

## ПРИЛАГАНЕ НА МНОГОФУНКЦИОНАЛНИ МЕБЕЛИ В ПУБЛИЧНОТО ПРОСТРАНСТВО

**Ангелина Велкова, проф. д-р Васка Сандева, проф. д-р Катерина Деспот**  
Университет Гоце Делчев - Щип, Р. Македонија - катедра "Архитектура и дизайн"  
e-mail: vaska.sandeva@ugd.edu.mk

**Крсте Мисирков** - п.к. 201, Щип 2000, Р. Македонија

## APPLICATION OF MULTIFUNCTIONAL FURNITURE IN THE PUBLIC SPACE

**Angelina Velkova, Prof. Dr. Vaska Sandeva, Prof. Dr. Katerina Despot**  
Goce Delcev University – Stip, R. Macedonia, Department of Architecture and Design  
e-mail: vaska.sandeva@ugd.edu.mk

**Krste Misirkov** b.b. P.O. Box 201 Stip 2000, Macedonia

### **Abstract**

*Public places are spaces in which, depending on the size, hundreds, or thousands of people pass through every day. Although these spaces are for a temporary visit or use, the constant rotation of people requires width, openness and comfort in the interior. Multifunctional furniture with its interactive relationship with people is a good solution that can satisfy all needs. Depending on the number of people in a given moment, the multifunctional pieces of furniture can be adequately transformed to accommodate a sufficient number of people, while not allowing the space to become motionless or with any other obstacles regarding its use and function.*

**Keywords:** *furniture, environment, designer, design, space*

Sustainability, comfort and innovative technologies in terms of furniture, especially in residential areas and public buildings, are important factors in the interior design for better functionality in everyday life.

The unity of these factors is complex, but some companies and designers are trying to create innovative furniture that has all the features combined. There are also certain problems, such as the high price or the lack of information and knowledge about smart and green materials and so on. This research seeks to understand these problems in order to find new solutions and emphasize the positive outcome for different types of creative furniture that is multifunctional, modular, innovative, saves space, and thus looks interesting, modern and eye-catching.

The main aim is highlighting multifunctional furniture as a contemporary innovation in housing and public spaces, in which it has various aspects, such as flexibility, the use of smart and green materials, compactness and enabling a faster and free lifestyle.

We constantly make new changes in education, science, arts and we always aim towards moving the borders. We are constantly seeking for what is creative, interesting, smart, and tend to avoid the complicity, simplifying it and making it accessible to each of us. Flexibility and mobility are ideas for the future of architectural spaces and they deserve to be highlighted. First of all, when utilizing this flexibility and mobility offered by multifunctional furniture, there are benefits in emergencies, this can be achieved by changing the structure of the furniture into

something that should be a part of the function and performance.

