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Proceedings of the
8th Annual International Conference

International Conference Architecture and Spatial Planning

Edited by
Edmond Hajrizi

October, 2019
Conference Book of Proceedings

International Conference

Pristina, 26-28 October 2019


© UBT – Higher Education Institution
International Conference on Business, Technology and Innovation
Pristina, Kosovo 26-28 October 2019

Editor: Edmond Hajrizi

Organizing Committee:

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International Conference is the 8th international interdisciplinary peer reviewed conference which publishes works of the scientists as well as practitioners in the area where UBT is active in Education, Research and Development. The UBT aims to implement an integrated strategy to establish itself as an internationally competitive, research-intensive institution, committed to the transfer of knowledge and the provision of a world-class education to the most talented students from all backgrounds. It is delivering different courses in science, management and technology. This year we celebrate the 18th Years Anniversary. The main perspective of the conference is to connect scientists and practitioners from different disciplines in the same place and make them be aware of the recent advancements in different research fields, and provide them with a unique forum to share their experiences. It is also the place to support the new academic staff for doing research and publish their work in international standard level. This conference consists of sub conferences in different fields: - Management, Business and Economics - Humanities and Social Sciences (Law, Political Sciences, Media and Communications) - Computer Science and Information Systems - Mechatronics, Robotics, Energy and Systems Engineering - Architecture, Integrated Design, Spatial Planning, Civil Engineering and Infrastructure - Life Sciences and Technologies (Medicine, Nursing, Pharmaceutical Sciences, Psychology, Dentistry, and Food Science).- Art Disciplines (Integrated Design, Music, Fashion, and Art).

This conference is the major scientific event of the UBT. It is organizing annually and always in cooperation with the partner universities from the region and Europe. In this case as partner universities are: University of Tirana – Faculty of Economics, University of Korca. As professional partners in this conference are: Kosova Association for Control, Automation and Systems Engineering (KA – CASE), Kosova Association for Modeling and Simulation (KA – SIM), Quality Kosova, Kosova Association for Management. This conference is sponsored by EUROSIM - The European Association of Simulation. We have to thank all Authors, partners, sponsors and also the conference organizing team making this event a real international scientific event. This year we have more application, participants and publication than last year.

Congratulations!

Edmond Hajrizi,

Rector of UBT and Chair of IC - BTI 2019
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An Integrated Approach on Spatial Planning FOR Territorial Cohesion

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Abstract. The new agenda of territorial planning for development, in countries in transition such as Kosova, based on integrated concept should consider the consistency of the complex factors and their coexistence in space (territory), within the need to discuss issues related to the development vision, development potentials and development requirements, through stakeholder’s involvement those based on planning activities: Identifying always relevant data, and measurement based on indicators; focus on developing new areas and marginalized areas and improving public-private partnerships, Better interrelation between the concepts of academic and institutional understanding and improving institutional expertise, doing decision-making with transparency and responsibility. Finally, through integrated spatial planning will be achieved territorial cohesion, and this will ensure qualitative and sustainable development and general prosperity of community.

Keywords: growth, development, spatial planning, territorial cohesion, policies, vision, strategies, resources, integration process.

Introduction

The urban growth, (without) urban planning especially in developing countries such as Kosova, implies a large spatial extent of smaller and larger settlements. The consistency of their co-existence in space (territory) within the development of functional concepts, remains a key issue with regard to territorial cohesion. In this context, research questions should be raised:

- How does the position and extent of the territory as well as the specific geographic conditions affect the spatial planning?
- How to address the population, structure, movements, density and growth in the correct accommodation of their needs?
- Why do communications, interconnections and the polycentric concept are the basis for the integration of the functional development?

Answers to these questions, can be the considered for a sustainable spatial planning and with integrated approach. To ensure territorial cohesion, it is necessary to ensure an integrated approach to spatial development through the cohesion of key factors such as: development policies and strategies, territory and development resources too.

In this context, it is necessary to discuss issues related to the development vision, development potentials and development requirements, through stakeholder’s involvement, in understanding the opportunities and needs, and always applying modern trends such as: efficient solutions, S.M.A.R.T. concepts, all this through integration processes based on the vision and development strategies!

- Polycentric development and systemic density
- Improved settlements structure- their functionality
Spatial development, development potentials of Prishtina Region

Based on the specific potentials and resources of the region, development potentials are based on: economic development structure, traffic/transport structure and heritage/touristic structure too.

As can be seen in Fig.1, in Prishtina region, the economic structure is with high development potentials, transport and traffic structure is well integrated with other functions, while heritage and touristic structure is with high potential developments too.

Development systems - geographical position, bordering settlements, urban centers, population, density, settlements, urban centers

Geographical position and bordering of this region, is characterized with different elements: topography, hydrology, eco-systems, inter-connectivity. As plural values they are related to the spatial development potentials of the region.

Scattered settlements vs. compactness, existing and added urban centers through polycentric development based on trends of population movements and their density and density of settlements, all in line with complexity of development spatial functions.
Development systems- connections, intersections, integration, flow, natural resources and development potentials (tourism and heritage)

Systemic spatial development system, cannot be successful without adequate concepts of integrated connections and intersections, based on flow of people, goods and information's- in area and from area towards surrounding.
Continual and value based spatial development process, is possible if based on values (natural, historic and architectural heritage), through them promoting identity and developing economy and tourism, value based.

Development systems: integrated planning- spatial cohesion
Integrated planning towards spatial cohesion, will ensure that key sustainable development parameters are fulfilled: environmental and physical sustainability (eco-systems, eco-buildings, eco-energy, and eco-traffic, quality of buildings and architectural values); movement and social sustainability (traffic, goods and information flow, employment, culture and tradition, interrelations between different groups of interest); economic and political sustainability (efficient use of potentials and resources, systemic development without marginalized areas; political system based on equity, transparency and responsibility).

Conclusions and recommendations

In the process of territorial planning for development, in countries in transition based on integrated agenda should consider those planning activities:

- Identifying always relevant data, for sustainable planning
- Indicators selection, for measuring quality of planning
- Better interrelation between the concepts of academic and institutional understanding of spatial development
- Improving institutional expertise, experience and other resources
- Focus on developing new areas and marginalized areas
- Improving public-private partnerships
- Building strong communications with community, in the process
- Doing decision-making with transparency and responsibility…

Finally, through integrated spatial planning will be achieved territorial cohesion, and this will ensure qualitative and sustainable development, integrated policies, areas and functions as well as basics for general prosperity of community.
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The Influence of colors on the living spaces; Living room and kitchen

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Abstract. The main place that everyone individual would to go after completing on his or her daily activities is home to relaxation. Particular importance in living spaces is also the use of colors, the amount of lighting the type of materials used in the interior design. Design, lighting, color occupies an important place in the psychological impact of living in a certain space. During the creation of living spaces, it is very important that one can feel happy, healthy and cozy in their homes. The purpose of this research is to gain results based on the research carried out on how the living spaces divided in Kosovo from 2000 to 2019, what are human activities during the day in the living spaces and how the spaces in the human psychology affect the colors.

Keywords: Living Spaces, Influence, Interior Design, Colors

Introduction

The most important purpose of designing interior spaces is to create physical environments that address people physically, economically, mentally and socially. The design of living spaces plays an important design role to provide comfort and convenience. Interior or interior art contains different types of materials and colors to achieve a design that fits into the functions of the living space. The interior architecture can achieve different emotions based on the vital function, such as relaxation, pleasure, warmth as human behavior completed in designated spaces. Much research has been on the use of colors and materials in interior architecture and what effect they provide. Also important is the psychological aspect which has a significant impact on human behavior, “One of the essentials of the role of architecture is to provide all built environments that rely on human psychological well-being” for more than one reason. Around 70% of a person’s spend life inside (Vogelpohl, 2005). “The influence of color generated in an interior space is the key to enjoying and successful functioning of a space. A color plays a major role in creating the ambience of a room and can affect the mood of the occupant. If the color elements of the room designed properly, then the interior designers can also create an atmosphere of space corresponding to the function of the room” (Hendrassukma, 2016). It is very important to design the interior based in function of space. The surface of the space, the orientation and the lighting of the living space also plays an important role. Determining the color of the living space always depends on the taste of the person, and on the style of the shape of the dwelling, in many case the results are good but there are many other cases where the right result are not achieved by the combination of colors. You are the one who can control the color determination of the spaces where you live, the treatment of the flooring material, the treatment of the roofing material, the color of the walls that make up the living space greatly influences the environment of the space function in which use.
According to the book, "Design is in the Details Living Spaces" color determination also determines the shape of the room, whether it is large, small or light enough. In the psychological aspect of man (Inc, 2005). It is very special if we consider how one person can feel according to the weather conditions, when the day is sunny we can notice significantly the joy, and emotional state, also in cases when the weather is rainy it can be noticed how much person feels unhappy that day. Similarly, the use of colors in the spaces we live in may also influence whether colors can have a positive or negative impact on human emotions. The Dictionary of the Turkish Language Society defines color as "different sensations of how objects reflect or emit light". (Nurcan GÖKÇAKAN ÇİÇEK, 2016).

Methodology

Various published research has been write on the influence of colors on living spaces, such as living room and in kitchen, which are the most usable part of the home. The research used the comparison form of how colors were treated in residential areas in Kosovo from 2000 to 2019, how the change in the use of colors and materials in residential areas has evolved.

Type of colors

Color is a tool that considered important for building one's mood depending on where they are used. Colors are segregate into cold and hot colors. Warm colors exacerbate the stimulus effect on the nervous system by increasing the level of mood in humans. While cold colors advised to be calming colors, or the opposite of the effect that warm colors provide. Many psychologists, architects and researchers have published research on the effects of colors in the psychology of man and the influence of colors on the spaces where they live.

