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Influence of Space Organisation on Kitchen Design From 2012 - 2022 in North Macedonia

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Abstract

The modern way of life is conditioned by fast transportation. This in turn requires integration of many additional contents that opens the opportunity to the passengers for quick access to their target-food, accommodation, entertainment, communication.

The distance of the existing railway station (3.7 km from the city centre) makes it hardly accessible to the population, therefore it is neglected and the rail traffic in the city of Kumanovo is minimized. On the other hand the bus station has a good location, but the building is in poor condition, which impedes the functioning of the city and intercity bus service. Adjacent to the existing bus station, a segment of the railroad from the proposed "Corridor 8" transits, which opens the question of the importance of rail transport and its impact in the further development of the city. These considerations clearly indicate the need to establish an integrated transport hub, whose proposed location touches the downtown area, but is still in the zone between the city and the suburbia, which includes adjoining contents such as: retail, hospitality and culture, which will help achieve the goal of the transportation hub as a starting point of development of a new city nucleus, a new point in the city.

Introduction

The apartment is one of the most complex human needs, not only because of the complexity of the housing function, but also because of the fact that this multifaceted functionality takes place simultaneously (Nikoljski, 2006) [1]. It is used as a permanent residence. The architectural space found in the apartment expresses the area where the movement takes place, because it is not possible to create a space without form. The space shows invisible design in terms of form, colors and materials. It can be negative or positive, deep or shallow, closed or open in two or three dimensions (Pellegrino and Jeanneret, 2009) [2]. A kitchen is a space, part or room of a housing facility, which is used for food preparation and part of it can be used as a dining room. In primitive societies, people built their own homes using kitchen models that have been proven by experience to be economical, comfortable and durable for a period of time. This paper explores kitchens from 2012 to 2022 across architecture and the growing interest of architects in designing kitchens to meet user needs. This paper aims to show the influence of architecture on the design of kitchens, because the project is the one with which everything begins and ends. The research will take place through the analysis of the typologies of projects that are most often encountered and projects for which the user experience shows that they are accepted as functionally useful.

Results and Discussion

The kitchen is the workplace in the apartment, but it is also an important place to stay and a meeting place for family members and guests, with a series of possibilities for its connection with the rest of the rooms. According to the MVO (Musterbauordnung), the building regulations, each apartment must have a kitchen or cooking area. Windowless kitchens and cooking niches are generally unfavorable and are only permitted if effective ventilation is provided. Also, the kitchen must have a clear height of at least 2,40

meters and a window area of at least 1/8 of its net floor area (Nojfert, 2009) [3]. In terms of placement in the space, the kitchen should be oriented to the northeast or to the northwest, in direct connection with the entrance party (a short way for the transfer of purchased goods, for garbage, etc.), with the (vegetable) garden and the basement. Or that there is an internal connection between the household rooms (auxiliary work rooms), the dining room and the pantry. From the kitchen, if possible, you should be able to see (supervise) the front door, the children's playground and the terrace. According to the position of the kitchen in the space, kitchens are classified into several types:

- Single wall kitchen
- Galley kitchen
- "L" shape kitchen
- "U" shape kitchen
- "G" shape kitchen
- Island kitchen

Depending on the size of the kitchen and the way of organization, there are the following types (Karanakov, 1995) [4]:

- Minimal kitchen (closet kitchen)
- Kitchen in a niche (kitchenette)
- Kitchen with dining area - they also contain a dining function

The data from 2012 to 2022 is imminent that the kitchen space is understood as the economically most frequent room, and in terms of specific requirements, the most complex for planning action in North Macedonia. In the process of anthropological deposition and creation of these complex requirements, the kitchen project relies heavily on modern materials, and thus on new technologies. This paper will analyze 20 (twenty) kitchen projects, concepts of existing projects from the Macedonian low-rise and high-rise housing structure. Single wall kitchen is a solution for long and narrow spaces. That solution consists of only one wall where all appliances and elements are arranged in sequence and often integrated. Single wall kitchen is a type of kitchen that is efficient, takes up less space and is simple to organize (Figure 1).

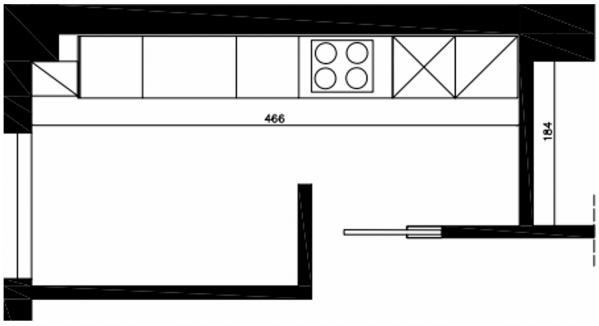


Figure 1: Single wall kitchen

Galley kitchen type is characterized by two walls that are placed opposite each other or two parallel work surfaces with free space to pass between them (Figure 2 and 3).

