MULTIMEDIA STUDIOS. Architectural Design Principles.

Authors: Bujar Q. Bajçinovci
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Affiliation: University of Prishtina, Faculty of Civil Engineering and Architecture, Kosovo.
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Abstract:

This book is originally and especially dedicated to the students of Architecture Department at the University of Prishtina for Educational, and Not-for-profit purposes. The monograph incorporates contemporary knowledge of the Multimedia Studios - Architectural Design Principles, followed by research data, discussion, extracts, quotes and citations by various authors, as well as official government publications as the academic comparative references. Seeing the lack of literature in the field of Architecture, especially in the University of the Prishtina “Hasan Prishtina”, I was inspired by the research and writing this monograph, which elaborates the MultiMedia - Architectural Design Principles. The book is a free and not-for-profit purpose, it is intended as basic literature of Master courses which I taught at the University of Prishtina. In the monograph I have presented research models, design typology, drawings as the cases studies for future generations at the Department of Architecture. There are four chapters, each chapter extensive explain and discuss issues related to the specific topic of the MultiMedia Studios - Architectural Design Principles.
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Special thanks to my colleagues, who had the opportunity to read the monograph, who helped me in writing and finalizing this monograph. Without this contribution, this monograph would not be as it is. As well, special thanks to my family for suggestions and for the support to publish this monograph.
MULTIMEDIA STUDIOS
ARCHITECTURAL DESIGN PRINCIPLES

SCIENTIFIC MONOGRAPHY
ARCHITECTURAL DESIGN

MULTIMEDIA STUDIOS

Architectural Design Specialty
Faculty of Civil Engineering and Architecture
University of Prishtina, “Hasan Prishtina” Kosovo

MULTIMEDIA STUDIOS. Architectural Design Principles.
Language: English

BUJAR BAJČINOVCI
Prishtinë 2019
PREFACE

This book is originally and especially dedicated to the students of Architecture Department of Architecture, at the University of Prishtina for Educational, and Not-for-profit purposes. The monograph incorporates contemporary knowledge of the MultiMedia Studios - Architectural Design Principles, followed by research data, discussion, extracts, quotes and citations by various authors, as well as official government publications as the academic comparative references. Seeing the lack of literature in the field of Architecture, especially in the University of the Prishtina “Hasan Prishtina”, I was inspired by the research and writing this monograph, which elaborates the MultiMedia - Architectural Design Principles. This book is intended to serve as a practical guide to design principles, concepts of construction for researched models, and the composition of the design functions.

Design and build of multimedia structures in Kosovo actually present architectural and environmental challenges, especially when the production process implies the use of various technological equipment’s that are less sustainable and eco-friendly. Diversity of multimedia studios design must always be in accordance with the requirements of the processes that cultivate contemporary architectural design guidelines, economic development, environmental protection and sustainable urban development. Of course, it is not possible to handle all the details of studied topic and the field discussed, but the main purpose of this monograph is to promote advanced design principles, and thus further to encourage students to consult with the specialists which have the needed expertise in the lightning design system, acoustics and material sciences for gaining supplementary knowledge. The objective of this book is to clarify high standards regarding technical, organizational and production requirements. These standards and regulations relate mainly to the architectural design buildings in relation to the urban planning and structures of mixed architectural modality.

As. Prof. Dr. Bujar Bajćinovci Dipl. Eng. Arch.
Design Specialty
Faculty of Civil Engineering and Architecture
University of Prishtina, “Hasan Prishtina” Kosovo
May, 2019
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MULTIMEDIA STUDIOS. ARCHITECTURAL DESIGN PRINCIPLES.
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THE MONOGRAPH PRESENT PROFESSIONAL AND SCIENTIFIC GUIDLINES FOR MULTIMEDIA STUDIOS - ARCHITECTURAL DESIGN PRINCIPLES, WHICH ARE DISTINCITED BY THE DESIGN THEORY, MEDIA BROADCAST, PUBLIC HEALTH AND SUSTAINABLE PRINCIPLES IN THE ARCHITECTURE. EACH HEADING, SHOWS THE TECHNICAL DESIGN DETAILS WHICH HAVE BEEN ILLUSTRATED, ACCOMPANIED WITH THE PHOTOGRAPHS, DRAWINGS AND CASE STUDIES. THE MONOGRAPH FILLS A SCIENTIFIC LACK OF BASIC AND ADVANCED UNIVERSITY LITERATURE, FURTHERMORE, THIS BOOK IS ESPECIALLY INTENDED FOR THE STUDENTS AND FOR EDUCATIONAL PURPOSES.