The present analysis sets out to investigate the use of color in-house use. Color plays a vital role in limited experiences, and while design can cover many areas of desire, we can do much to direct more in the service of the area where they live. Understanding psychological creation more heavily, is central to the design to give in sections to do such as interior design, logo; graphic design and advertising (Kalia, 2013).
When choosing colors for interiors, the functional aspects greatly influence how the aesthetics and type of colors are to be determined. Overestimation through color creates sensory overload. In contrast, colorless interiors can be stressful and unproductive. (Kalia, 2013)
Cold colors tend to shrink and make objects appear shorter and smaller, warm colors make items appear larger and closer to the viewer (Niemeyer, 1988). Lighter, less saturated or pastel colors make objects look lighter in weight and larger. When using colors with the same values and intensities, warm colors appear heavier (Niemeyer, 1988).

**Case Study**

As a case study in our research we have compared the colors used in living spaces in the immediate post-war period, namely 2000 and the use of colors nowadays namely 2019. The reason why we selected these the period for comparison is that the post-war period is the time when great development of buildings was made in Kosovo and the use of different colors within living spaces began.
More explicitly, we have selected a family consisting of 6 members who built a house shortly after the war ended. The same family has also built a house today.
The main purpose of why we chose to compare these two houses from the same family is to see how much the use of colors has changed from time to time.
In the pictures below, we have shown the changes that have been made to the house by the same family in two different houses, in the different time.

**Living room**

The picture below shows the design of the daily case stance we took for the study. In photo, it is seen that the greatest use of colors is orange in the walls and white, while the white one on the ceiling. Also in terms of materials, it is seen that there is more use of natural brown wood material.

![Figure 2-Living room in 2000 (Personal Photo courtesy)](image)

Unlike the photo above, it can be seen that the white color is the dominant one in the design of the day stand, as well as the use of other materials such as designed carpets and slabs of mainly gray color. Also in the above picture, there is a great use of natural brown wood while in the picture below there is no great use of this wood in both the floor and the furniture.
Kitchen

Kitchen environment built in earlier years; walls are white, as well as ceramic tiles. While the material from which the kitchen it was made of natural brown wood.

As well as the above environment, and the kitchen space built in postmodern times, the walls was painted white color, but accompanied by lot of small light. Unlike the upper kitchen environment which has white tiles, this one has a blue and white decor. In addition, the material from which the kitchen was built is wood, but the wood is processed and painted with white color.
Conclusion

After the war, (1998-1999) Kosovo received a burst of development in terms of construction, development and recovery of damaged housing. The use of colors in residential spaces after the development of technology, the acceptance of information in various forms, additional literature, documentaries, chapters on color and interior design, after year 2000 began to consider the use of colors properly based on the designation of spaces. Mostly in living spaces such as day stands, kitchens most commonly used in residential buildings as opposed to previous years where the use of enclosed colors, textured materials, and in great detail,. Today they have returned to the use of lighter colors, which positively influence the perception of space, the psychological aspect and the elimination of colors and materials within a space. The use of colors in interior architecture has an extraordinary impact on one's emotions, comfort and mood. The use of colors and materials in interior architecture should show the motives of the inhabitants, treat the openings and provide natural and artificial lighting in the living areas, show the culture of the place, provide comfort and tranquility within the space in which we live. Creating an interior architecture that complements the architectural concept with the psychological concept manages to gain adequate living space.

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Landslapes that shape Informality; Case Study in Tirana

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Abstract. The continuous transformation of the agricultural and natural territories to a build environment has been very dynamic in Tirana, especially during these last 30 years. Resulting mainly in an informal urban sprawl, many questions have been raised on the future of these areas. To prevent a further extension, a new strategy has emerged by the latest General Local Plan of Tirana, which develops the city within its actual footprint and redefines the urban area by implementation a Green Belt. This paper aims to study the possible scenarios between the two city fabrics, landscape, and informality. Such a study is seen of great interest due to the landscape high potential not only in the development of informal areas but also in their integration with the rest of the city.

Keywords: Landscape, Informality, Green Belt, Urban Sprawl

Introduction

One of the biggest problematics of the cities of nowadays is their changing, their footprint enlargement, and transformation of territories from natural or semi-natural to a build environment. The global trend is the movement from rural areas towards the urban ones mostly due to mechanization and modernization of many economies such as agricultural and agro-processing. Due to this trend, and evaluating that by 2050, 70% of the population would live in urban areas. Although on a small scale, such developments have started to be present in the Albanian context as well. Phenomena such as urban-sprawl, have been present these last 30 years in Albania, especially in the Western lowland area, achieving its top at the Tirana-Durrës area. Representing the most important cities in Albania as per the socio-economic sector, this area has been the target of many Albanian families due to certain conditions and difficulties that have generated and created what is today known as the Informal Settlements area. These last 10 years there have been many legislative changes, and different strategies have been implemented, as per the territorial development. During 2014-15, the territorial reform, and the National Spatial Planning were implemented, and after that, the General Local Planes have started to get conceived for each municipality. General Local Plan for Tirana 2030, or as it is known GLP TR30, has ended and been in force since 2017, but still, they do exist many unsolved problematics as per the areas occupied by the Informal Settlements which require great attention as the most vulnerable areas of the city. Nowadays new theories have arisen where keywords, such as Efficient Use of Natural Resources, Sustainable Development, Ecology, Biodiversity, etc., create the general framework of territorial development. While in the developed countries, there have been defined indicators to evaluate the city quality of life regarding many aspects such as Economy, Education, Energy, Environment, Transportation, Urban Planning, etc., in Albania, there is still a lack of such indicators. Taking into consideration the quality of life, this paper aims to bring to the attention of different planning
actors, the importance of interventions to the informal Settlements areas, through a contemporary medium of nowadays - the Landscape.

Background and Case Study

As previously mentioned, the urban development in Albania has been very dynamic these last 30 years, due especially to the change of the political system which was accompanied by socio-economic changes. Phenomena such as internal migration, emigration, and uncontrolled demographic movements in general, were introduced mainly due to social and economic reasons. It is important to state that the failure of the economic system came as a result of the failure of the political system. The side effect was the demographic movement or population adaption towards the new system - that of a free market economy.

As a known phenomenon in other developing countries as well, the informality started to develop at very fast paces including the economic sector, but also that of territorial development. Informal settlements began to appear within the city footprint, but mostly it was a phenomenon that emerged outside the city boundaries, resulting in a new footprint which is about four times bigger in its surface [Fig. 1a; Fig. 1b; Fig. 1c].

This development, known also as urban sprawl has invaded previews agricultural and natural land and has connected the previews separate build areas of the settlements. The result is what we have today (1) A mixed land use; (2) Not a very clear transition from the compact city to the peri-urban area, and the rural areas after that.

As far as the planning, there have been some developments from 2014 which started with the National Spatial Planning and continued with the General Local Plans for each municipality. The General Local Plan of Tirana till 2030, has been concluded in April 2017 and for the first time a tendency of stopping the urban sprawl by landscape medium, was introduced. A Perimetral Park or as it is known as Metrobosco would finally be implemented, and having the attributes of a Green Belt, would not allow the further horizontal alignment rather than would contribute to the creation of a compact city [Fig. 2].
While the Green Belt gives some answers to the problematic of urban sprawl, many questions arise for the city itself in terms of porosity, presence of landscape, standards as per the green spaces within its fabric, and landscape possible use in shaping the existing fabric, especially the informal areas. Being developed mostly spontaneously, without a Regulatory Plan (what is today called the General Local Plan), the buildings, especially the informal settlements have filled the spaces and have contributed to the creation of this continuous city fabric, similar patterns, and many times creating contradictory coexistence. Exactly these situations are subject to this study to implement landscape as a medium for city transformations. As will be illustrated below, this is completed by analyzing some of the most vulnerable areas of the city containing different problematic.

**Informal Settlements & Industrial Area**

During the Socialist regime, different industries were invested in the peripheries of the cities. Areas such as “Kombinat”, “Uzina e Autotaktoreve”, etc., were important industrial areas detached from the city. During the last 30 years, these areas have been also invaded by informal settlements. Nowadays the center and the satellite neighborhoods are connected and do result in a continuous build environment with a mixture of industrial, old, new and informal housing [Fig. 3].
Informal Settlements & Infrastructure

The informality was developed at such speed and there were no possibilities of planning especially the infrastructure. Nowadays that the city has quadrupled in size and population, there are difficulties in infrastructure development due to the presence of informal settlements and the process of expropriations. This is resulting very costly process as well. Due to minimum interventions, often informal settlements due have an uncomfortable closed approximate to the infrastructure axes [Fig. 4].
Informal Settlements & Formal Settlements

In general, there is a mixture between formal and informal, particularly in the areas of Yzberisht, and Kashar this coexistence between informal buildings and formal ones is very present and organized in large areas. They are different patterns, not only in terms of permits but also in terms of constructions, scale, public space, services, etc. Problems due exist in these areas in terms of social cohesion as well, as these two different morphologies share their own particular common spaces [Fig. 5].

[Fig. 5]  Tirana Topography; Maps; Orthophotos; Land Use Map
Source: www.geoportal.asig.gov.al

Informal settlements & natural and semi-natural land

There is a large number of previews of agricultural land turned into a build environment. This has caused further defragmentation of land. Not only a problem in terms of decreasing the productive land, conflict with possible previews owners but also in its managing, pollution, also in aesthetics [Fig. 6].
Informal settlements and cemetery

The pressure of construction has been at such a high level, there have been no limits as per their positions. One of the most problematic areas is considered the closeness of the informal settlements to the cemetery. The most problematic more than anything is of a social and psychological point of view. Especially in this case, interventions of the landscape are seen as a keyword towards a solution [Fig. 7].
Landscape as Urbanism

As previously mentioned, the keywords in the overall urban development framework are related to sustainability, ecosystems conservation, concepts related directly to the natural environment not only in the city outskirts but also inside its footprint in the conditions the cities are today - high urbanization of territory.