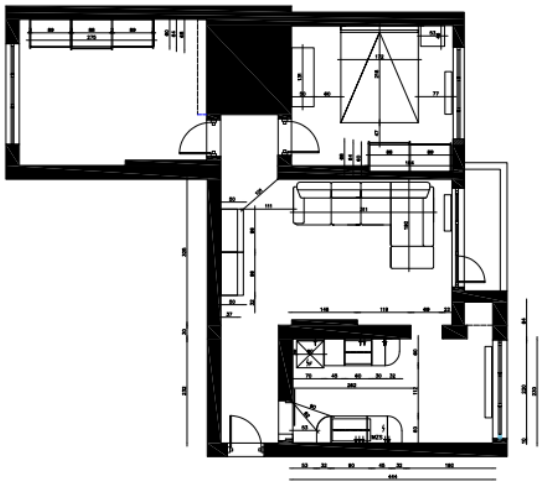


Figure 2: Galley kitchen

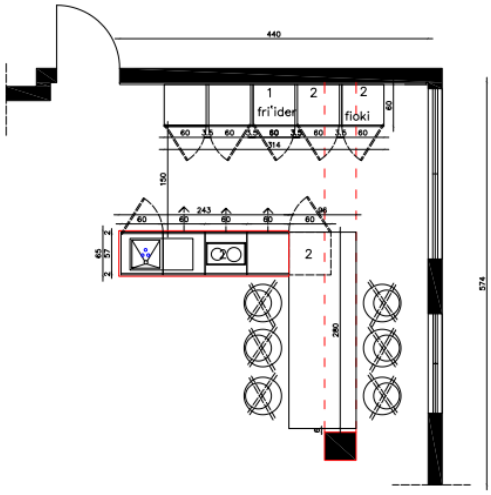


Figure 3: Galley kitchen

‘‘L’’shaped kitchen is suitable for smaller spaces, work surfaces and appliances form an L shape along two walls, often around the dining area (Figure 4), (Grimley and Love, 2018) [5].

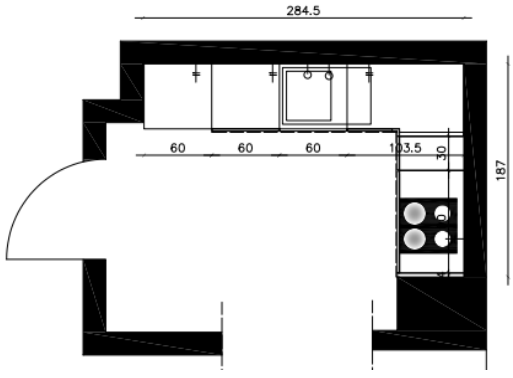


Figure 4: "L" shape kitchen

‘‘U’’shaped kitchen uses three walls with elements. This type of kitchen works well because it allows you to have a larger work surface in a compact space. ‘‘G’’shaped kitchen is obtained by evolution of ‘‘U’’shape kitchen, where the island forms the third wall (Figure 5).

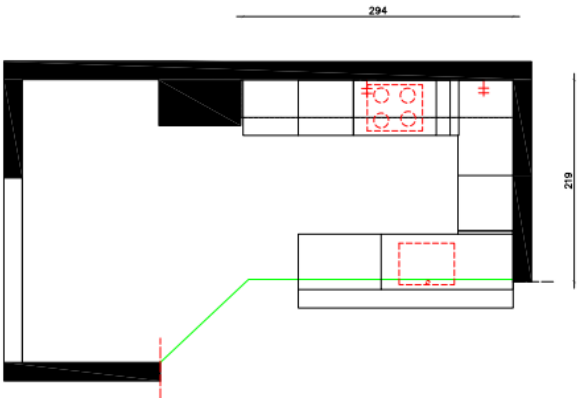


Figure 5: "U" shape kitchen

Island kitchen is a type of kitchen that provides a large work surface or storage area in the middle of the kitchen. It can also be used as a preparation area or for enjoying meals (Figure 6 and 7).