THE MONOGRAPH IS DEDICATED TO THE STUDENTS OF THE DEPARTMENT OF ARCHITECTURE, UNIVERSITY OF PRISHTINA, “HASAN PRISHTINA” KOSOVO

This book is provided for Free
Architectural design faces major challenges as a result of obvious climatic changes and completely new lifestyles, while globalization is described as a process in which regional economies, societies and cultures are integrated through a global network of political ideas, communication, transport and global value of the integral market value. The phenomenon of globalization is an unstoppable historical process that reflects on the respective technological innovations, science, demography, new economics, urbanization, and ecological strategies (Bajçinovci, 2017).

According to the early stages of the production, Radio Pristina started work shortly after the second world war in 1945 in Prizren, and then moved to the capital, Pristina. At the beginning of 1974, TVP did not have sufficient electronic technology, but all the material for the program went through film technique and then was sent to other contemporary equipped TV studios, where the film was developed and later adapted for broadcasting. Pristina Radio Television, abbreviated as RTP or TVP, was the first Kosovo Albanian TV-Radio. The end and the termination of the air programs from this television was carried out in 1990. After the 2000, the material and buildings of Radio Television of Prishtina are under the administration of Radio Television of Kosovo ((RTK).1

“The Media of Kosovo consists of different kinds of communicative media such as radio, television, newspapers, and internet web sites. Most of the media survive from advertising and subscriptions. According to IREX2 there were 92 radio stations and 22 television stations in Kosovo in 2012. In the analysis of advertising market in the Republic of Kosovo by Independent Media Commission3 44% of the budget of public companies goes for advertisement in national televisions, 10% in local televisions, 8% in national radios, 9% in local radios, 11% for daily newspapers and 18% for other media. Kosovo lacks strong private advertisers, thus leaving private advertisers dependent on foreign donors. Most media outlets remain financially unsustainable, and operate only thanks to business supporters.”(Excerpt)4

“On June 19, 1999, Radio and Television of Kosovo (RTK) began its first broadcast with a two-hour program. RTK has since gone through a long development process, financial stabilization and transfer of management from international to local people. Today, RTK represents one of the most important information institutions, a public medium whose editorial independence is, and will be, essential to maintain stability and sustainability of

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1 Radio Televizioni i Prishtinës, Radio Televizioni i Kosovës, 2019
5 Media in Kosovo, 2019.
interethnic relations and a sound political and economic development of Kosovo. Initially, RTK was managed by EBU in line with a memorandum of understanding signed between OSCE and EBU, which envisaged the establishment of a sustainable and independent public broadcaster. In time, RTK program increased from two hour program to four, and then to 15 hours of programming a day, until finally on 22 December 2003, RTK began broadcasting 24 hours a day. Program diversity increased steadily with the launching of new programs in Albanian and minority community languages. RTK programs are broadcasted via satellite and terrestrial waves.” (Excerpt)

“In order to reflect better the situation of the public broadcaster, the GAP Institute conducted a secondary research on public broadcasters in the region. This reflection assisted the research in order to better understand the trends of financing methods of public broadcasters in the region. This research included the legal aspect and the financing method of public broadcasters in Albania, Montenegro, Croatia, Serbia and Macedonia. In all these countries, the state is the founding body of the public broadcasters.”

Figure 1. Major urban centers, TV-Radio broadcasting, Kosovo. (Source): Bujar Bajçinovci, 2019.