As per the 21st-century theories on urban development, the landscape is brought back to the center of attention. As Charles Waldheim represents in his theoretical book Landscape as Urbanism, the use of Landscape could be a way of rethinking the city. As a medium, with its resilience can organize, transform and shape the city, and at the same time allow further developments in the future. By this medium, the purpose is not only to change the quality of life in the city, but also that of offering sustainability over time. Regarding the quality of life, although there are some efforts from the local authorities in implementing strategies, not too much has been done as per drafting standards which seems to be not only the method of evaluating your progress, but also could assure comparison between different cities performances. In this particular study, we’re referring mostly to the green area of cities in terms of quantity and quality of life, especially that of informal settlements as the most vulnerable ones. The developed countries have already defined by international standards the evaluation criteria and their values for evaluating sustainable development. Not too much is being done mostly due to the high pressure of construction, but also to the difficulties the informality has created during its spontaneous development such as urban filling, land consumption, ownership, land-use transformation, or partial lack of will from the local and central authorities.

Method and Results

Transformation of territory

The method of studying the territorial transformation has been done by analyzing the maps and orthophotos of case study areas that were chosen based on “typology” and vulnerability scale. The land-use transformation during different years is studied to be able to stratify the buildings as per their age, but also try to understand the original character of each area. The transformation of both the city footprint and the urban filling has been studied taking into consideration the information available at www.asig.gov.al. There are several important periods of time taken into consideration such as the socialist period, beginning and end of transitory periods. The last land-use proposal has been taken into consideration as well for being a better understanding of the actual problematics and the GLP approach to them.

Interventions

Considered to be the simplest, but yet the best to illustrate new concepts, the schematic applicative methods based on the theoretical model is being used in this study and interpretation in terms of quality of quantity is described for each case study [Fig.8].
A third phase, not part of this study would be the analysis of the phases of the interventions and strategies on steps to follow.
Discussions

The city of Tirana does handle a lot of problematics due to this transitory period, but not only. The pressure on the construction industry is at very high levels. An unsolved and important part of the city is the Informal Settlements Areas. Like in all countries, these are very socially sensitive areas, and therefore they will not be relocated. On the other hand, they do create problems for the general quality of life in the city in terms of accessibility, orientation, but the way they are constructed, they do generate problematics for themselves.

The role of the green area is definitely positive and does give a big contribution to the quality of life in several aspects such as (1) functional (public spaces, services, infrastructures, accessibility); (2) Social (lack of social cohesion, lack of quality of life); (3) Structural Aspect (Lost of Identity through the uniformity implanted); (4) Economic (Defragment of agricultural land); (5) Quality of Life (Possible improvements of same indicators especially in the conditions of growing population); (6) Ecological Aspect (Ecological corridors creation; Conservation of Ecosystems and Habitats, therefore a more sustainable and resilient city.

Conclusions

This study aims to make a theoretical explanation of the use of landscape and came to a few applicative instruments to give some solution to Informal Settlements Areas. These areas will require a lot of time to acquire certain characteristics and values, but landscape interventions seem to be the ones that have the minimum effect on costs, is a sustainable and resilient solution.

While other studies have been oriented towards the effect of Perimetral Park, this study is oriented towards the internal network. Understandably, other larger and more detailed studies should happen before the implementation starts.

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Residential Collective building facilities for reintegration of repatriated people in Ferizaj

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Abstract. In recent years in Kosovo, there has been a trend for many Kosovars to sell all their property and move out of Kosovo for a better future. But many of them cannot find themselves there or the asylum seeker does not accept them as Kosovo is not part of the country at risk of crisis. They spend some isolated time there and many seek to return to Kosovo but have no way of integrating as most have nowhere to return. Kosovo has done little for this category of people who according to statistics make up a very large population. The first part of the paper will analyze these categories of people, where through interviews and many other detailed analyzes will be extracted the main factors of migration and the main factors of the problem of reintegration. Following these analyzes, as a second part, there will be a concrete project plan in the Municipality of Ferizaj for the creation of collective housing facilities for the integration of repatriated persons in this municipality.

Keywords: Migration; Repatriation; Reintegration, Sustainable Integration;

Introduction

Migration is the movement of people from one place to another with the intention of settling permanently or temporarily in a new location. Movement is often long distances and from one place to another. People can migrate as individuals, in family units or in large groups. A person moving from their home to another country due to natural disaster or civil disturbance can be described as a refugee. A person seeking asylum from political, religious or other forms of persecution is usually described as an asylum seeker. This phenomenon has also happened in Kosovo due to the very low standard of living and political problems that have occurred in recent years. Many people as they cannot find themselves there as most EU countries are not given the right to work decide to return to Kosovo. But the main problem for these people is reintegration into Kosovar society, taking into account housing insurance, health treatment, social welfare, employment and vocational training and supplementary education.

Purpose of the research

The purpose of the research is to study what are the problems of the persons who have migrated and why most of them have problems during repatriation to Kosovo, so they do not integrate into life.
Factors for sustainable integration

The process of analysis included identifying key factors affecting the sustainable reintegration of repatriated persons who have made substantial progress in implementing the current strategy. These factors are: government legislation and policies, funding, decentralization and the active role of municipal bodies, case management system and international assistance. The reintegration process represents an important achievement that can be characterized as a priority for further development. Institutional reintegration mechanisms, a comprehensive reintegration system, institutional support structures, legal framework and operational reintegration procedures should be established.

Repatriation statistics in Kosovo from 2013-2017

In Kosovo, over 50,000 citizens of our country have been repatriated from 2013 until February this year. According to the Ministry of Internal Affairs, Germany is leading in terms of returns. The ministry notes that EU countries, particularly Germany, Switzerland, France, Sweden, and Austria are continuing to return Kosovo citizens who are staying illegally in these countries. “The readmission process has worked quite well so far and this is also reflected in the European Commission's Kosovo report and other reports by international institutions and organizations. The Department for Citizenship, Asylum and Migration is implementing readmission agreements signed with various countries.

Figure 01. Statistics of repatriated persons in Kosovo 2013-2017

It is very important after the first stage of the data on the number of persons to know the age, divided into 6 categories.
In order to plan a successful reintegration, it seems necessary to know the age of the repatriated persons, to determine their activities and contribution to society.
According to the statistics presented above, it is seen that the highest percentage belongs to the age group of 18-34 years, an active working age with a percentage of 65.9%; the second category with the highest number being 35-64 years old.
Each category has its own importance, where it should be treated separately for sustainable reintegration.

**Analysis and results from the questionnaire**

A very important point to deal more closely with the problems faced by repatriates in Kosovo and the lack of sustainable reintegration is the very important interviewing of these persons, where some questions can be reached to determine the reasons for non-reintegration. The results of the questionnaire were very close to each other, highlighting largely the same problems faced by repatriates.

When asked what is the reason for migration, most have taken note of the economic situation, while one major point left out is the issue of information where the majority did not have any information on state aid.

Another problem is the housing situation where most of them live in poor conditions, followed by social and educational problems that make it difficult for sustainable reintegration.

On the last question of whether an integration plan is needed for expatriates, all of whom offer housing and integration, all were very well received but who were very specific about such a program.

**Project Proposal**

**Description**

The pilot project initially proposed will be for the municipality of Ferizaj, then the same program can be used for other municipalities in Kosovo.

Construction of collective housing facilities for repatriated persons in the municipality of Ferizaj.

The program covers a period of 3-5 years of residency, and will also include shops as an "incubator" for training and development of private business supported by the state and the municipality in various fields for the preparation of the working class in occupations, different to have a sustainable reintegration

**Location**

The selected location is owned by the municipality of Ferizaj and is located in the northwestern part of town. This area of the city is also called the "new city" as it was recently developed on this side with residential complexes and fulfills all the housing criteria.

As it is mainly an area of collective housing construction, it will also be very easy to develop our collective housing program for repatriated persons.

It is a major advantage that the infrastructure is regulated by easy access to the main city streets which connect to the rest of the city.

As can be seen from Fig. 01, the location is very convenient where the distance from the city's main cultural, educational, and health facilities does not exceed 15 minutes walking distance.

Apart from the facilities mentioned in close proximity there are also sports fields for the development of sports activities.
Concept

The initial concept originated in the form of a geometric cube that figuratively represents Kosovo, where this shape has changed during migration, breaking away from the former. At this stage a new form of detached parts has been created. Later when these detached bodies have evolved and changed shape from the original form they wish to return to their original state but no longer fit into the original body. These bodies must be integrated in various forms to give the object a function, in which case repatriated persons must be integrated into society, not only physically but also in all social spheres of life. A conclusion must be reached that these bodies are not an obstacle to the object but that they give the object a dynamic and dynamic function.

Function of the building

This facility has a mixed function on the ground floor and the first floor is a shared business space in the shape and function of a shopping center, which includes business shops with different areas depending on the business purpose, as well as the training center within of the reintegration program, while the upper floors are entirely dedicated to collective housing with separated access to the business part.
Figure 02. Ground Floor

Figure 03. Living Floors
The western part is the part of the inhabitants' entrance to the dwellings, where the ground floor and the first floor are mainly of glass facade, while the other part of the thermofascade. These two colors symbolize one of the colors of the embedded press process emblem.

The eastern part is the part of the entrance to the business which is a public part, where the ground floor and the first floor are mainly of glass façade.

Figure 04. 3d visualizations

Figure 05. 3d visualizations
Results from the project proposal

From the project proposal applied according to the research conducted for the reintegration of repatriated persons in the Municipality of Ferizaj, we will have the following results:

- Easier information for repatriated persons.
- Reintegration into the housing field where housing is provided
- Preparation of staff in various professions for the labor market in Kosovo and abroad.
- Easier access to the rest of the city as a unified group.
- Holding trainings and courses in different fields and languages.
- Reintegration in the field of education
- Provision of medical services
- Reintegrate with other community members in cultural and other areas for faster and longer-term social reintegration.

Conclusion

The current situation in Kosovo offers limited opportunities for returnees to improve their living standards and reintegration. Challenges include an extremely difficult economic and social situation, and high levels of unemployment driven by the volatile political situation in Kosovo. Unfortunately, the increase in returns from Western Europe to Kosovo is often linked to the limited capacity and lack of relevant authorities to deal with a high influx of returns.