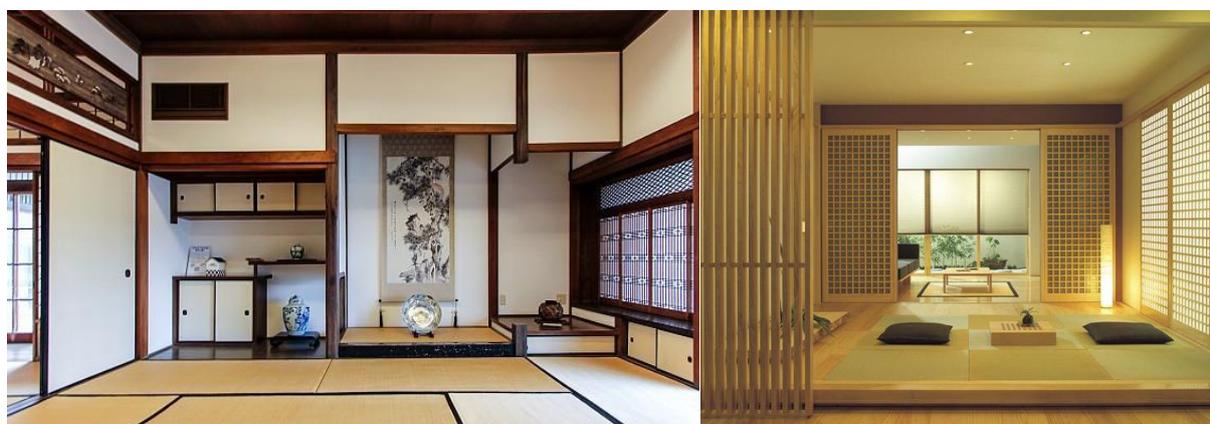
### Functionality in the interior

Our lifestyle and the way we express ourselves are reflected in our interior, the space we inhabit and the furniture we use. It does not carry the tradition and use by itself, we are the ones who give meaning, purpose and use in our everyday life.

Having the ability to access furniture with freedom and to easily alter its features, we could contribute to achieving greater satisfaction to the needs of the users. Thus, when considering a design process, we can do a re-evaluation of the physical elements (color, shape, material, structure), but also the immaterial characteristics (lifestyle, use, culture, value).

Understanding the importance and impact that furniture has in our lives will allow us to decide whether some changes like the additions or subtractions of certain elements are needed. As well as the forms and colors we use in the interior and how they affect our daily life, work environment and how effectively these elements are used and are they compatible to our everyday life. By comparison with other cultures, it is much easier to identify problems or obstacles in one's own lifestyle, which may not have been obvious before.

Clean lines, whites and light earthy tones, along with natural materials in the Japanese interior design leave us an open space, which is very simple, but very functional (*pic. no 1 and 2*). Here, the unnecessary overcrowding of the elements is easily avoided, which at the end of the day only contributes to a cluttered space, without the maximum use of the function.



*Pic. no.1 and 2 – An example and comparison between the old and new style of the Japanese tatami room*

These same colors and tones, along with natural materials and minimal decor, can be found in the Scandinavian interior design (*pic. no 3 and 4*), where with a slightly different design of the elements, the same goal of functionality and free space is achieved again by removing all unnecessary elements and allowing the primary pieces to be the carriers of their primary function in the interior.

However, there is a perceptible difference between them. In the traditional Japanese interior, one room can have the ability to transform into a few interior rooms or spaces in the West World, with it, it can have several functions, each defining the size of the space or the room. This is best achieved with the use of the tatami mattresses that have a multipurpose use - a replacement for a chair beside the dining table, a replacement for the dining table itself, as well as a sleeping bed.



*Pic. no. 3 and 4 – An example and comparison between the old and new Skandinavian interior design style*

The remaining furniture is stored in a closet built into the wall itself. This storage of elements after they are done with their use is very common, by restoring the free open space for other functions and everyday activities.

Today, the design of the interior in Japan, although it has received some of the influences of the Western World, still adheres to its tradition of mobility, functionality and spaciousness. In their interior they have managed to keep at least one room that has the tatami mattresses as multipurpose mattresses that later transform the same room into a place for drawing, a guest room or simply as a place for rest.

When these characteristics which are used in homes and in the premises where a small number of people live, are applied in public buildings and public interior places, where a larger number of people passes through daily and require greater organization, then the elements would perform their exact task – they would be highly functional and non-obstructing to the work, movement and rest in these public buildings.

### **Multifunctional furniture in public buildings**

When it comes to the use, conditions and the method of use, the furniture can be divided into three groups:

- offices and public buildings (office furniture, school furniture, home furnishings, hotel furniture, cinema furniture, hospital furniture, canteen furniture, furniture for a common room, etc.);
- residential rooms in multi-family rooms (kitchen furniture, bathroom furniture, garden furniture);
- transport (boat furniture, train furniture, aircraft furniture).
- In the group of furniture for offices and public buildings there is another subgroup related to specific human activities:
  - furniture for administration;
  - furniture for offices and studios;
  - furniture for workers.

The nature of the work in these public spaces and the way of using premises in buildings and public interiors require the design of furniture to be aimed towards managers, group leaders, assistants and secretaries, workers that are grouped, or individually staffed, serving internal and external clients. The nature of these pieces of furniture should match the specific requirements of the countless different users.



