

# WORKSPACE DESIGN AND ORGANIZATIONAL STRUCTURE: SEARCHING FOR THE ORIGINAL REFERENCE

Nevena Parlić<sup>1</sup>, Mladen Čudanov<sup>2</sup>, Gheorghe Săvoiu<sup>3</sup>

<sup>1</sup> University of Belgrade, Faculty of Organizational Sciences, e-mail: [nevena.parlic@gmail.com](mailto:nevena.parlic@gmail.com)

<sup>2</sup> University of Belgrade, Faculty of Organizational Sciences, e-mail: [mladenc@fon.rs](mailto:mladenc@fon.rs)

<sup>3</sup> University of Pitesti, Faculty of Economic Sciences and Law, Department of Finance, Accounting and Economics e-mail: [gsavoiu@yahoo.com](mailto:gsavoiu@yahoo.com)

*Abstract. This paper analyzes the nature of relations between workspace design and organizational structure design. We present historical development of both and illustrate the relations with four case study analysis. As well as decentralization, other aspects of organizational design can be related with the interior design. This paper starts with the description of interior design evolution in business context. Next part gives review and basic definitions of organizational design. This paper concludes that the focus of contemporary research was on organizational behaviour, while organizational design was neglected in the context of interior design. At the end we illustrate symbolic example of organizational design change implementation, which is finished with changes in allocation of employees in physical space, as well as design or different usage of organizational interior.*

*Keywords: Interior design, organizational design, correlation, causality, centralization*

## 1. INTRODUCTION

The question posted in this paper is common in scientific research – what is the nature of relations between two correlated phenomena? We study interior design of the organizational workspace facilities on one side and organizational structure design on the other. Since there is no widely accepted approach to quantitatively measure our objects of research, we will rely to qualitative analysis, case studies and pattern description. We will describe historical development of the both observed research objects, and analyze cases of exemplary structure.

In practical means, organizational structure is sum of ways jobs are divided, and how those different tasks are coordinated between members executing those tasks [1]. We can define organizational structure as the predetermined pattern of elements and relations which are purposefully established for the sake of reaching organizational objectives. Workspace design in this context can be defined as the plan of the system of the organizational interior physical environment elements and relations between those object, again purposefully established for the sake of reaching organizational objectives. So we can find similarities between the two phenomena from the definition.

Our second step is to analyze organizational structure into its elements, and decentralization, departmentalization, coordination and communication, corporate values and the process flow are all attached to spatial design; newer

solutions on this field include adapting the work space with people's psychological reactions to space, which affect productivity and creativity in work, in mind. While introducing these elements, we should pay attention to individual needs, as well as needs of whole teams and the organization through operational motto "form follows function". The same principle is valid in the case of organizational structure design, and both forms follow the same, or very similar function. We can also determine distinction between operative and strategical organizational design where similarly to workspace design operational design is focused on efficiency, and strategic design is focused on effectiveness [2].

As the general definition of reference can be given as the source of information used to establish some claim. In that light, we can use it as a metaphor for the relation between organization workspace and structure design. Is the designed structure source for workspace, or vice-versa? Or is there a third phenomenon influencing both? Is there causality, or is there some modifying variable? This article will study individual cases and discuss presented questions.

## 2. HISTORY OF WORKSPACE DESIGN

The concept of workspace is not new; back in the days of Ancient Rome existed the *officium*, and in the 18th century in India and Great Britain appeared the first offices which held a function of headquarters from which the business was being controlled [3].

1900. – 20th century marks Taylorism and the industrial revolution of that century. Frank Lloyd Wright marked this period, and a building of particular importance is the Larkin [18] building, which symbolizes the first commercially cost-effective project of that time [3].

1910. – 1930. – These years were in the sign of many project which mostly weren't actually built, due to the fall of Wall Street in 1929. and the overwhelming war economy. Although never built, Rohe's design for Friedrichstrasse [17] business building remains to the day one of the most important structures of 20th century. He presented a radical concept to the board: a skyscraper, made solely from steel and glass – decades later this very style dominated the architecture of workspaces [15].

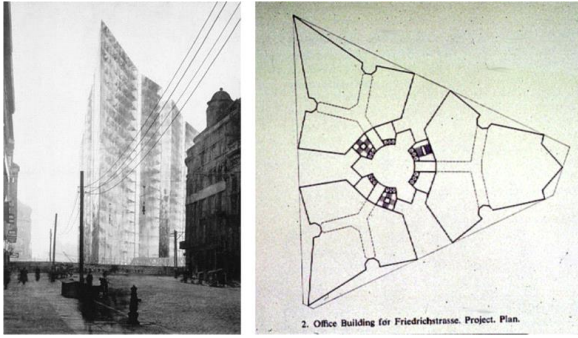


Photo 1 Friedrichstrasse, n.d.