This research and project proposal will raise institutional awareness and address problems not only superficially, but only as a document, but take concrete steps based on the project proposal and set an example for other municipalities to solve the problem of this category of persons.

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Urban blocks, geometric methods, application of space syntax

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Abstract. This study is based on the strategic development plan (SDP) and urban development plan (UDP) for the city of Ferizaj, 2008-2015 +, as well and the 2011 regulatory plan (RP), which expired in 2016. Functionality of the city center of Ferizaj, solving the problem of moving in the downtown area and other areas, regeneration, reorganization and revitalization of the formation of urban blocks. Adequate traffic solution that enables the creation of reorganized areas of the city is a must and a primary necessity. The methodology of approaching the solution of urban problems with the geometric method using the constants $\phi = 1.618$ and $\pi = 3.14$ golden section and golden number as well. The impact of Space Syntax which highlights it’s the relation between abstract social relations and physical space through spatial characteristics. The relationship between the internal space of buildings (micro world) and the outer space (macro world) which are determined by the buildings themselves.

Keywords: space syntax 1, urban block 2, infrastructure3, “The Image of City” Kevin Lynch 4

Introduction

The research is based on my experience and commitment to the Council of Experts on Urban Issues and Development and Regulatory Plans, for a long time active participant in their drafting in the role of consultant, even as active participants in public discussions. These discussions did not provide any output in the process. The reasons for this failure are many, among others worth mentioning

• Missing prior experience, the city has had no regulatory or development plan, no general urban plan, except for some parts that were worked 40 years ago, and as a result we have

• Spontaneous construction, which has formed a greed of inadequate longitudinal roads and alleys with an extension and positioning that creates a dysfunctional road

• Professional development, it is not proven that it is at the right level for preparing the documentation and approaching this problem. this should be added to the preparation for presentation at public discussion with citizens, as a consequence;

• Public discussions are too long without results;

• the construction process continues with rules that only further complicate the situation in the city
Consequences

1. Lack of sun presence in the spaces where we live (distance between objects under any minimum)
2. Lack of space surrounding the building and affecting in the comfort of residents who it’s living in it (parking lots, green areas, children’s playground)
3. The street network, inherited from a street with individual residential buildings (houses) now serving collective housing facilities, the houses have been replaced by multi-floor residential buildings.
4. Hierarchy, in terms of organization in a standard’s Residential block, urban block, urban area, does not exist.

Threats

- Pollution of the environment due to the overloading of roads by vehicles
- Psycho-physical condition of the inhabitants especially of the younger generation
- Lack of social life, turning it into a threat’s
- Creating an isolated life, cut off from the outside world

All that has been said so far, are known and identified, are part of our daily lives. The question is how we approach problem solving, not just identify problems. So far, the more we try to make changes, the sooner we get back to the beginning, and this makes us feel “the lost” not only geographically but also intellectually and mentally.
Before approaching the solution of the problem we must first understand:

What is the City?
A space organized on a surface that is managed by the people who living in it, which space must provide a healthy, harmonious environment that space must be adaptive and evolving. A space where every person living in it follows the path of life by their choice.

How we approach the change that will be the result of the ingenuity and understanding of global technology development and how we will accept that change.

The 20th century city’s as a result of technological development has been divided into 3 zones, in the Industrial zones, sports and recreation, living, and the fourth element is the traffic that connects all these zones and has enabled interoperability between these areas.

But the development of technology also influences the change of organization of spaces in the city itself. New technology no longer requires as many workers as it was in the last century, new computer and robot systems create new occupations that can be performed or developed by the home or any other object, fare from the place where the product is manufactured.

Some firms do not even have a facility in which employees have to be present every day, just through an electronic system to process their work in a center.

Sport and recreation is increasingly under the service of professional sports and their sponsors, rather than people who would like to recreate those spaces. Traffic should not be overlooked, namely the roads on which vehicles are increasingly presenting a breakdown rather than a connecting element, a pedestrian to cross from one side to the other ten road profiles b = 20-25m presents a stressful challenge.

All these factors are elements that cannot be overlooked in the approach of changing living spaces in our cities.

In the book THE IMAGE OF THE CITY author Kevin Lynch, among other things he says:

"Not only is the city an object which is perceived (and perhaps enjoyed) by millions of people of widely diverse class and character, but it is the product of many builders who are constantly modifying the structure for reasons of their own. While it may be stable in general outlines for some time, it is ever changing in detail. Only partial control can be exercised over its growth and form. There is no final result, only a continuous succession of phases. No wonder, then, that the art of shaping cities for sensuous enjoyment is an act quite separate from architecture or music or literature. It may learn a great deal from these other arts, but it cannot imitate them."

The art of forming cities
What can be learned from other arts?

- Literature - written language, in which linguistic elements (such as words) are joined to form the logical meaning and content of a description (such as phrases or clauses), while the way in which words are arranged in grammar is called Syntax
- Architecture: a connected or regular system: the harmonious arrangement of parts or elements that serve a function or functions, an arrangement of spaces here too we have syntax but a syntax of graphical language. But it should be noted that the architecture is also based on proportions, a module which is the measure of the dimension of each space and each element in that space, a module that is a product of what is called the Golden section and the golden number.

Art music that is not seen but heard, its elements are tones and overtones, which, depending on the arrangement (syntax), are arranged in a harmonic rhythm that creates the melody. 1; 1 + 1
$2 + 1 = 3; 2 + 3 = 5; 3 + 5 = 8; 5 + 8 = 13 \ldots \text{ and so on, one a mathematical sequence or process that represents the constant } F_i (\phi = 1.618\ldots)

In this combination, using the other arts, we reach the rectangle which if the longest arm has the value of 1 (one) then the shortest arm will be $1 / \phi$, this rectangle represents the ideal proportion, on the basis of which the golden spiral is created, the golden triangle $\Pi_i (\pi = 3.14\ldots)$ Constant which appears much earlier than $F_i (\phi = 1.618\ldots)$, sometime around 600 BC which is constantly discovered by Pythagoras during the solution of the design structure, namely the design of the pyramids in Giza.

How will the above elements now affect the planning, change and reorganization of our cities: space syntax; constants $\Pi_i$ and $F_i$, gold section, golden spiral, and golden triangle. Proportion

Kevin Lynch - points out that there are 5 key elements that make us understand space syntax in the city

1. The description of space
2. The theory of natural movement
3. Cities as movement economy
4. The simultaneously multi-scale city
5. The dual grid

These 5 elements represent the fundamental concept of space syntax.

In my research I will focus on the element:

The description of space

Existing areas or existing spaces as stated above (Consequences… 3. Infrastructure network, inherited from a road with individual residential buildings - the house on both sides of it) and an extension of these roads in the distance between the 40 -50m, with a profile outside the norms that would be suitable for a residential road, with a great length of 600-700m 'some terminating without access or connection to any other road, which are connected only to one main road by also made it non-functional (for reasons of short distance access). Extremely narrow sidewalks, and an economy stretching along this main road.

In such a description, it is noted that it is not possible to organize a space with objects that would meet the normal conditions of life unless steps are taken to enable an organization based on the principles of Space syntax using geometric methods based on the constant's $\Pi (\pi)$ and $F_i (\phi)$.

There are 3 main elements in the city that interest every resident in the city:
1. The road, as short as it can be
2. Plato-area (residential block, urban block) in which it is located
3. Address - the object where he lives

Object-building which can have many floors (apartments) or individual residential object (house)

The purpose of the study will be to change the living space - from individual living (house), to collective living spaces - apartments with different shape and flooring.
Fig. 2 Possible form of objects solved based on the principle of $\phi$-constant

Fig. 2 shows 3 different versions of the shapes that represent the types of multi-story buildings. The object is the basement of an object can have a maximum length $L = 50 m^2$, also permitted by the building laws (fig. 2) in which the apartments are located, while an apartment that meets the normal conditions for a family will be
The most requested apartment in the market and which fulfills the requirements for a family, with a surface of $A = 85 \text{ m}^2$, which surface are organized the spaces that need to own an apartment. We will take this as a floor unit.

Fig. 4 shows how many apartments can have a characteristic floor length $L = 50\text{ m}$, as well as the width of the building $B = 16\text{ m}$. At the bottom of Fig. 4 is shown the pot garage of the same lane in which 30 vehicles can be parked, a number equivalent to 3 residential floors, respectively 24 apartments.
Whereas the proper surface where the object is placed depends on the distance obtained where the edges of the surface where the object is placed will be the axes of future roads.

If the short arm of the rectangle where the object is placed will be \( L = 50 \text{ m} \) then the longest arm will be \( L \times \phi = 80.902 \text{ m} \).

Then with the geometric principles, we will have objects with floor and height, basement depth and foundations as well. the corridor of the street as in Fig. 5.

Fig. 5 the example where the short side of the surface where the object is placed is \( L = 50 \text{ m} \). On the left side of Fig. 5 is the building belonging to a residential block, on the right side is the building located in a row around a street profile. the example shows how the objects arranged in blocks have higher story’s than the objects that belong to a string that are bounded on both sides by the road. Residential block organization is a better option, it enables higher flooring, green area organization, parking and business.
Figure 6. Possible blocks are presented, if we analyze the example of a residential block with 6 objects that are placed on an area $A = 27,725,425$ m$^2$, we will have this information:

- 384 apartments
- Road profile $a = 10.7m + 1.5m$; green ribbon on both sides + 8.65m sidewalks on both sides of the road
- Designated regulatory and construction lines
- Apartment’s and number of floors
- Height of public and business spaces
- Number of vehicles and parking lots in garages and underground parking levels
- Technical flooring that separates the apartment’s floors from the business

With this method we will not only have a graphical or functional solution but we will get a set of information. With the increase or decrease of the short side of the rectangle where the object is placed, all parameters will change, but not in content.
Fig. 7
Example where the short side of the rectangle, the surface where the object is placed, \( L = 60 \text{m} \)

Fig. 8
Example where the short side of the rectangle, the surface where the object is placed, \( L = 40 \text{m} \)

**Purposes of the research**

Cities in general are in the process of urban change, a partial and continuous process which, with time and social economic changes, has been rising or falling respectively stagnation, faster or slower changes, but that process has not stopped. Implementation of geometric methods as a product of \( \pi \) and \( \phi \) constants, as well as the analysis of space syntax in urban research and planning. Provide a sustainable solution that can be characterized as a process in which the quality of life is developed so that social and economic life is not a threat to the survival of environmental elements and ensures their continuous improvement.