I. INTRODUCTION

Albania: “Albanian Radio Television (RTSH) was established in 1999. RTSH must cover at least 9% of Albania’s territory, whilst at least 50% of the programs in RTSH must be of their own production. As with the majority of public broadcaster, in RTSH as well the political propaganda is prohibited, excluding election periods, but even during the election period any message that damages the policy of RTSH is banned. Advertisements are used as a method of financing, and in addition to advertisements RTSH is also funded by license fee revenues. The fee for radio-television devices is 600 lekë per year (4, 25 Euros). This fee is calculated and paid by family users only for one TV receiver, regardless the number of devices within a family. The Electric Energy Payment Office is charged with the fee revenue. The fee revenue must be collected within the first quarter of each year. Electric energy bills, together with the license fee revenue, are collected by the CEZ Distribution Company, which benefits 10% calculated commissions based on the level of fees for the service provided. The state budget funds the television and radio services outside Albania’s borders, the radio service for the foreign audience, important technical projects including new technologies for production and broadcasting, major nation-wide film projects, as well as the RTSH symphonic orchestra. The measures of financing are provided by the annual law on the state budget. (Excerpt)  

Croatia: “Croatian Public Radio Television was established in 1991 and was named Hrvatska Radiotelevizija and bears the HRT acronym. Based on the principles of program broadcasting, HRT must inform the public about political, economic, social, cultural, health, education, scientific, and religious questions, as well as it must provide open discussions on all questions of interest for the state. HRT must outsource at least 10% of the broadcasted programs to independent production companies, excluding news programs, sports manifestation, games and advertisements. HRT is funded from the license fee revenue of radio and television, advertisements, production and sale of audio-programs, tele-text, organization of concerts and other manifestations. In addition to this, citizens are obliged to pay a fee to HRT, which is 1.5% of the average monthly salary of employees in Croatia on the basis of the statistical data of the previous year.” (Excerpt)  

Montenegro: “Montenegrin Radio Television was established in 2001 and its original title is Televizija Crne Gore and bears the RTCG acronym. RTCG assets are state property and the state possesses property rights and obligations, sources of financing, security and all new developments in relation to production and ownership. RTCG cannot be privatized without the consent of the Montenegrin Parliament. Business operations, apart from production, broadcasting and sale of programs, movies, include the production and broadcasting of advertisement and sponsorships. Pursuant to the Law on Broadcasting, any private household or legal entity in the territory of Montenegro that

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7 Instruction no 1, dated 8.1.2009, on the fee of services to use television devices.
9 Law no. 8410, dated 30.9.1998 / Article 117/ RTSH
10 Law on HRT/ Law on the Croatian Radio-Television
accepts the broadcasting of at least one radio is obliged to pay a monthly fee of 3.5 Euros per month for broadcasting; a fee paid through the electric energy bill. If the amount donated by the state budget is insufficient to realize obligations of the RTCG, then the RTCG Council may seek compensation from the state on the condition that the deficit is not caused by the misuse of the RTCG funds.” (Excerpt)

**Serbia:** “Radio Television of Serbia was established in 2001 in its original name Radio Televizija Srbije and RTS acronym. RTS is broadcasted in cable and satellite 24 hours a day, in order to reach the widest public possible. RTS financing is done through the fee revenue from the citizens of the Republic of Serbia, which is carried out through electric energy bills. The amount of the fee and the method of collection are provided by the Law on Radio-Diffusion.” (Excerpt)

**Macedonia:** “Macedonian Radio Television (RTM) is a public enterprise, established by the Parliament of the Republic of Macedonia. Its activities, defined by law, are composed of production and broadcasting of radio and television in all genres which must fulfil news, cultural, educational and recreational needs of citizens of the Republic of Macedonia. RTM financing is done through broadcaster fee revenues, whereby anyone who own a radio or TV must pay the fee. Households pay a single fee, irrespective of the number of devices owned. The fee is paid each month and its amount is 2.5% of the gross average salary in the Republic of Macedonia for the last three months. The license fee revenue is paid through the electric energy bill, excluding those who state that they do not own any device. A fee must be paid even for radio devices installed in vehicles, which occurs once a year, upon the vehicle registration.” (Excerpt)

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12 http://media.parlament.org.ua  
CHAPTER II

