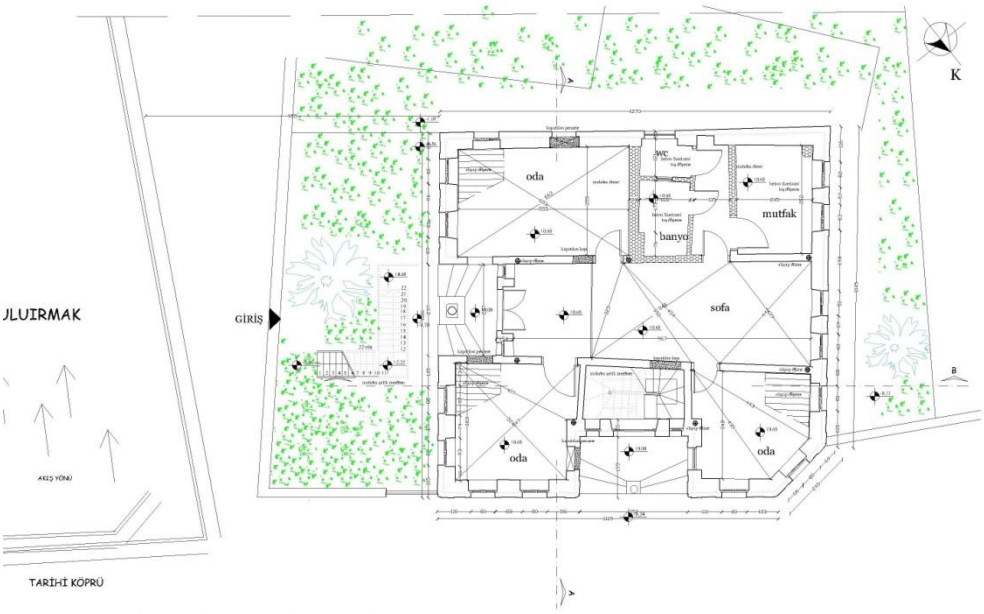

Figure 3: *İbrahim Kaya Mansion Ground Floor Plan-Surveying Project (Karadayı Yenice, T., Dülgerler O.N., 2007)*

Early on the building was first constructed connection between two floors was provided with a wood frame staircase located in one side of the sofa. The upper floor plan is the repetition of the ground floor plan. Like in most of the traditional Aksaray houses this building also has balconies on upper floor located over street-courtyard entrance (Karadayı Yenice, 2012). But it is seen that as in ground floor reinforced concrete slabs were s

upplemented, kitchen, toilets and bathrooms were installed also in the upper floor in the northwest direction. As apprehensible in eaves details the roof is original wooden frame hipped roof altered (Figure 4).