With these methods we will have a process that will be a continuum of changes in the transformation of the city for decades to come. For me, applying these methods represents disciplined thinking and disciplined minds in solving the spaces in which we live.
Administration of Residential Buildings in co-ownership

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Abstract. The residential sector in Kosovo is currently facing the same challenges as other post-communist countries faced during the transition period. The issues of administration of condominiums that emerged after the transition, are like ones that are faced in Kosovo and comparable to the countries from the region and some other countries from Central and Eastern Europe. With the transition of residential sector towards free market in 90’s, a considerable number of buildings in co-ownership got privatized. The right to permanent residence was transferred into co-ownership. At the same time, the responsibility for administration and maintenance of the building was transferred to the new owners. Lack of creation of association of owners and administrators in these buildings led to the deterioration of the conditions in condominiums. The stock of condominium buildings, especially those constructed before 1998 are in grave conditions in terms of maintenance of common spaces. Based on European practices, in order to regulate this area, Kosovo has passed the Law No. 04/L-134 for the buildings in co-ownership (condominiums) along with Administrative Instructions, Guidance material and several leaflets. During the process of monitoring of implementation of primary and secondary legislation for the condominiums by the stakeholders that deal with maintenance and cleaning of common areas of the building, it was identified that the owners of the condominiums that are constructed before 1998 are reluctant to get organized in the form of association and consider that the maintenance is the obligation of the Municipality. Whereas in the new condominium buildings, the investors/the developers impose a tariff for the maintenance of the building as part of the agreement of purchase of the individual units. Therefore, from this research, one will propose the indicators and good practices that will influence in the sustainable administration of condominiums, in the increase of awareness to live in condominiums. All this study is performed with the aim of keeping the building and environment where one lives in clean and efficient condition, based on the Legislation and good European practices.

Keywords: Condominium, co-ownership, Association of owners, administration, energy efficiency in the buildings.

Introduction

The background on the condominiums in Europe
Many countries in Europe have a long tradition in utilizing the concept of condominium. The latter represents a special form of ownership of the buildings whereby the exclusive ownership of a part of the building, i.e. a flat, is combined with the joint ownership of the common spaces of the building that are utilized by all the owners and inhabitants of the building. At the start of the ‘90s many countries in Europe have passed through the phase of political and economic transformation which has also played a role in the residential sector and policies of the latter. The new policies in the residential sector have brought about fundamental changes in
the functional elements of management practices and those of maintenance of the buildings, by transforming them from municipal service that was regulated by the state, into self-regulating service which is managed by the owners. The request for improvement of legal framework in this sector, as well as to improve the efficacy of the buildings in co-ownership was rather emphasized and this was the reason why many governments of European Countries have reflected on the subject.

In some countries, the responsibilities to administer the non-privatized buildings was transferred to the municipalities, they in turn did not have enough budget to manage this housing fund. In other countries one established the semi-public enterprises, such is the fund of housing in Slovenia and Austria which continued to manage the remaining residential buildings by giving them against low rent as social housing for the needy families.

After the privatization of the buildings, the laws in several countries of Eastern Europe have determined that the right in joint ownership towards the common property in the residential buildings, including the land parcels around the buildings are represented in the certificate of the ownership of the flat. In the case of Estonia, Hungary, Latvia and Slovakia, the land parcels represent joint ownership of the owners of the flat and they are registered as such in the Cadaster. This implies that the Municipalities have divided the residential parts and the land lots to many residents in consistent manner. In some other countries, the joint ownership remains with the Municipality. Through the transfer of ownership from the state or the municipality to the former tenants, one transferred also the responsibilities to maintain and rehabilitate the joint parts of the building.

By being in private ownership, the new owners are expected to maintain the residential multi-flat buildings with their own expenses. As a result of this, the owners of the flats in multi-flat buildings are obliged to divide the general expenses to maintain and repair the common building and to pay for the public services. The problem that is commonly faced in several Eastern European and South Eastern Europe counties is the failure of several owners to pay the expenses. The laws in Estonia, Hungary and Slovakia have an important provision through which one stipulates that the failure of the owner of the flat to fulfil its obligation to share the general expenses (including the payments of the services) represents a breach of the property rights of other owners in the multi-flat residential building. Based on this provision, the owners that do pay their expenses, have the right to ask the owners who fail to pay the expense to fulfill their obligation and to pay for the damage caused by failing to pay, or for late payment of the obligations or other mandatory fees. Some countries (Hungary) have even more strict provisions such is the selling of the apartments of the owners who fail to meet their obligations regarding the maintenance and administration of joint property or registering it as a collateral in the Cadaster.

A very important element is the determination of decision making which is rather important during the general renovation or other upkeep activities in the condominiums. It is indispensable the establishment of the association of the owners for all the owners of the flats. Despite the drafting of legal basis in various European countries, the phase of implementation lasted for a long time and it was marked with lots of problems. In Ukraine, it took almost ten years from the passing of the legislation on privatization of the buildings, until the law on condominiums was adopted, whereas in other East European countries, they still face with the problems in regulation of the joint ownership and the functioning of the associations of the owners in condominiums. This is as a result of the vacuum in legislation, the lack of financial means and campaigns on increasing awareness. The difficulties in implementation mostly occurred as a result of the habit of the residents to maintain only their individual units, also as a result of lack of financial means.

An important issue regarding the condominiums is if the national laws and regulations require the creation of the association of the owners in each building, or in a group of multi-flat buildings that got privatized. In more advanced economies, it is more favorable the mandatory membership in the association of the owners, as a legal requirement. The existence of this legal
provision is very important for the success of reform in residential sector and the privatization in the countries undergoing transition. Based on the guidance of “United Nations Economic Commission for Europe (UNECE)” on the management of condominiums in countries undergoing transition in East Europe, it is very important the education of the owners on the nature of this form of maintenance of ownership, the values and its advantages and to assist those in practical management of the condominiums. Based on this guidance, without strategy nor specific actions on multi-flat buildings, the real-estate markets in the countries undergoing transition in Central and East Europe will be facing serious problems.

The civil codes and the legislation that regulates the residence issues, usually represent the main legal basis that regulates the co-ownership. The civil codes regulate the rights of ownership for the apartments, as well as for common spaces in the multi-flat apartment buildings, whereas the related legislation with residency regulates the management and maintenance of the units of condominiums, the responsibilities of the owners of the flats and the main elements that relate to decision making in condominiums. The legal basis is usually accompanied with guidance that cover various aspects of creation and functioning of the co-ownership.

One will present the statistical data and the process of comparison between two systems in two different time periods regarding the administration of condominiums.

The time period before 1998/99
In the period before 1998/99, based on Basic Law on Governance of Condominiums owned by society (“Official Gazette of Socialist Federal Republic of Yugoslavia, no. 35/1965), it is stipulated the possibility of establishing the condominium management enterprises in the Municipalities with the purpose of administration of residential buildings owned by society. The residential fund before the last war of KLA 1998/99 is developed through the joint contribution by state owned enterprises or other state institutions of the employees. Municipality of Prishtina, based on the mentioned law, took the decision in 1967 to establish the Municipal Condominium Enterprise, which functioned until 1974, when through a decision the social residence fund which was governed until then by the municipal body on apartment issues at the Municipality of Prishtina, it was transferred for governance and administration to the condominium enterprise.

The time period after the years 1998/99
Initially, in dealing with this issue, they passed the Law No. 03/L-091 on use, administration and maintenance of the condominiums, which entered into force 15 April 2009. With the purpose of advancement and facilitation of the procedures on administration of condominiums, one passed the amendment of this law with the Law no. 04/L-134 on the condominiums, which entered into force in August 2013. Based on the latter, one adopted all the bylaws in order to implement it. In addition, in order to render it applicable, the Law no. 04/L-134 on condominiums and in order to facilitate the campaign of awareness, they drafted the Guidance on implementation of Law no. 03/L-134 on condominiums as well as the brochure “What do we need to know on condominiums”.

Even though this Law represents a solid basis for the regulation of issues of co-ownership and administration of condominiums, the clear definition of certain issues remains a challenge to efficiently implement it. Especially, a challenge remains with lack of clear definition of common spaces in the apartment buildings, administration and maintenance of buildings in co-ownership, the definition of rights and obligations of accountable mechanisms to implement the law, etc.
Objectives

The purpose of this research is the analysis of the process and the procedures of administration of condominiums that are constructed in different time periods and that are classified in multi-flat buildings that are constructed before 1998/99 and that are financed, constructed and managed by former socially owned enterprises and the buildings in co-ownership that are constructed after 1999 in the Republic of Kosovo, whereby most of them are financed and managed by the private sectors or through a private-public-partnership (either through co-financing or through concessionary joint financing).

The treatment and review of problems that are as a result of implementation of several legal provisions. The most challenging issues that were faced during the implementation were: initially the change of legal system of Kosovo, then the change of management of the condominiums from former socially owned enterprises to the association of the owners, the administration and management of the residential buildings in co-ownership.