MEDIA CENTER - DESIGN PROGRAMMING

2.1 MEDIA CENTER - "TV/RADIO" STUDIO"

MEDIA CENTER

In accordance with the urban spatial plan, and city regulatory plans: It’s required to design conceptual project, Media Center "TV/Radio Studio". The building and the surrounding area should be designed in the sustainable concept, maximally functional and rational, both in the construction period and in the period of use, taking into account the surrounding buildings, the existing urban ‘ansamble’, and the situation in the holistic context. Particular attention should be attend to: Physical structure and space organization, fulfillment of functional and structural requirements, referring to the research data and findings from the respective municipality. Increased accent to the landscape morphology and environmental pollution, preserving greenery around the existing situation, as well as design to be consistent with bio-climatic conditions and rational use of land. The design solution should be as economical and rational as possible.

Typology of basic studios, depending on the medium:
1. Studio TV-general, Group A and Group B;
   - Control of Production
2. Studio TV-special;
   - Control of Production
3. Research on Movie Creation, and Television Programs;
4. Studio Radio-general, Group A and Group B.
   - Control of Production

Fundamental typologies, depending on digital production:
1. TV Emissions;
2. Radio Emissions;
3. Marketing and Promotion;
4. Virtual Cinematography.

Primary use, includes:
1. Programming;
2. Studios;
3. Marketing and Promotion;
1. GENERAL FUNCTIONS
1. Supply zone/yard  cca: -------- m²
2. Parking places  cca: -------- m²
3. Space for containers and garbage  cca: -------- m²
4. Services, maintenance and workshops  cca: --------
5. Electrical supply, HVAC  cca: --------
6. Master Warehouse  cca: --------
7. Central wardrobes for technical staff  cca: --------
8. Central wardrobes for personnel  cca: --------
9. Toilets for staff / technical staff  cca: --------
10. Main Lobby / Foaje  cca: --------
11. Main Administrative, Offices  cca: --------
12. General Management, Offices  cca: --------
13. Meeting Room  cca: --------
14. Main buffet  cca: --------
15. Master Restaurant  cca: --------
16. Amphitheater – Within the structure  cca: --------
17. Small classrooms for parallel sessions for conferences  cca: --------
18. Space for audiovisual projections  cca: --------
19. IT Main Server  cca: --------

2. DEPARTMENTS. TV STUDIO - GROUP A AND B
1. Lobby / Foaje  cca: -------- m²
2. Main Administrative, Offices  cca: -------- m²
3. Meeting Room  cca: -------- m²
4. Buffet  cca: --------
5. Wardrobes for technical staff  cca: --------
6. Wardrobes for personnel  cca: --------
7. Wardrobes for actors  cca: --------
8. Research Studios  cca: --------
9. Production Studios  cca: --------
10. IT Studio CGI  cca: --------
11. Stage, design, showroom – Choreography  cca: --------
12. Artistic Studio  cca: --------
13. Artistic Atele  cca: --------
14. Technical Support  cca: --------
15. Television director  cca: --------
16. Digital Studio  cca: --------
17. IT server  cca: --------
18. Warehouse of TV props - material  cca: --------
3. RADIO STUDIO - GROUP A - B

1. Lobby / Foaje .. cca: ****** m²
2. Main Administrative, Offices .. cca: ****** m²
3. Meeting Room .. cca: ****** m²
4. Buffet .. cca: ******
5. Wardrobes for technical staff .. cca: ******
6. Wardrobes for personnel and guests .. cca: ******
7. Digital Studio .. cca: ******
8. Production Studio - Acoustic .. cca: ******
9. Production Studio “On the Air” .. cca: ******
10. Radio Diffusion Mainframe .. cca: ******
11. Studio – Audio .. cca: ******
12. Archive .. cca: ******
13. IT studio - Server .. cca: ******
14. Warehouse - material .. cca: ******