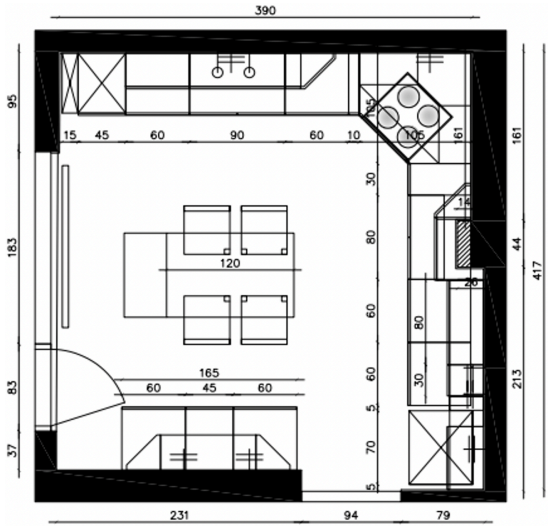


Figure 6: Island kitchen

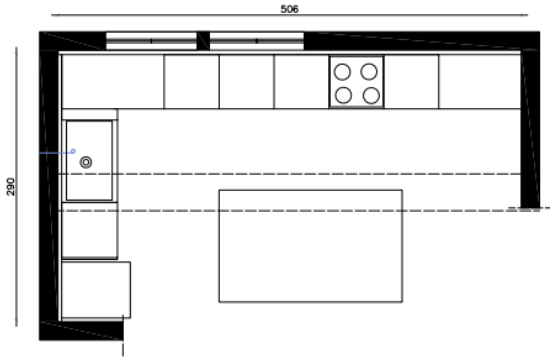


Figure 7: Island kitchen

The typological representation of kitchens within the analysis carried out on 20 (twenty) existing projects from the Macedonian low-rise and high-rise housing structure is shown numerically (Table 1).

Table 1: Typological representation of kitchens

Classification parameters	Types of kitchen organization					
Types of kitchens according to specified parameters	Single wall kitchen	Galley kitchen	"L" shape kitchen	"U" shape kitchen	"G" shape kitchen	Island kitchen
Number of representation (out of a total of 20 analyzed examples)	6	3	3	1	5	2

Conclusion

In the contemporary design of housing furniture, especially kitchens in general, regardless of the planner, designer, manufacturer, industry, country of origin, a tendency of great respect for preserving the personal expression of the user of the space has appeared. The need is felt to choose solutions that in themselves co-ordinately imply more open space, more and more frequently and more approaches are being taken to solving the kitchen as part of the living area (residence). The kitchen, in fact, tends to absorb almost the entire family life and atmosphere. We live in a period where we have completely distanced ourselves from standardization at least in the domain of personalized furniture for housing, that means not standardized pieces of furniture and kitchens, but maximally adapted to each married couple separately, completely personalized to the personalities, but it is also very important to adapt and the given space and opportunities. It is recommended to pay attention to the installations during design, to concentrate them from the apartment or building in installation nodes that can be produced industrially. The design of any type of architectural space becomes more important and the possibility of its use increases as the needs and demands of the user are met. Therefore, the needs of the user must be satisfied to obtain a correct and successful result. The process of analyzing the needs of users is the most important step in the design and development of spaces, because setting their goals helps to define the design priorities in the space to achieve a result that achieves the comfort of the user. Conceptual kitchen design should begin with a clear understanding of the cultural history of the space, as well as the specific needs of the user, because detailed user information allows designers to create more complete and successful spaces. The most important point that is needed is to know the area and dimensions of the kitchen, because knowing the dimensions helps to determine the type of kitchen that fits the space to save a comfortable working space for the user; where the needs of the user are the most important thing in the design of the space. The results obtained from this research show that in

the analyzed existing projects more open kitchen space prevails, a single wall kitchen and a "G" shaped kitchen.

References

1. Nikoljski E. *Dizajniranjeto na mebel, ergonomijata, tehnoloshkiot razvoj i nivnoto vlijanie vrz progresivnata evolucija vo proektiranjeto i dizajniranjeto na kujnite vo stanot* [Master's Thesis]. Skopje: UKIM: Faculty of Architecture; 2006:39.

2. Pellegrino P, Jeanneret EP. Meaning of space and architecture of place. Semiotica; 2009:269-296. https://doi.org/10.1515/semi.2009.049

3. Nojfert E. Arhitektonsko projektiranje. Skopje: Ars Lamina. 2009:161.

4. Karanakov J. *Elementi na proektiranje*. Skopje: UKIM, Faculty of Architecture; 1995:139.

5. Grimley C, Love M. The Interior Design Reference & Specification Book Updated & Revised: Everything Interior Designers Need to Know Every Day. Rockport Publishers; 2018:93.