Residential condominium buildings

Therefore, based on the afore-mentioned, in this paper I will elaborate the possibility of positive change of the existing policy where the main goal would be the review and definition of ownership and usage of condominiums with common spaces. In order to meet this goal, I have put some objectives that would render the process and administration process of condominiums much easier, such are:

- Definition of the ownership of the common spaces and the construction site and the space around the building, as well as the share of participation in the co-ownership;
- Determination of the title of co-ownership and registration of the same;
- Definition by law of the owner and the user of the residential unit;
- Oversight of the implementation of the regulation on the co-ownership in the residential buildings in condominiums and the definition of the body that would perform the oversight;
- Determination of the privileges, obligations and the responsibilities of the authorities of local governance;
- Determination of privileges, obligations and responsibilities of the owners of the condominiums;
- Determination of the privileges and obligation of the users of the condominiums;
- Determination of the privileges and obligations of the developer of condominiums;
- Determination of the obligations of the owners of flats that are not being used or the users of the buildings that are no owners;
- Determination of minimum and maximum tariffs that should be based on the types of the services of maintenance including the cleaning, security, maintenance of parks and spaces around the building;
- Definition of the responsibilities of the administrators and the society of administrators of the condominiums as administrative associations of condominiums, as well as the issues that should be included in the administration of the buildings in co-ownership.

The statistical data that are presented in the research reports of the Kosovo Statistical Agency and that have presented a description starting from the type of the residential buildings, type of residence, number of families and number of persons per flat.

In addition, in the following tables one listed the buildings as per the type, status of usage and the type of residence in the municipalities.
# Municipalities and the type of residence

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Total</th>
<th>Total</th>
<th>Used by one or more residents</th>
<th>Used by residents who are not included in census</th>
<th>Used by random or secondary usage that is not included in census</th>
<th>Flat not used for residence (dedicated for sale, rent, etc.)</th>
<th>Another type of flat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kosovo</td>
<td>412,884</td>
<td>412,519</td>
<td>293,078</td>
<td>1,083</td>
<td>18,550</td>
<td>99,808</td>
<td>365</td>
</tr>
<tr>
<td>Urban</td>
<td>175,942</td>
<td>175,791</td>
<td>126,056</td>
<td>811</td>
<td>6,584</td>
<td>42,340</td>
<td>151</td>
</tr>
<tr>
<td>Rural</td>
<td>236,942</td>
<td>236,728</td>
<td>167,022</td>
<td>272</td>
<td>11,966</td>
<td>57,468</td>
<td>214</td>
</tr>
</tbody>
</table>

Tab. 1.1 Flats according to the type, status of use and type of residence in the municipalities

<table>
<thead>
<tr>
<th>RESIDENTIAL FLATS</th>
<th>Number of common residential flats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Detached</td>
<td>222,984</td>
</tr>
<tr>
<td>Semi detached</td>
<td>5,116</td>
</tr>
<tr>
<td>Apartment building</td>
<td>1,908</td>
</tr>
<tr>
<td>Row or row of houses</td>
<td>735</td>
</tr>
<tr>
<td>Other</td>
<td>253</td>
</tr>
<tr>
<td>Total</td>
<td>230,996</td>
</tr>
<tr>
<td>Buildings that are not inhabited</td>
<td>230</td>
</tr>
<tr>
<td>Total</td>
<td>231,226</td>
</tr>
</tbody>
</table>

Tab. 1.2 – buildings according to the number of flats that are inhabited and the type of building

<table>
<thead>
<tr>
<th>PERIOD OF CONSTRUCTION</th>
<th>Number of regular number of flats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>&lt;1960</td>
<td>5,671</td>
</tr>
<tr>
<td>1960-1969</td>
<td>9,790</td>
</tr>
<tr>
<td>1970-1979</td>
<td>26,505</td>
</tr>
<tr>
<td>1980-1989</td>
<td>46,965</td>
</tr>
<tr>
<td>1990-1999</td>
<td>45,597</td>
</tr>
<tr>
<td>2000-2009</td>
<td>50,012</td>
</tr>
<tr>
<td>2010</td>
<td>6,232</td>
</tr>
<tr>
<td>2011</td>
<td>454</td>
</tr>
</tbody>
</table>
### Tab. 1.3 – the buildings according to the number of inhabited regular flats and the period of their construction

<table>
<thead>
<tr>
<th>Type of residence</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A flat with one or more regular residents</td>
<td>126,056</td>
<td>167,022</td>
<td>293,078</td>
</tr>
<tr>
<td>Flat with inhabitants that are not included in registration</td>
<td>811</td>
<td>272</td>
<td>1,083</td>
</tr>
<tr>
<td>Flat reserved for seasonal usage/or for secondary use</td>
<td>6,584</td>
<td>11,966</td>
<td>18,550</td>
</tr>
<tr>
<td>Empty flat</td>
<td>42,340</td>
<td>57,468</td>
<td>99,808</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>175,791</td>
<td>236,728</td>
<td>412,519</td>
</tr>
</tbody>
</table>

### Tab. 1.4 – Regular flats according to the type of location (urban/rural) and the status of residence (Data from the report “Registration of Population, families and flats in Kosovo 2011” – Statistical Agency of Kosovo)

<table>
<thead>
<tr>
<th>Type of property</th>
<th>Type of residential units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regular flats</td>
<td>Other types of units</td>
</tr>
<tr>
<td>Private property</td>
<td>293,188</td>
<td>265</td>
</tr>
<tr>
<td><em>In which the owner lives</em></td>
<td>283,789</td>
<td>234</td>
</tr>
<tr>
<td>Public property</td>
<td>1,246</td>
<td>14</td>
</tr>
<tr>
<td>Mixed property</td>
<td>781</td>
<td>2</td>
</tr>
<tr>
<td>Co-op ownership</td>
<td>666</td>
<td>4</td>
</tr>
<tr>
<td>Other type of ownership</td>
<td>654</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>296,535</td>
<td>287</td>
</tr>
</tbody>
</table>

### Tab. 1.5 – residential units that are used according to the type of residential unit and type of ownership (Data from the report “Registration of Population, families and flats in Kosovo 2011” – Statistical Agency of Kosovo)

<p>| Number of residential buildings | 340,945 |
| Number of buildings with at least one regular flat that is used | 247,949 |
| Average number of flats in building | 1.3 |
| <strong>Number of flats</strong>            | 412,884 |
| <strong>Number of regular flats (that are used)</strong> | 412,519 |
| <em>Used by one or more regular inhabitants</em> | 293,078 |
| <em>Used by residents that are not included in census (diplomatic personnel)</em> | 1,083 |
| <em>Reserved for seasonal stay/random use (vacations, seasonal work)</em> | 18,550 |
| <strong>Number of empty flats</strong>      | 99,808 |</p>
<table>
<thead>
<tr>
<th>Number of other residence units</th>
<th>365</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of families per flat</td>
<td>1.0</td>
</tr>
<tr>
<td>Average number of residences per flat</td>
<td>5.9</td>
</tr>
<tr>
<td>Average number of rooms per flat</td>
<td>4.0</td>
</tr>
<tr>
<td>Average surface area used by resident</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Tab. 1.7 – Buildings and Flats (Data from the report “Registration of Population, families and flats in Kosovo 2011” – Statistical Agency of Kosovo)

In absence of a database on the condition of the residential flats in Republic of Kosovo, and especially the administration of the residential buildings in co-ownership, in order to make a description of the present situation, I have used the data from the report “Flats and Buildings in the Municipalities” published in December 2013 and the Report “Registration of the Population, Families and the Flats in Kosovo 2011”, published by Kosovo Statistical Agency.

**Research methodology**

Research methodology that is used in preparation of this paper is presented in the following graph by using the method of feasibility in order to increase the living quality in the residential multi-flat buildings.

Fig.1 Methodology of organization, management and administration of the residential buildings that are in co-ownership based on Law no 04/L-134 on condominiums.

The decision-making bodies for the administration and maintenance of the buildings in co-ownership
The main problem for lack of implementation of this law is:
In Kosovo during this period the private sector constructed many residential condominium buildings without prior permission by the authorities, and there are also many buildings that have exceeded the construction permit by exceeding the construction permit, both in terms of volume of the building, also regarding the number of floors by now respecting the construction coefficients according to the construction conditions and construction permits. In addition, there was a stumble in the process of technical approval of these buildings, especially in Prishtina, and elsewhere in Kosovo based on the legislation in force, the co-ownership cannot be implemented if the building is not issued a technical approval and certificate of utilization. Also, many developer companies even after sell-out of the apartments, they keep the right to manage the common space unilaterally, in contravention to the law.

Result and the discussion

This issue is currently regulated by Law no. 04/L-134 in the residential condominium buildings. During the process of monitoring on the implementation of certain legal provisions, one has observed many problems. The hurdles in implementation are as follows:
- Definition of the issue of individual property and co-ownership in the condominiums;
- Creation, change and dissolution of co-ownership;
- Utilization of co-ownership and the residential units in the building;
- Registration of the condominium building in the cadaster;
- Establishment of owner associations and the decision-making bodies in the residential building and division of responsibilities;
- Administration and maintenance of common spaces in the condominiums;
- Oversight and penalties;

Description of current situation
During the process of monitoring of the implementation of Law no. 04/L-134 on the condominiums by the responsible body which in this case is the Ministry of Environment and
Spatial Planning, has organized plenty meetings in the terrain with stakeholders: the officials from the municipalities, the representatives of the associations of the owners, administrators and representatives of NGO that deal with issues of residence, representatives of the Public Housing Enterprise, representatives of the private companies that deal with the maintenance and cleaning of common spaces, representatives of Notary chamber, representatives of NGO, representatives of research projects, etc. in addition, based on Law no. 04/L-134 on the condominiums, University of Business and Technology – UBT, as the authorized institution by the Ministry of Environment and Spatial Planning has implemented the process of training and certification of the administrators for administration of the condominiums. During these meetings and the process, one identified the challenges, problems and hurdles that have resulted in lack of enough implementation of this law.

Current Policy
Initially, for the treatment of this issue they passed the law no. 03/L-091 on Use, Management and Maintenance of Condominiums which was adopted 15 April 2009. With the purpose of advancing and facilitating the procedures of administration of residential buildings in co-ownership they passed the amendments to the law through law no. 04/L-134 on Condominiums in August 2013. Based on this law, they promulgated all the bylaws that facilitate its implementation. In addition, in order to render the Law 04/L-134 increasingly more applicable for the condominiums, they organized awareness campaigns, they passed the guidance on implementation of law no. 03/L-134 on condominiums, as well as the brochure “What do we have to know on condominiums”.