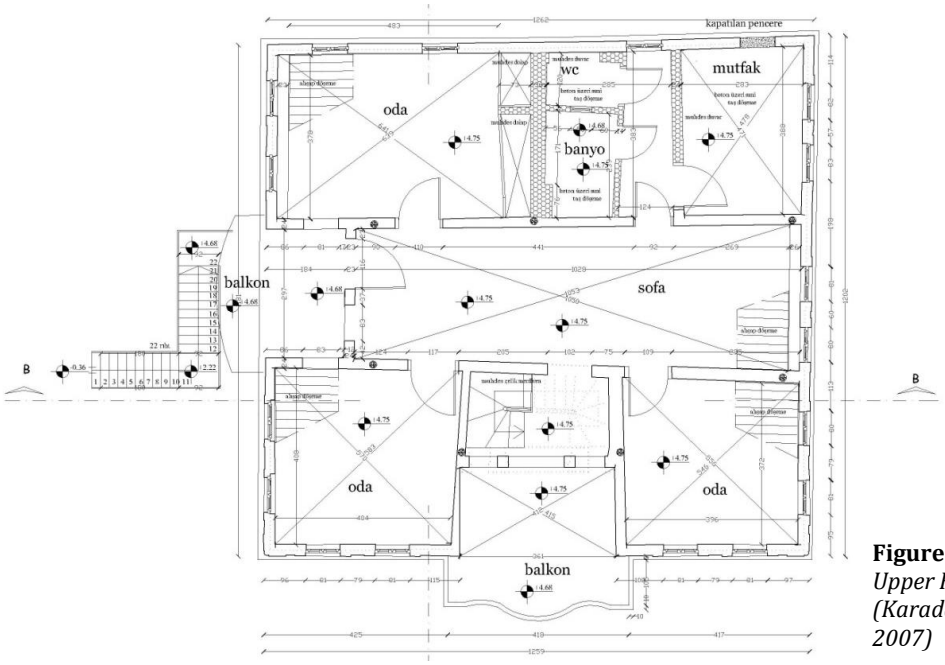

Figure 4*: İbrahim Kaya Mansion Upper Floor Plan-Surveying Project (Karadayı Yenice, T., Dülgerler O.N., 2007)*

In contrary to the simple interiors there is plenty of ornamentation on the façade of : İbrahim Kaya Mansion. Straight cut stone cladding used on the façade area enriched eith the use of dense patterns. Today the basement floor became invisible or the existing windows are closed because of the fillings done on street (Figure 5). East and south facades where the entrances are located are identical. On the façade of ground floor in the entrance areas right in the middle there are arches with stone columns and stone stairs. Along with them two row room windows exist. Only on the east façade where street entrance is located, the north room window is beveled. On the upper floor arched balconies over the entrances are carried by stone buttress(Figure 6). At the sides of these balconies two row room windows are lined up from ground floor. As a result of supplementation on the east façade there has been significant changes. Most of the windows were closed or totally torn down and remodeled with masonry blocks. On the north façade the

ground floor windows are repeated on upper floor. Te windows are framed with squeezing jambs. These jambs on the ground floor are ornamented with geometric forms as the ones on upper floor are kept simple. As in window frames buildings corner stones are also squeezed and ornamented with geometric forms. Like in traditional Aksaray houses in İbrahim Kaya Mansion the upper floor is disjointed from ground floor with a stone molding.

Figure 5: *İbrahim Kaya Mansion basement window (Dülgerler O.N.,* 2007)

Figure 6: *CAT Aksaray Office . right: east façade, left: west façade after restoration. (original 2011)*

İbrahim Kaya Mansion has 70 cm thick walls. These walls are quarry stone work. On the façade straight cut stone cladding is applied. Ground floor walls are 55-60 cm upper floor walls are 24cm thick. These walls are all clad wit 16 cm thick straight cut stone. Walls are constructed quarry stone filled with adobe and rendered in the interior. Inside these walls wood studs are inserted around door and window openings where load bearing capacity is lower (Karadayı Yenice, 2012).

Wooden joists and beams derived from poplar tree are used in building. These beams diameters differ from 15-20 cm on upper floors to 20-30 cm on the basement. The beams are arranged with 20-30 cm axis distances(Figure 7). For the joints with walls stone pillows are used. Wooden beams are exposed in basement,

in other floors they are covered with wainscot. Over these beams are straw matting, mud, mortar and upper floors slab. The finishing for floors are stone in sofa and balconies, wood for the rooms.

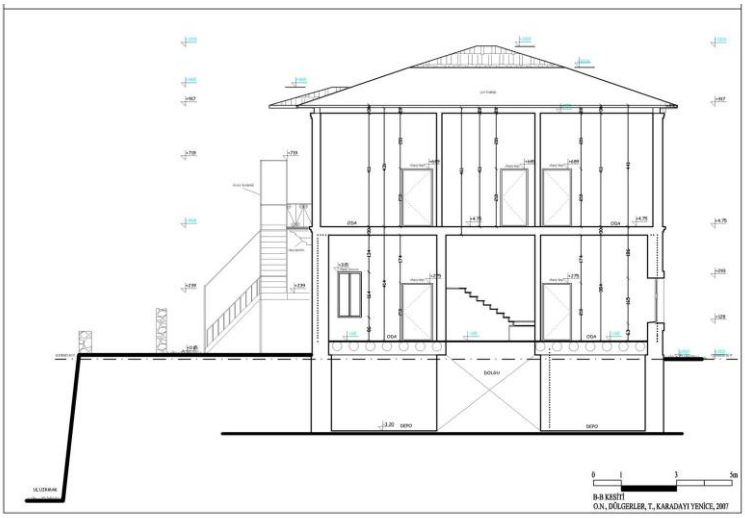

Figure 7: *İbrahim Kaya Mansion B-B Section-Surveying Project (Karadayı Yenice, T., Dülgerler O.N., 2007)*

Transformation of the Building and Function Change

Transformation and function alteration approach is a common case for sustentation and re-utilization of historical buildings. For this reason first of all a requirement program convenient for the new functional identity of the building is required. In this research a requirement program is built for İbrahim Kaya Mansion with the help of previous applications and requirement programs of historical buildings transformed to CAT offices.