Most important moment of 20th century is undoubtedly the beginning of Bauhaus and motto „form follows function”. Bauhaus was established in 1919. in Weimar by a German architect by the name of Walter Gropius [4]. Functionalistic ideas of Bauhaus represented getting away from decor, flamboyant and overcrowded. Merging the form with function was crucial.

1950. – The fifties brought further progress in building with contemporary materials like steel and glass, and the smart, clinical architecture of the international modernist movement was adopted as the new image of corporate business [5].

1964 – The legendary furniture design company Herman Miller presented an office plan which no one ever got to meet with before. It was called “Action office” and it was a creation of Robert Propst, which was among the first to say that office work is mental work as well, and that the mental effort is attached to the support of the surrounding to the capabilities of an individual [6].



1980 – The '80s were marked as years that gave birth to a dystopian version of Action office of the sixties. The exclusively economical system of thinking lead to the creation of the so-called “Cubicle farm” [16], a space in which, in order to place as much tables as possible, and with that employees, were divided with cross-like dividers and tables in its corners, closing the view, communication and socialization amongst employees, enclosing them in a limited space of minimal dimensions, with those constructions then multiplied a couple of hundred times in aright rows from wall to wall.

1990. – One of, in not the greatest, development of the 1990s, was the Internet, or it being available to the general public. This occurrence had an inevitably powerful impact on

humanity in global, way of thinking in all aspects and necessarily on functioning and modernization of workspace of that time.

2000. – During the last decade, furniture designers tried to divide the sea of cubicles and encourage socialization [7]. Current trend of the workspace layout reflects often complex structure of development of modern companies and different specific work styles. Growing prices of real estate and increase in prices of office space, especially in capital cities, brought the need for more effective space use – and informal, more flexible, multi-use work spaces.

### 3. RELATIONS OF INTERIOR DESIGN AND DECENTRALIZATION

Structure is an important tool which orients managers and subordinates to think, as well as work within a certain frame. As all of the organizations have a structure, primary obligation of a manager is to develop the right kind of structure in order to reach organization’s objectives. Although a good organizational structure does not guarantee success, a weak one can have a negative impact on the work of even the best of managers, and a wrong one puts a spotlight on all of the wrong problems, worsens irrelevant quarrels and creates a mountain of triviality [8]. Some of the important concepts of universal theory of design are hierarchy, specialization and division of labour, chain of command or authority, unity of command, unity of direction, authority and responsibility [9]. consider the purpose of organizing, the reason of organizing, the structure of organization and the process of organizing as such principles. Organizational design and change are interconnected. True, organizational change could be understood as a process of organizational redesign and transformation [10].

As the surrounding – economical, social, political and technological – changes at an incredible speed, the organization will simply be omitted and outdated, even if it stays right where it is [11].

**Decentralization** is defined as the degree to which responsibilities and tasks are carried from higher, manager positions, down to lower levels of organizational hierarchy. On the other hand, centralization is defined as the degree to which responsibilities and tasks are held in the top of the organization’s hierarchy. No organization operates as completely centralized or decentralized [12].

Dimensions of decentralization and specialization have two directions of distribution: vertical and horizontal, and by crossing these two directions of authority allocation, four typical models of decentralization can be defined:

**An autocratic structure** has a small number of managers on top of the management structure which make all of the important decisions. Interesting, but non-stereotypical example of autocratic structure is the headquarters of Thin Office company in Singapore.



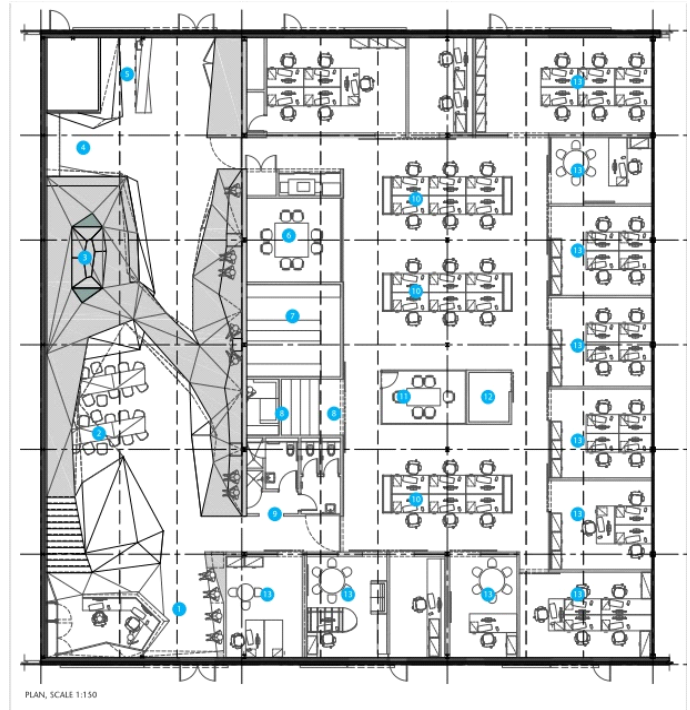
PLAN, SCALE 1:150

Photo 3. Illustration of an interior of a company with autocratic structure [13]

The “boss box“, which we can see under the number 7 on the floor plan, makes the space even more interesting. These tables in the corner are separated for private conversations of executive managers, but they are not completely separated as an enclosed office, which would be typically autocratic.