Even though this law represents a solid basis for regulation of issues of condominiums and administration of the latter, the implementation of legal provisions remains a challenge in efficient implementation of it.

Challenges on implementation of the legal dispositions in practice are:
- Lack of definition of co-ownership in the common spaces of residential buildings;
- Lack of linking the ownership of the building/unit of the building with the ownership over the land around the building;
- Lack of implementation of detailed regulation plans in the case of maintenance of common spaces of the condominiums;
- Lack of definition of ownership of the units of the buildings that creates problems in the establishment of owners’ associations;
- Lack of legal basis that defines the minimum and the maximum of the fee for maintenance of condominiums;
- Hurdles in reaching the agreement on maintenance of buildings by 100% of the owners of condominiums;
- Lack of clarity in determination of the owner and user of the residential unit/lack of certificates on use of new buildings;
- Lack of clear definition of obligations and responsibilities of the owners and users of the units of apartments in the law no 04/L-134 on Condominiums.
- Lack of public (municipal) mechanisms on management of condominiums;
- Lack of definition of institutional responsibilities (accountabilities)
- Lack of fund on management of buildings;
- Hurdles in establishment and registration of the associations of the owners as NGO-s;
- Lack of legal basis for enforcing the payment of fees on services;
- Lack of penalties in case of failure to implement the law;
- Lack of awareness and education campaigns on administration of condominiums;

Change of current policy – Goals and objectives
One should pass a new practical law which would have in focus the respect of right of the owners of condominiums, as well as administration of the condominium residential buildings.

**Purpose:**

Through a new law on the right of co-ownership, one should address the already identified problems mentioned above and that the administration, maintenance and disposition of co-ownership gets regulated in a more suitable manner. Through this law one should defined the principles for determination and utilization of co-ownership, the level of property rights in the condominiums, the manner and conditions to register co-ownership, disposition and utilization of such property, administration of condominiums, transfer of co-ownership and transferring the right the use the condominiums, etc.

**Goal:**

One should reach a clear definition of the property in the condominiums and the surrounding areas of the latter, the rights, obligation and responsibilities of the owners of residential units regarding the utilization, administration and maintenance of the parts, spaces and common equipment of the buildings, co-ownership the building.

**Objectives**

- Definition of property rights in the condominiums and common spaces of plot where the condominium building is constructed;
- Determination of the criterions for registration of co-ownership of residential condominiums in the Register of Real Estate rights;
- Determination of clear criterions for establishment of the association of the owners and the utilization of residential condominiums, as well as clear definition of their status in the registration/certification;
- Determination of obligation of the owners of the residential units, as well as definition of institutional responsibilities.

**Changes to the existing policy – Recommendations:**

- To define through law the co-ownership in the joint spaces in the residential buildings;
- To perform the interlink between the property over the building with the plot where it is constructed;
- Implementation of the detailed regulation plans in the case of maintenance of the common areas of the old condominium buildings;
- To define the legal basis that determines the minimum and the maximum of the fee for maintenance of the condominiums;
- For the maintenance agreement to be valid, one should lower the percentage of the approval of the owners of the condominiums (50%+1);
- One should define the owner and the user of residential unit;
- The municipalities should perform technical acceptance of new buildings and issue certificates for the utilization of new buildings in order to accelerate the process of registration of the owners in the cadaster;
- One should plan the budget for implementation of the obligations that derive from this law for the responsible institutions;
- To define obligation of the residential units through future law for residential condominiums;
• One should define the public (municipal) mechanisms for management of the residential condominiums;
• One should create a budget line for administration and management of the residential condominiums;
• One should define the institutional responsibilities and accountabilities;
• One should encourage the establishment and registration of Associations of the owners in form of NGO-s and define other optional modalities regarding maintenance;
• One should establish the legal basis for mandatory payment of the service fees;
• There should be defined the sanctions for lack of implementation of the law;
• There should be an awareness and education campaign for administration of the condominiums.

Benefits that derive from this research are:
With the supplementation and amendment of the law in force on residential condominiums, one would firstly reach the social welfare, general security in the condominiums, the property and legal right on the individual unit would be reached for condominiums, there would be proper administration of the condominiums, there would be a creation of institutional mechanisms to address all the legal, regulatory hurdles regarding these residential condominiums.

Conclusions

Experience from European countries indicate that the establishment of the associations of the owners as legal entity which acts on behalf of the owners is an indispensable step. In this regard, it is necessary to create possibilities for the registration of the agreement without the full membership of all the owners of the residential units in the building (such is proposed in Slovenia, which is currently passing amendment to the law). In addition, the registration of the co-ownership should be treated through law and it should be done at the onset when the construction of condominium begins. After the registration in the cadaster, then all the owners of residential units would automatically become the members of the association of the owners and they would hold full responsibilities for the management of the co-ownership. One should investigate the possibility of the creation of the unified regulator and that the creation of the co-ownership, administration and maintenance of the condominiums, trainings and increasing the awareness campaigns on the administration and maintenance of condominiums. Stimulation and sanctioning with time limits for this process in general.

References

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Effect of NaOH Molarities on Strength Properties of Ground Perlite-Based Geopolymer Mortars

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Abstract. Geopolymers are the eco-friendly binders derived from activation of alumina silicates such as fly ash and metakaolin with alkaline activators. Ground perlite, a volcanic alumina silicate, has a potential to be a precursor material for geopolymer production thanks to its high SiO₂ content and amorphous form. This paper presents the investigation of geopolymer production with ground perlite and NaOH. For this purpose, mortar mixtures are made with four different NaOH solutions (3M, 6M, 9M and 12M). Mortar specimens with dimensions of 4*4*16 cm are taken from the mixtures and heat curing process is applied to the specimens after casting. The flexural and compressive strength tests are conducted on the mortar specimens at 7 and 28 days of curing. The test results showed that the flexural and compressive strengths of the ground perlite based geopolymer mortars increase as the increment in molarity of NaOH solution, significantly.

Keywords: Ground Perlite, Geopolymer, Mortar, Strength Properties.

Introduction

Geopolymers are alumina-silicate inorganic polymers derived from activation of alumina-silicate powders with alkaline activators [1,2]. Geopolymers are mentioned as eco-friendly materials that have great potential to restrict the CO₂ emissions of the construction sector [3]. Additionally, geopolymers have outstanding mechanical properties [4], dense microstructure [5], high resistance to harmful ions [5] and elevated temperatures [6, 7]. Most alumina-silicate materials, such as metakaolin, fly ash, and calcined clays involve high amounts of reactive alumina and silica have been used as precursor for geopolymer synthesis [8,9]. Besides, most commonly employed activators are sodium hydroxide (NaOH), sodium silicate (Na₂SiO₃), potassium hydroxide (KOH), sodium carbonate (Na₂CO₃) and the combinations of these activators. Perlite is a glassy volcanic rock that can be considered as a precursor material for geopolymer synthesis thanks to its high amorphous SiO₂ and Al₂O₃ content. However, there are very rare studies performed about this topic. In a previous work [10], perlite has been synthesized with sodium hydroxide and/or sodium silicate at oven curing conditions (cured at 100°C for 1 day) or room temperature. The better strength development has been observed for the geopolymers derived from NaOH and sodium silicate solutions with respect to the geopolymers activated with only the NaOH. Additionally, the results obtained from this work show that dry curing is essential for the perlite-based geopolymers.
This experimental work deals with the strength development of ground perlite-based geopolymer mortars. For the purpose, ground perlite has been activated with 3M, 6M, 9M and 12M NaOH solutions, separately. Geopolymer mortars have been produced with the mixtures of ground perlite, CEN standard sand and the NaOH solutions. The mortars are exposed to heat-curing at 100 °C for 48 hours in an oven. The flexural strength (f\text{f}) and compressive strength (f\text{c}) tests are conducted on the mortars at the 7 and 28 days.

**Materials and Methods**

Ground perlite is used as an alumina-silicate source (precursor material) in geopolymer mortar mixtures. The chemical composition of the perlite is given in Table 1. The specific gravity and the maximum particle size of perlite is 2.31 g/cm\(^3\) and 65 μm, respectively. The CEN standard sand with a maximum particle size of 2mm is employed in the mortar mixtures. NaOH is used as activator in the mortar mixtures. NaOH is in solid form and is used by melting in the mix water.

The mixture proportions of the mortar mixtures are illustrated in Table 2. As seen in the table, molarities of NaOH are determined as 3M, 6M, 9M and 12M. Mortar mixtures are produced in a Hobart mixer with respect to TS EN 196-1 [11] standard. After the production, fresh mortar mixtures are poured into the three gang mortar molds. The mixtures poured into the molds are kept at 25±2 °C for 24 hours in laboratory. The mixtures are put in an oven and exposed to heat-curing at 100 °C for 48 hours. The 4x4x16 mm mortar specimens are taken from the molds and are subjected to dry curing until the testing day. 6 mortar specimens are manufactured for each mixture. The f\text{f} and f\text{c} tests are conducted on the specimens with respect to TS EN 196-1 [11] at 7 and 28 days of curing, separately.