4. RESEARCH ON MOVIE CREATION, AND TELEVISION PROGRAMS

1. Lobby / Foaje .. cca: ****** m²
2. Main Administrative, Offices .. cca: ****** m²
3. Meeting Room .. cca: ****** m²
4. Buffet .. cca: ******
5. Wardrobes for technical staff .. cca: ******
6. Wardrobes for personnel and guests .. cca: ******
7. Research Studios .. cca: ******
8. Production Studios 2D .. cca: ******
9. Production Studios 3D .. cca: ******
10. IT Studio CGI .. cca: ******
11. Stage, design, showroom – Choreography .. cca: ******
12. Audio, Technical Support .. cca: ******
13. Studio – Motion Capture .. cca: ******
14. Studio – Virtual Cinematography .. cca: ******
15. IT studio - Server .. cca: ******
16. Warehouse of TV props - material .. cca: ******

Focusing on the concept of design solution that necessarily respects the sustainability, realizes the protection of noise pollution, light pollution, air quality, and the determination of using renewable energy sources, for the planned structure. In the selected urban site, attention should be paid to any change in the area that could significantly harm public health, micro location and the environment.
<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production, News</td>
<td>30%</td>
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<tr>
<td>Engineering</td>
<td>10%</td>
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<tr>
<td>Programming</td>
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<tr>
<td>Business Administration</td>
<td>10%</td>
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<td>Private Offices</td>
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<td>Communication</td>
<td>15%</td>
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<tr>
<td>Sales and Advertising</td>
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Figure 2. Composition of design structure, Media Center

Figure 3. Television Studio, At the BBC Television Centre.
(Source): Alexander Baxevanis, 2012. Flickr. Licensed by Creative Commons, Attribution 2.0 Generic (CC BY 2.0)
3.1 CHALLENGES - CONCEPTS AND PRINCIPLES

Actually, there are increasing energy consumption, also, we are witnessing global climate change, environmental pollution, and implications for the aforementioned phenomena are on the rise! Therefore, the redefinition of the architectural design process has to take place as a contemporary response of the XXII century, many aspects are linked to the integrated design process, including: transdisciplinary, holistic approaches, energy efficiency, and overall performance of buildings (Bajčinovci, 2017).

Studies on European Community cities present studies that individual facilities and other users are responsible for about 35% of CO2 emissions from consumed energy. Hence, a more sustainable approach to cost-benefit, energy consumption in this sector can be optimally reduced. The current state of the MULTI MEDIA sector or its accompanying structures is such that it is a large consumer of energy, a major consumer of natural resources. However, while we are building at the same time we are creating a certain impact on the environment, energy resources, in mining industry, agricultural land, water and other natural resources. According to the current research, from total energy consumption the construction industry takes about 40-50%. Of course, to have a sustainable environment there is much to be done and to reduce the negative environmental impacts. The need to improve the performance of objects is the immediate task of designers, and designers in relation to themselves, the community, and the client. So, we need to develop an efficiency measurement system so that efficiency can be assessed, hence, there must be ongoing improvements by promoting cost-effective solutions, duration, construction, efficient maintenance, flexibility, revitalization, and overall achievement of targeted performance. Architectural sustainability requires a sophisticated understanding of natural, functional, social, cultural and environmental aspects. It is the responsibility of each architect, to declare openly about ecological awareness and to promote the preservation of the environment.

Therefore, to design a high performance structure, basically is required to set specific objectives and further is required to apply integrated design process as a holistic strategy for social awareness. A symbiosis between function, human demands and profitability. Usually the demand and use of energy is the largest environmental challenge, the prerequisite which have direct impact on future conceptual design idea, then, the method and strategy for an energy-efficient building is an objective that is inevitably mandatory. A design strategy which encompasses the whole sustainable variables in targeted ecology equation.
3.2 TIPOLOGY OF MULTI MEDIA STRUCTURES

Vitruvius (Marcus Vitruvius) believed that an architect should focus on three central features in the design process: FIRMITAS (stability), UTILITAS (functionality), and VENUSTAS (beauty). But VENUSTAS (or beauty) theory is a very complex concept. Vitruvius believed that an eternal notion of beauty could be taught by “the truth of nature”, the nature based on universal laws of proportion and symmetry. He believed that the proportions of the human body could be used as a model of proportional natural excellence. He explored how ancient scholars have examined many examples of “well shaped men”. In addition, he argued with illustrations that there was a connection between perfect geometric shapes and the human body. Human form is seen as a living rule that contains universal proportions and universal laws.  