**Oligarchy structure** includes a bigger number of people on top of the hierarchy. An interesting example of this type of structure could be the headquarters of Red Bull company in Amsterdam. In the centre of the space we can see an open type of work space, and on the left an interesting entrance part, reception desk, as well as a number of common seating spots, which promote values of the company like spontaneity and communication.

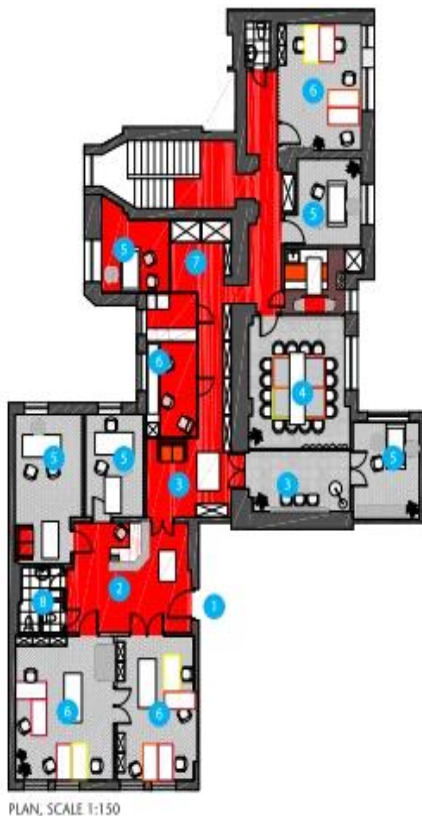
Still, the most important characteristic which says a lot about the type of structure are separated offices on the wall-faced brim of the entire space, which are divided from the rest of the space with glass panels, in order to give managers enough privacy, for whom they are intended, but, also, allow them to be able to watch over the employees in the centre.



PLAN, SCALE 1:150

Photo 4. Illustration of an interior of a company with oligarchy [13]

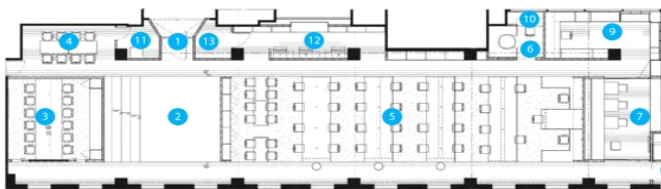
**Polycentric autocracy**, includes a small number of managers on each level of structure, which bring decisions. We can take the space of Hill+Knowlton company as a good example of a workspace which reflects its polycentric autocratic structure. On the floor plan we can see under the number 6 a few offices which are shared by a few people, in a traditional layout, as well the doors that directly connect these two offices which tells us about their necessary communication and coordination by labour division. Still, in the rest of the space we see all individual offices, intended for one person which communicates the enlarged number of people “on the top”.



PLAN, SCALE 1:150

Photo 5. Illustration of an interior of a company with polycentric structure [13]

**A democratic structure** is the one in which the authority is being equally distributed with professional and executive capabilities [14]. A good example of work space which is adapted to democratic structure and equality is the workspace of Barcode company.



PLAN, SCALE 1:250

Photo 6. Illustration of an interior of a company with democratic structure [13]

Most important characteristic of this work space in correlation with structure is the common studio, on the floor plan marked with number five, where we can clearly see that all of the employees are placed in a common open-space room, behind massive shared tables, which encourage communication and coordination. In a system like this there are no individual, enclosed offices for top management and different hierarchy levels, as it's the case in oligarchy or polycentric structure, nor the individual rooms which hold the function of CEO's office, which is mostly typical for autocratic structure.

We have to remark, still, that there are no pre-determined rules for different types of structure in correlation with work space. Still, these examples are very valuable in the aspect where they prove us that structure of the organization and the

visual aspect of workspace go together and how one dictates the other; shows their existing relationship and with that, the importance of the impact they have on each other.

#### 4. CONCLUSION

Satisfaction of employees is something all organizations strive for. Satisfied employees build satisfied teams, satisfied teams group and construct main parts of the puzzle that make the organization: and all together, create a successful company.

