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TRANSFORMATION OF LIVING SPACES – CHANGES IN FUNCTIONAL ASPECT

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Abstract: Ensuring the provision of suitable living units remains one of the most challenging issues among the architects. The economic conditions in Kosovo represent one of the factors that influenced the functional and spatial change in multi-apartment buildings. Taking into account the passing of time, economic conditions, the requirements and needs of the communities change, those affects change in the functional and spatial aspect. The construction of multi-apartment and individual buildings, as well as other buildings with other uses in the center of the cities represents a delicate issue. On the other hand, the need for reconstruction and re-destination of usage of the existing residential buildings is becoming an important topic for the society in Kosovo. The issue is somewhat sensitive regarding the multi-apartment residential buildings, given that the usable surface is increasingly limited. The next challenge for the architects will be the treatment of the existing areas, their adaption in harmony with the requirements of the new generations, social changes that Kosovo is dealing with. The entire endeavor to reach a more comfortable solution is realized through treatment of the residential spaces not only in function wise, as well as in the exterior, through the transparence in architecture. The aim of the paper is to show transformation of the living spaces through real example, in Prishtina.

Keywords: Multi-apartment residential buildings, Function, Interior design, Kosovo

1. Introduction

Multi-family apartments in Kosovo initially started to get constructed in the city of Pristina and then after in other cities of Kosovo. Those buildings started to get

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constructed in 1947 and in time they underwent significant changes be it in functional also in constructive aspect. At the emergence of their construction, buildings were constructed using prefabricated elements, whereas nowadays these constructive systems are used in smaller scale. On the other hand, it is considered that the longevity of the buildings constructed with prefabricated elements is longer than that foreseen [1].

Renovation of mentioned buildings is rather important given that the demolition of old buildings and given that the construction of new multi-family buildings in urbanized neighborhoods and in city centers is impossible. The living conditions have a great impact in the life of the people, be it at home or in working places [2], therefore the construction of qualitative residential buildings remains one of the most important challenges for the architects.

The construction of the multi-family apartments in Kosovo can be split in two periods: those constructed before 1999 and those after 1999 [3]. This classification can be explained with the fact that the mentioned buildings went through functional changes from one period to the other. Multi-family apartments constructed before 1999 are constructed by the public sector based on the Yugoslav standards. These buildings do not meet the criterions regarding thermal isolation, therefore recently there were some attempts made to intervene in order to reduce the energy losses. One of the most important components that require energy in the residential sector is the need for heating energy [4].

After 1999 (the after war period), Republic of Kosovo was characterized by an extraordinary chaos regarding the constructions in general. After this period the need for accommodation is increased considerably, which is a result of ever increasing number of people without accommodation, the houses of who were destroyed during the war and who as a result moved to the urban areas. Other factor of the migration of families from village to city is also lack of economic activities [5, p. 7].

The displacement of large number of people from villages to the cities increased the need for construction of residential units. Unable to construct individual homes, the construction of multi-family apartments is now considered as dominant element, especially in the city of Pristina. After this period any technical regulation did not exist that would be controlled by the competent organs, this led to an extraordinary chaos not only in functional, but also in constructive aspect as well as in the appearance of buildings.

The buildings constructed after 1999 in Kosovo are constructed by the private sector. Some of the large construction companies provided to the citizens the opportunity to buy those apartments in installments, while the bank rate is much larger compared to the economic conditions that the country was facing.

This was a transitory period that was characterized not only by uncontrolled construction activities of the new buildings, but also rendering the existing ones disfigured, which is manifested largely in the façades of the multi-family apartments.

The surface area of the buildings constructed in Kosovo in the period after 1999 is significantly smaller than those constructed before this period. Also, based on the statistics from the countries of Central and Western Europe, this was confirmed by the ever increasing need for smaller dimension apartments with a lower price [6].

2. Discussion

In order to achieve a balance between the old and new needs, the space needs to be treated with due respect. In order to create the impression of greater expanse of surface, a very important element is the transparency in architecture. On the other hand, the space needs to be treated not only in function wise, as well as in the exterior.

Flexibility in architecture represents an element, which cannot be neglected especially in creation of living spaces. Taking into account that the family structure changes with passing of time, the flexibility enables adaption of the spaces based on the needs of the families. Flexibility means the possibility of reorganizing housing units without changing the structure of the building [7]. In these cases, the living spaces must be large enough so that they can adapt to different functions. It is considered that the housing units that have in average 70 m² offer suitable possibilities for flexibility [8].

Functional building is the building that is suitable for the activities for which it is dedicated [9].

The three elements that need to be taken into consideration are: the function, the lighting and the space. Residential spaces should be given special importance as it is one of the main factors that determine how comfortable residents will fill within it. Insufficient housing spaces are a concern for a large number of residents. Characteristic feature of lot of architect's projects is that the internal spaces are deliberately left unfinished, in order for the users to organize them based on their personal needs. This way the same space can be used for various functions. A good architecture can be considered the one that can entail various functions simultaneously by adapting it to the needs of the users. Lawson emphasize that process of design is consist of several phases as are; evaluation, problem, analyses, synthesis and solution [10, p. 49].