“To raise the question of typology in architecture is to raise a question of the nature of the architectural work itself. To answer it means, for each generation, a redefinition of the essence of architecture and an explanation of all its attendant problems. This in turn requires the establishment of a theory, whose first question must be, what kind of object is a work of architecture? This question ultimately has to return to the concept of type."  

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15 http://www.bl.uk/learning/cult/bodies/vitruvius/proportion.html
“The very act of naming the architectural object is also a process that from the nature of language is forced to typify… It might even be said that type means the act of thinking in groups … The design process is a way of bringing the elements of a typology—the idea of a formal structure—into the precise state that characterizes the single work.”

Figure 5. Possible solutions of functional composition multimedia. Typology A and B (Source): Bujar Bajčinović, 2019.

Figure 6. Possible solutions of functional composition multimedia. Typology D and E (Source): Bujar Bajčinović, 2019.

Figure 7. Symbiosis of typology A and B, resulting with complex shape. A+B=C (Source): Bujar Bajčinović, 2019.
3.3 COMPOSITION OF FUNCTIONAL ZONES - MULTI MEDIA STRUCTURES

At the beginning, to design a framework of functional zones for multimedia structures, we can conceptually conclude that those typology of buildings or multifunctional buildings must offer a fundamentally contemporary solution in relation to market and profit requirements. Profit, as the promoter of social development and the key factor to improve urban development. Nowadays, in Kosovo we are witnessing a huge requests for those types of multifunctional buildings, and the reason why? The reason is simple, we have come to the stage of the development where the market and economics requirements are on the rise for those types of buildings. Of course, we can elaborate much longer for essential, social, architectural and urban reasons for this phenomenon, on the other hand, it is suffice to conclude that there are huge financial offers to make investment! Hence, it does not always mean that the new buildings should be designed and build. Moreover, we must constantly to look for, and encourage the revitalization of buildings or urban blocks when this is possible, and when is worthwhile? Looking forward for symbiotic solutions: harmony between the environment, location, architecture, and buildings should be sought. In this context, a ‘full-time’ working multifunctional buildings should be encouraged.
Figure 10. Typology of shapes, modular offices and stair position. 

Figure 11. Typology of shapes, modular offices and stair position. 
Figure 12. Morphology and composition of functional zones

Figure 13. Variations, forms. Composition of space volumes
Figure 14. Iteration, finding design solutions - composition of functional zones

Figure 15. Iteration, finding design solutions - composition of functional zones
Figure 16. Seeking design solution - composition of functional zones

Figure 17. Seeking design solution - composition of functional zones
3.3.1 Functional morphology – organization structure

Figure 18. Holism as a strategy of sustainable design - composition of functional zones

Figure 19. Functional morphology of architectural design
3.4 DESIGN PRINCIPLES

![Diagram showing functional organization of stage and studios](Source): Bujar Bajcinovci, 2019.

Figure 20. Functional organization – stage and studios

![Diagram showing conference hall](Source): Bujar Bajcinovci, 2019.

Figure 21. Conference Hall

Figure 22. Concert Hall, Projection Hall.  

Figure 23. Concert Hall. Projection Hall.  
3.4.1 Open and private offices

We distinguish two common styles of organizing offices in multimedia structures:

1. The traditional concept;
2. Contemporary concept.

The traditional concept, consists in that, that has all horizontal communications, closed offices, and support offices in separate organizational space, within structure.

Figure 24. The traditional concept of organizing working modules, offices

The contemporary concept, or so-called 'open' offices, consists of having all working spaces in open organizational space.

Figure 25. The contemporary concept of organizing working modules, offices
In organization of working places in open systems, the recommended area for workplace are 4.2 to 4.8 m². While in the traditional system of organization of workplaces, the areas for working spot are greater:

- 1 Workplace .................. 9 m²/person
- 2 Workplaces.................. 6 m²/person
- 3-4 Workplaces.................. 5 m²/person
- 4-6 Workplaces.................. 4.5 m²/person

Depending on the depth in the traditional concept, the offices can be divided: (with 1.2 m' design module):

- Very deep offices ................. 20 m’
- Deep offices .......................... 11-19 m’
- Medium deep offices............. 6-10 m’
- Common offices ................... 4-5 m’

Figure 26. Window position and size in lighting factor.
Figure 27. Window position, depth and size in lighting factor.