In the requirement program need for nine separate spaces has been determined to begin with. These are; president's room, meeting room, secretary, countour, project supervision, archive, technical service, restrooms, kitchen and resting area. Considering the user and using time it is possible to divide CAT offices in to two which are permanent users and temporary users. Permanent users of the building are; contracted architects, technical staff, staff members, executive board members and president, and temporary users are; architects coming for membership services, architects' relatives, technical staff and visitors (Aydın and Yıldız, 2010).

A suitable space arrangement for the new function of the building has been tried to achieve considering these two user profile and common areas. Space requirements for short term users tried to be gathered on the ground floor as much as possible. Spaces those will serve for the permanent users are planned on the remaining two floors.

During surveying process it has been observed that the spaces and balconies facing south has been preserved as in their authentic dimensions where as north part of the building has lost theirs as a result of supplementations. On the basement floor all of the space under the sofa and half of the rest places has been filled therefore separation of spaces is no longer possible. There

have been new installations as stairs, doors and structural elements to the building (Figure 8). During transformation process the building has been purified from these subsequent additions. Since the original staircase has been demolished a spiral staircase has been inserted at east part of the building right in front of the entrance. The fillings in the basement have been removed and except from the space located on northwest all spaces are gathered as one large space. Because of the lack of day light tis single space has been planned as archive. And the space located on northwest is planned as technical services (Figure 9). On the ground floor space required for short term users have been tried to be gathered together as much as possible. It has been thought to reutilize southwest room for secretary and southeast room for project supervision. By preserving the original chimney on the northeast this space has been planned as a kitchen separated with a counter from the rest of the space function as seating room with table arrangements (Figure 10). On the upper floor the authentic the balconies have been preserved and the missing parts have been repaired. It has been tried to plan this floor mostly for permanent users. The meeting room will be used mostly by executive board, occasionally for commissions' meetings and rarely to greet of small group of visitors is located on the north side of the upper floor. Southeast room has been reserved as president's room as southwest room has been reutilized as a countour.restrooms are planned behind the staircase both in groun floor and upper floor (Figure 11).