It is very important to perform the so-called Post Occupancy Evaluation (POE) of the buildings. The inhabitants are the ones who know best the shortcomings of residential unit, if the latter fulfills their needs or not, therefore their feedback is very important for the architects. Post occupancy evaluation represents an evaluation process of the buildings after they have been used for certain period of time. POE differs from other evaluations of building performance in that it focuses on the requirements of building occupants, including health, safety, security, functionality and efficiency, psychological comfort, aesthetic quality and satisfaction [11].

The design quality of new housing units in the Netherlands has been assessed through surveys of satisfaction of inhabitants, which enables a more accurate determination of the quality of housing [12, p. 157].

3. New flat design

Below a demonstration of the transformation of living spaces in Prishtina within a flat through a real example can be observed. The apartment is oriented in southeast-northwest direction. The façade in southeast direction has a panoramic view oriented in such direction that does not hinder the view. In *Fig. 1* there is represented the plan of existing condition, whereas in *Fig. 2* the changes have been done during the intervention. *Fig. 3* and *Fig. 4* show the situation of housing unit during renovation.



Fig. 1. The original floor plan (survey)

Fig. 2. The new floor plan



Fig. 3. Gypsum works (photo: Ertan Sylejmani)



Fig. 4. Installation work (photo: Ertan Sylejmani)

The kitchen has been moved in order to allow for addition of a room within this living space. This modification did not cause problems regarding installations, and in addition it did not influence the decrease of the length of the working surface in kitchen (*Fig.* 5).



Fig. 5. Kitchen area after intervention (photo: Ertan Sylejmani)

The dining area is incorporated in the living room in order to transform the existing dining area into a sleeping room. The modifications that were done did not reduce the overall number of room; on contrary an additional room was added. The space that was once dedicated to the kitchen is replaced with the children's room.

Taking into account the effects that the color brings about, in order to create the feeling of larger space and lit areas, the corridor that does not have natural light is equipped with white doors, as well as the walls which are painted white. Fig. 6 and Fig. 7 show the changes done in the corridor before and after the renovation.

The selection of furniture got special attention. In attempt to preserve the available space, the furniture with large dimensions does not constitute part of the interior. The walls are painted white color in order to create the feeling of larger space and ceramic tiles were installed on the floor (*Fig.* 8).



Fig. 6. The corridor before the renovation Fig. 7. Corridor after the renovation (photo: Ertan Sylejmani)



Fig. 8. The interior of the apartment after the renovations (photo: Ertan Sylejmani)

Fig. 9 shows the interior of sleeping room. In this case, special attention has been paid to the colors. Knowing the importance and the effect of colors, especially in the interior of housing units, the effort has been to use warmest colors and nature details.



Fig. 9. The interior of the sleeping room after the renovations (photo: Ertan Sylejmani)

Before the intervention, the balcony was used as a storage area thus ruining the outside view of the building, which represents a phenomenon that was widespread after the conflict in Kosovo. The performed changes have eliminated preview shortcomings as: dark communication areas and adding an additional room.

4. Conclusion

Taking into account that the cost of the renovation of a building is smaller than that of reconstruction, the transformation of older buildings is considered to be an important element, especially for the countries that face difficult economic conditions, as it is the case of Kosovo. The largest numbers of multi-family apartments are in Prishtina, where it took key study. A reorganization of a residential unit in functional aspect creates the opportunity to increase its value, thus adapting to the new needs. An eventual modification with affordable cost of investment is a welcome proposition; on the other hand the maximal usage of the space represents an element that cannot be neglected. In the case of the mentioned changes, one needs to take into account the tradition of the population, the people who live in that living space.

References

- Borsos A. Living spaces prefabricated apartments, *Pollack Periodica*, Vol. 9, No. 2, 2014, pp. 59–66.
- [2] Tao L. W. Living conditions The key issue of housing development in Beijing Fengtai District, *HBRC Journal*, Vol. 11, No. 1, 2015, pp. 136–142.
- [3] Sylejmani M., Medvegy G. Multi-family apartments constructed between 1947 and 2017 in Kosovo, *Pollack Periodica*, Vol. 13, No. 1, 2018, pp. 193–202.
- [4] Ahmeti P., Dalipi I., Basha A., Kistelegdi I. Current heating energy demand by the residential sector in city Prishtina based on the main sources, *Pollack Periodica*, Vol. 12, No. 1, 2017, pp. 147–158.
- [5] Spatial Development Report for the Housing Sector (in Albanian) Prishtine, 2014.
- [6] Teige K. The minimum dweling, 1932.
- [7] London housing design, Guide-Interim Edition, Flexibility and Adaptability, 2010.
- [8] Živković Z., Jovanović G. A method for evaluating the degree of housing unit, flexibility in multi-family housing, *Facta Universitatis, Ser. Architecture and Civil Engineering*, Vol. 10, No. 1, 2012, pp. 17–32.
- [9] van der Voordt T. J. M., van Wegen H. B. R, Architecture in use: An introduction to the programming, design and evaluation of buildings, Elsevier, 2005.
- [10] Lawson B. How designers think?, 2005.
- [11] Learning from our buildings A state of the practice summary of post occupancy evaluation, Federal Facilities Council, *Technical Report*, No. 145, National Academy Press, Washington, DC, 2001.
- [12] Cousins M. Design quality in new housing-learning from the Netherlands, New York, 2009