Figure 28. Depth and size in lighting factor with natural light from above

Figure 29. Main communication, workplace modules
3.4.2 Verticality of multimedia structures

Figure 30. Typology of functional organization – vertical dimension. *(Source): Bujar Bajčinovci, 2019.*

Figure 31. Typology of functional organization – vertical dimension. *(Source): Bujar Bajčinovci, 2019.*

"By looking at architectural objects as groups, as types, susceptible to differentiation in their secondary aspects, the partial obsolescence appearing in them can be appraised, and consequently one can act to change them. The type can thus be thought of as the frame within which change operates, a necessary term to the continuing dialectic required by history."16
Figure 32. Typology of functional organization – vertical dimension.

Figure 33. Typology of functional organization – vertical dimension.
Figure 34. Typology of functional organization – vertical dimension. 

Figure 35. Typology of functional organization – vertical dimension. 

Figure 36. Typology of functional organization – vertical dimension. 
3.4.3 Production Offices – ON AIR

Figure 37. Typology of Production Offices – ON AIR, single module and double module

Figure 38. Typology of Production Offices – ON AIR, double square modules.
It is extremely important to dedicate sufficient time and analysis for the chosen design typology, a choice should be made in the relation of the desired artistic outcome, functionality, proportion, structure, and materialization. In the overall sustainability, building should benefit from natural resources such as sun, wind, geothermal, water resources, and profitability. Nevertheless, the bioclimatic features of the micro location, should play the crucial role in the analysis of the landscapes, considering for the greenery, daylight protection in the summer season, shade, cooling, wind, and air quality.


Figure 40. Typology of Offices – ON AIR, open office - quadruple modules. (Source): Bujar Bajçinovci, 2019.
CHAPTER IV

CASE STUDIES

4.1 MULTIMEDIA STRUCTURES WITH COMPLEX AND DYNAMIC FUNCTIONS

The shape and proportions in the building should be properly interconnected in the composition of the architectural design solution. Of course, the function and form should be clearly expressed in the visual sight of the structure. Hence, we must constantly be focused on the demand that the architectural composition must be the result of the functional expression of the architectural design solution. Function, construction, materialization, and compositional formation should be the result of a genuine multi-professional study and research. Fluid structures, dynamics, organic: Architectural concepts reach symbiosis and thus result in a complete union of different constructive parts, functions, and elements. Finally, a design solution which will achieve an interconnective advancement in relation to the stability of the structure! This merge, this symbiosis generates a new notion of architectural identity, different characteristics and features coexist at genuine new levels that are related to each other. Unity of forms and functions, which will evolve in new born identity.

Figure 41. Television Studio, At the BBC Television Centre.
(Source): Alexander Baxevanis, 2012. Flickr. Licensed by Creative Commons, Attribution 2.0 Generic

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Figure 42. Television Studio, At the BBC Television Centre. Studio Lightning
(Source): Alexander Baxevanis, 2012. Flickr. Licensed by Creative Commons, Attribution 2.0 Generic

Figure 43. Television Studio, BBC Television Centre. Old set for Match of the Day.
(Source): Alexander Baxevanis, 2012. Flickr. Licensed by Creative Commons, Attribution 2.0 Generic
Figure 44. ABC Television. Controlling the ABC 13 robot cameras
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LITERATURE AND BIBLIOGRAPHY


68. Law no. 8410, dated 30.9.1998 / Article 117/ RTSH

69. Law on HRT/ Law on the Croatian Radio-Television


78. Media in Kosovo, 2019.


84. Plani Global i dekadës së strategjisë së sigurisë rrugore 2011-2020, e shpallur nga Asambleja e Përgjithshme e Kombeve të Bashkuara me 2.3.2010


86. Radio Televizioni i Prishtinës, Radio Televizioni i Kosovës, 2019


92. UN, DESA. UN. Habitat: Living Planet Report, 2015