Figure 8: *Subsequently Added Stairs And Closed Window (Dülgerler, O.N., 2007)*

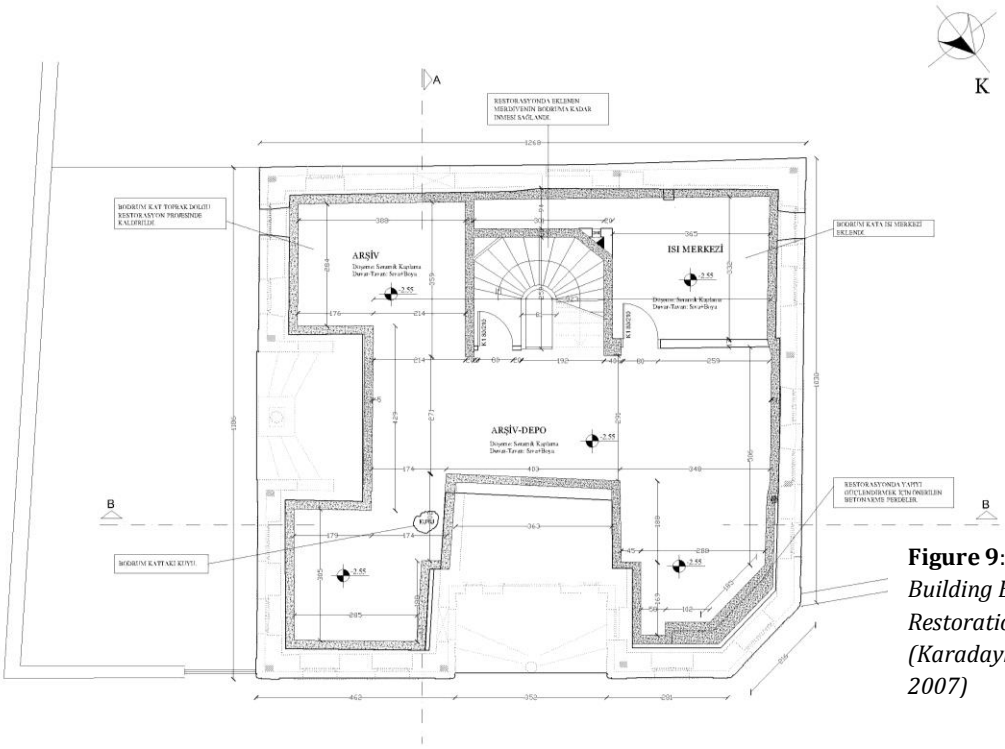

Figure 9: *CAT Aksaray Office Building Basement Floor Plan-Restoration Project (Karadayı,Yenice,T., Dülgerler, O.N., 2007)*

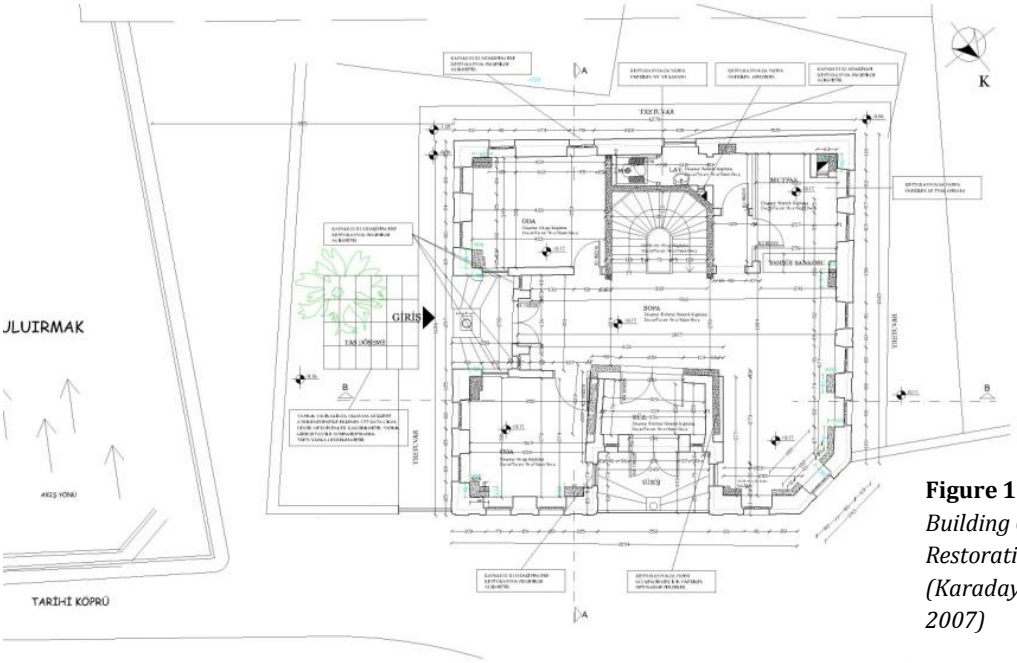

Figure 10: *CAT Aksaray Office Building Ground Floor Plan-Restoration Project (Karadayı,Yenice,T., Dülgerler, O.N., 2007)*