Interior design elements are not a new thing in business context, but the relationship between them and organizational design is mostly neglected in literature. "Gestalt approach" [15] recommends connection between structures, and mostly focuses on the organizational net's end. Other authors [16, 17, 18, 19, 20] mostly give attention to relations between interior design and various aspects of organizational behaviour.

With enjoined effort of designers, psychologists and managers, this thematic is today significantly more understandable to all groups of people, as to in which all and numerous and incredibly intertwined ways they affect employees each moment, and often becomes an element which is decisive in many ground breaking situations in the work place. This study indicates the connection between organizational design and centralization. Although anecdotal, the proof that most of the programmes of organizational changes with at least redistribution of organizational members in the physical space of offices, if not the complete interior redesign, implies that there is a significant coherence between interior design and organizational design, primarily organizational structure.

#### References

- [1] Mintzberg, H. (1983): The Structure in Fives: Designing effective organizations. New Jersey Prentice Hall.
- [2] Jaško, O., Čudanov, M., Jevtić, M. & Krivokapić J (2017) Organizacioni dizajn – pristupi, metode i modeli. Belgrade, Serbia: Fakultet organizacionih nauka
- [3] Lovell, M, 2016. The Evolution of Office Design. [online] Available at: <https://www.morganlovell.co.uk/articles/the-evolution-of-office-design/> [Accessed: 15.7.2017.].
- [4] Winton, A.G. (2016).The Bauhaus,1919-1933, [online] Available at: [http://www.metmuseum.org/toah/hd/bauh/hd\\_bauh.htm](http://www.metmuseum.org/toah/hd/bauh/hd_bauh.htm) [Accessed: 21.9.2017.]
- [5] Open Workspace Design, 2016. A Historical Timeline of Office Design, [online] Available at: <http://www.openworkspacedesign.co.uk/2016/03/29/office-design-timeline/> [Accessed: 16.7.2017.]
- [6] Saval, N. (2014). "The Cubicle You Call Hell Was Designed to Set You Free", Wired [online] Available at: <https://www.wired.com/2014/04/how-offices-accidentally-became-hellish-cubicle-farms/> Accessed: 12.9.2017.
- [7] GSA (2009). "The Evolution of Office Space And Attitudes Toward Work", [online] Available on: <https://www.gsa.gov/node/86117> Accessed: 12.9.2017.
- [8] Rao M.G., Rao V.S.P. (1999). "Organisation design, change and development", Discovery Publishing House.

- [9] Koontz H., O'Donnell C. (1972). "Principles of management: an analysis of managerial functions", McGraw-Hill, 1972.
- [10] Nadler, D. A. (1995). Discontinuous change: Leading organizational transformation. Jossey-Bass, Inc. Publishers, 350 Sansome Street, San Francisco, CA 94104..
- [11] Banerjee M. (1995) "Organizational Behaviour", Allied Publishers.
- [12] DuBrin Andrew J. (2008). "Essential of management", Cengage Learning.
- [13] Plunkett D., Reid O. (2013). "Detail in Contemporary Office Design", Laurence King Publishing Ltd.
- [14] Dulanović J., Jaško O. (2009) "Organizaciona struktura i promene", FON.
- [15] Mies Van der Rohe Society, "The Story", [online] Available at: <http://miessociety.org/mies/projects/> [Accessed: 10.9.2017.]
- [16] [Cubicle Farm], n.d. [image online] Available at: <https://www.wsj.com/articles/a-brief-history-of-the-dreaded-office-cubicle-1399681972> Accessed: 20.9.2017.
- [17] [Friedrichstrasse], n.d. [image online] Available at: <https://www.pinterest.com/pin/413627547000687467/> Accessed: 20.9.2017.
- [18] [Larkin Building], 2007. [image online] Available at: <https://en.wikiarquitectura.com/building/larkin-building/> Accessed: 20.9.2017.
- [19] Yoo, Y., Boland Jr, R. J., & Lyytinen, K. (2006). From organization design to organization designing. *Organization Science*, 17(2), 215-229.
- [20] Markus, T. A. (1993). Buildings & power: Freedom and control in the origin of modern building types. Psychology Press.
- [21] Horgen, T., Joroff, M., Porter, W., & Schon, D. (1999). Excellence by design. *Transforming Workplace and Work Practice*, 9.
- [22] Kornberger, M., & Clegg, S. R. (2004). Bringing space back in: Organizing the generative building. *Organization Studies*, 25(7), 1095-1114.
- [23] Skogland, M.A.C. & Hansen, G.K. (2017). Change your space, change your culture: exploring spatial change management strategies. *Journal of Corporate Real Estate*, 19(2), 95-110.
- [24] Mitton, M., & Nystuen, C. (2016). Residential interior design: A guide to planning spaces. John Wiley & Sons.