*Pic. no. 5 – An example of a simple, yet highly functional modular unit in the work space, or other public spaces e.g. a coffe shop, or a book store*



needs and maintaining personal hygiene and storage.

From a constructive point of view, the link between different types of public buildings should be explored, as well as their potential to function as structural elements in cities.

The feeling given by a public entrance, when we first step inside this space, is what determines how we will further accommodate it and how comfortable and at ease we will feel. Openness is not needed only to give easier access and movement, but also provides a way of calling in and gathering as many people as possible. These public spaces vary in size and have the ability to accommodate various activities. That's why they have the ability to combine a variety of multifunctional elements that together would provide a unity that brings comfort, mobility, functionality and compactness.

The study of interior design tends to focus on the one-on-one relationships (personal space), and less on the community or the multitude of people.

Social studies are in turn preoccupied with that community (user experience and needs, interactions, behavior), while urban planning and design consider urban development as a whole (flows, spaciousness, mobility, landmarks). Studying the public interior spaces is not an independent activity and therefore the interdisciplinary approach can enrich the design of these public spaces.

Designers must develop an interdisciplinary methodology that will allow spatial analysis in a variety of conditions, both urban and internal. This complementary method can provide a definition of all the relevant features that can be found, both physically and socially. We could say that the public interior belongs to the social space, but mainly defined by its public use.

But the main importance is that internal architecture is approaching the public interior from other social relations: man-object, man-space, man-man. The public interior design is equipped with a public dimension and an internal dimension. Equally important is the fact that it has architectural, social, urban and anthropological aspects in the design itself.

When it comes to the elements that best represent their function in the interior of public buildings, we can go with two different approaches: to adjust the interior of the public space to the furniture that we have decided to incorporate, or to adjust the furniture to the interior of the space.

No matter which approach we decide to use, the most important thing here is the human factor and his interaction with the elements in the given space. Multifunctional furniture and its ability to have an interactive relationship with people is a good solution that can satisfy all of our needs.

The formation and grouping of elements is in our hands, we control how much space we need and how to fit in all those pieces. This is a very entertaining element of the multifunctional unit, which can be further combined with different colors and shapes that are playful and vibrant, but still focus on accommodating the exact number of people, because at any given moment a bench that can fit 10 or more individuals in a room is not always needed.

With the multifunctional furniture, the maximum use of space and the most efficient use of space is determined according to the need of the person or group of people in it.

### **Conclusion**

The good design of the interior, or rather the entrance of the public buildings, is what attracts the people, the customers. The human eye immediately focuses on interesting colors and shapes - they are the ones that grab our attention most easily. So, it is logical when it comes to the space in which we want to attract as many people as possible, to use and to emphasize the interior with these bright pops of colors and interesting shapes. Although there are different criteria to be met in the home interior and the interior of public spaces, one of the most important is the commotion, the fluidity of space and the ability to accommodate a different number of people at a given moment. These are common regardless of the type of interior and its use. That is why the multifunctional furniture, with its interactive relationship with people, is a great solution that can satisfy all needs.

### **References**

1. Despot, Katerina and Sandeva, Vaska (2017) Application and transformation of traditional forms in contemporary interiors. Applied Researches in Technics, Technologies and Education, 5 (2). ISSN 1314-8788 (print), 1314-8796 (online)
2. Ellen, L. The ABC's of Bauhaus, the Bauhaus and design theory. Journal design (2011)
3. Sandeva, Vaska and Despot, Katerina (2017) Graphic line as composer of forms in interior and exterior design. Applied Researches in Technics, Technologies and Education, 5 (2). ISSN 1314-8788 (print), 1314-8796 (online)
4. Димчев, Веселин, Изобразително изкуство. Методика, София, Изд. Просвета, 1993
5. Добринна Желева-Мартинс и Стела Борисова Ташева Теория на композицията, София, 2014
6. Желева-Мартинс Д. Тектониката в съвременната архитектура. Издателство на БАН. София. 1985. стр. 99 (in Bulgarian).
7. Петров, Георги, Дизайн пространствено оформление, София, изд. Болид, 2002, ISBN 954-612-014-6 [9].