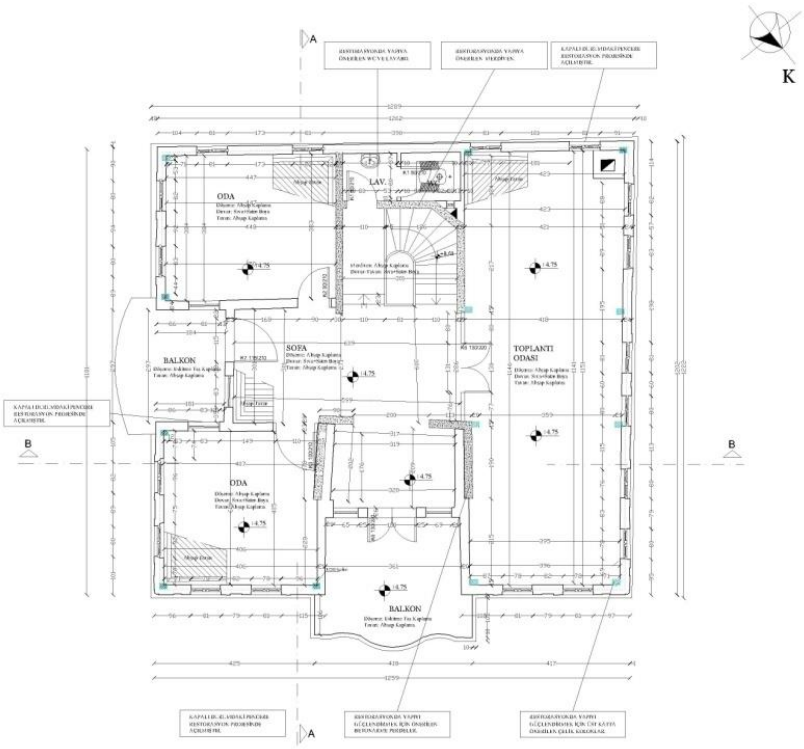

Figure 11: *CAT Aksaray Office Building Upper Floor Plan-Restoration Project (Karadayı,Yenice,T., Dülgerler, O.N., 2007)*

Figure 12: *CAT Aksaray Office Building President's Room (2011*)

Figure 13: *CAT Aksaray Office Building Meeting Room (2011)*

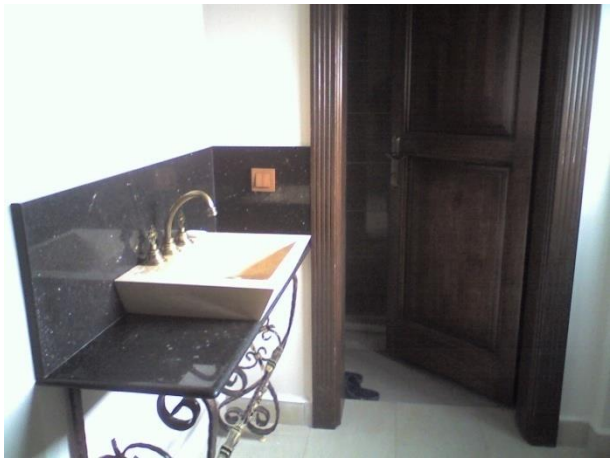

Figure 14: *CAT Aksaray Office Building Restroom (2011)*

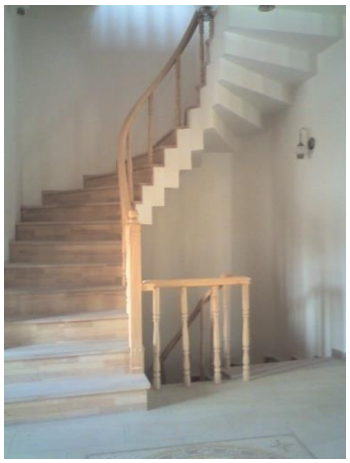

Figure 7: *CAT Aksaray Office Building Staircase (2011)*

Conclusion

In conclusion transformation and reutilization in historical buildings have great importance for the sustainability of the building. Yet it is another significant point that the building should meet the new function. That is why right spaces should be obtained for the new users when reutilizing the buildings.

In this research spatial and functional transformation of İbrahim Ağa Mansion which is originally planned as residence has been studied. First of all in recognition of the building, plan specifications, construction technique, construction elements and materials are briefly explored. The transformation issue which is the the second phase of the study includes the spatial definitions for new functions and their reasons. Afterwards how the building defined in first section has been evaluated according to new spaces has been referred.

It is thought that this study is not only a document for conservation and handing down to the next generations of historical stone houses but also it could contribute to possible conservation and restoration studies may take place in the future.

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