<table>
<thead>
<tr>
<th>SiO(_2)</th>
<th>Fe(_2)O(_3)</th>
<th>Al(_2)O(_3)</th>
<th>Na(_2)O</th>
<th>K(_2)O</th>
<th>CaO</th>
<th>MgO</th>
<th>TiO(_2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>73.16</td>
<td>0.86</td>
<td>14.57</td>
<td>3.42</td>
<td>6.33</td>
<td>1.18</td>
<td>0.16</td>
<td>0.12</td>
</tr>
</tbody>
</table>

**Table 1. Chemical composition of perlite.**

**Table 2. Geopolymer mortar mixture proportions.**

<table>
<thead>
<tr>
<th>Molarity</th>
<th>Perlite</th>
<th>NaOH</th>
<th>Sand</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg/m(^3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>625</td>
<td>45</td>
<td>1600</td>
<td>375</td>
</tr>
<tr>
<td>6</td>
<td>625</td>
<td>90</td>
<td>1600</td>
<td>375</td>
</tr>
<tr>
<td>9</td>
<td>625</td>
<td>135</td>
<td>1600</td>
<td>375</td>
</tr>
<tr>
<td>12</td>
<td>625</td>
<td>180</td>
<td>1600</td>
<td>375</td>
</tr>
</tbody>
</table>

**Results and Discussion**

The results of the f\text{f} tests are given in Fig.1. The 7 and 28 days f\text{f} values of the geopolymer mortars are between 2.76-4.45 MPa and 3.00-4.76 MPa, respectively. The f\text{f} of the mortars enhances as increasing of NaOH molarity, continuously. Approximately 60% increase is observed on the f\text{f} values of the mortars from 3M to 12M. The f\text{f} of the mortars enhances with
The $f_c$ values of the mortars increase between 6% and 12% from 7 to 28 days of curing. The $f_c$ test results are illustrated in Fig. 2. The 7 and 28 days $f_c$ values of the geopolymer mortars are between 15.36-22.15 MPa and 18.55-32.10 MPa, respectively. The $f_c$ of the mortars enhances with increasing of NaOH molarity, significantly. Approximately 44% $f_c$ increment is seen on the mortars at the age 7 days. The increment in the $f_c$ of the mortars from 3M to 12M is reached to almost 73%. The $f_c$ of the mortars enhances as the curing age. The $f_c$ values of the mortars increase between 20% and 45% from 7 to 28 days of curing. The enhancement in the strength of the perlite-based geopolymer mortars with increasing NaOH molarity can be attributed to easier dissolution of Al and Si elements from the precursor material of perlite. Similar results are concluded in a previous work for fly ash [12].

Fig. 1. The flexural strengths of the mortars
Conclusions

According to experimental results acquired from this work, the following conclusions can be listed:

- Perlite is suitable for being a precursor material for geopolymer synthesis.
- The ff and fc values of the geopolymer mortars derived from ground perlite and NaOH enhance with the increasing of NaOH molarity.
- The ff and fc of the geopolymer mortars enhance with the age of curing.
- The 4.75 MPa of ff and 32.10 MPa of fc can be achieved with 12M NaOH at the age of 28 days.
- The investigation of the activation of the ground perlite using more than 12M NaOH and at different curing conditions can be proposed for the further studies.

References

Garden Roses (Rosa x hybrida) as a landscape architecture plants: Large blooms and compact growth

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Abstract. Garden roses (Rosa x hybrida) provide aesthetic value as landscape plants throughout the growing season. Plant architectural characteristics have been shown to be linked to crop yield and for roses, plant architecture affects their ornamental value and flower productivity. The formation of plant architecture starts from bud rate, which determines the positioning and number of shoots and flowers. Architectural analysis of roses in this study focused on morphological and vegetative part of roses, such as stem length and diameter, flowering stage, branching, and branching angles, number of flower stems. This group of plants can be erect shrubs, climbing or trailing with stems that often have thorns. Flowers vary in size and shape and are usually large and showy, in colours ranging from white, yellows, reds, pinks and purples. Roses have been characterized by both quantitative and qualitative morphological traits such as size, shape, and the color of petals, hips and sepals, inflorescence architecture, the length of the flower stems.

Keywords: Garden roses, landscape, plant architecture, color, shape

Introduction

Roses have made great contributions to the world as landscape plants and as cut flowers in the floral industry (Bendahmane et al., 2013). Architecture is also linked to yield in rose (number of flowers) as well as other crops such as: number of shoots and flowering stems per plants (Shimelis and Shiringani, 2010). Previous architectural analysis of roses focused on morphological, topological, and geometrical traits, such as stem length and diameter, succession, branching, and branching angles (Godin et al., 1999). Roses, the “Queen of the Flowers,” have been enjoyed for thousands of years. Their cultivation dates back to at least Greek and Roman times. Many varieties are descendants from ancient garden plants in China, Persia, and Turkey. The Romans, Greeks, and Persians used domesticated roses as ornaments and for medicinal use. The essential oils of roses are also commonly used in the perfume and cosmetic industries (Roberts et al., 2003). Chinese roses were introduced to Europe in 1400s, which lead to the development of ‘modern rose cultivars’ via the hybridization among Chinese, European and Middle Eastern roses (Raymond, 1999). Nowadays, there are 30,000 to 35,000 rose (Rosa x hybrida) cultivars in the world (Blechert and Debener, 2005; Gudin, 2003). Roses offer a range of color, shape, and scent that is unrivaled. Few plants are more varied in growth habit, height, foliage and form. Roses are adaptable plants that grow well in almost all parts of the world. Plant architecture is the result of growth and branching processes. The components of its variation include genetic, environmental factors and the genotype × environment interaction (Crespel et al., 2014). Roses are adaptable plants that grow well in almost all parts of the world. They're most vigorous in warm-temperate regions, although some have adapted to subtropical or cold regions. In hot climates, some may flower most all year.
Objectives

The objectives of this study were to evaluate the aesthetic value as landscape plants for five garden roses cultivars and the levels of architectural traits, morphological, branching angle and vegetative part of roses.

Classification of garden roses

The American Rose Society recently approved a new classification scheme that reflects both the botanical and evolutionary progress of the rose. There are three main groupings: Species (i.e. wild roses); Old Garden Roses (classes in existence before 1867); and Modern Roses (classes not in existence before 1867).

Species Roses

Often referred to as “wild roses,” species roses are usually single-petaled (4-8 petals), once-blooming and have a bush size ranging from 0.30cm to 60 cm.

Old Garden Roses

Old garden roses were popular prior to the 20th century. A true Old Garden Rose predates 1867 (the year that La France, the first Hybrid Tea, was introduced). These are generally tough, durable shrubs that have stood the test of time; many are considerably more fragrant than their modern counterparts. Most are once blooming, and would be used in the landscape similar to a Lilac or Hydrangea. They often grow quite large, but can tolerate severe pruning every few years to maintain lower growth.

Rosa alba - Dating back before 100 A.D., Albas are the most elegant of all old roses, with tall, slender, upright bushes producing flowers of blush pink or white with charming, delicate beauty set against the perfect background of grey-green foliage.

Rosa Bourbons - Discovered in 1817 on the French Ile de Bourbon when a seedling from the Damask rose ‘Quatre Saisons’ and a China rose (believed to be ‘Old Blush’) sprouted up between the rows.

Rosa China - The China roses play a great part in the history of our modern roses, having given them their ever-blooming abilities. The plants are somewhat tender and may need protection in cold climates.

Modern Garden Roses

Modern Roses are those varieties bred after 1867. Most people imagine these types when they think of roses. Classification of Modern Roses can be complicated because many have Old Garden Roses in their ancestry, but they are largely classified by growth and flowering characteristics. Unlike Old Garden Roses which bloom once a year, Modern Roses bloom...
continuously. They also have a larger bloom size and longer vase life, but lack fragrance, and are less hardy and disease resistant.

Ground cover Roses- Also known as “landscape” roses, this type of rose was developed to fulfill the desire for a garden rose that offers color, form, and fragrance, but is also easy to care for.

Floribunda Roses- Are a cross between a Hybrid Tea and Polyantha roses. Each stem produces a cluster of large blossoms in the classic Hybrid Tea shape. Floribundas can be found in a variety of colors including orange, yellow, pink, purple, and white.

Hybrid Tea Roses- Hybrid Tea roses have been the favorite of the Modern Roses, and come in a very diverse range of colors. They are known for their long, upright stems, which make them an extremely popular cut flower. Hybrid tea roses have large, well-formed, pointed blossoms.

Rambling Roses- Are vigorous growers with numerous clusters of small to medium-sized blossoms, and long, flexible canes. They are often once blooming, but may be repeat or continuous.

Miniature and Miniflora- These classes have increased in popularity due to their novelty and versatility. They can be used for edging beds, growing in containers and rockeries or even for taking indoors as temporary pot plants for decoration. The height of the average plant is about 30-45 cm, and flower form and foliage are indeed miniature versions of both hybrid teas and floribundas. Miniflora roses are a new classification adopted by the ARS in 1999 to recognize another step in the evolution of the rose, intermediate bloom size and foliage falling between miniatures and floribundas.

**Material and Methods**

Five garden roses cultivars were evaluated for two seasons, April and November of 2017 and 2018 in area of Prishtina. Architectural analysis of roses in this study focused on morphological and vegetative part of roses, such as stem length and diameter, flowering stage, branching, and branching angles, diameter of shoots, number of flower stems, primary shoot and color. In this study garden roses cultivars are: Hybrid Teas ‘Gold Wedding’; Hybrid Teas ‘Double Delight’; Hybrid Teas ‘Mister Lincoln’; Hybrid Teas ‘Graham Tomas’; Hybrid Teas ‘Vaj Vicend’. The plants were planted in soil in raised beds in April. The grafted plants and the own rooted ones were planted in open fields in distance 1 x 1 m. The scheme of experiment was a randomized complete block design with four replications.
Fig. 1 Garden rose cultivars in our study; 2017/2018; plant height; length of flower stems; succession; branching; diameter of shoots, area of Prishtina

Results and Discussion

Plant architecture, number of branches and vegetative part of roses

Plant architecture of rose characterize on four categories such as: vegetative traits, reproductive traits, flower branch and branching angles. Plant architecture was divided into the following traits: the number of nodes on the vegetative part and reproductive part, and the primary branch (Figure 2).
The length of the reproductive shoot and the number of nodes on the branch, (figure 3 and 4) also differed among the garden rose in our study. The number of flowers of both primary and secondary shoots differed among garden roses. The formation of plant architecture starts from bud rate, which determines the positioning and number of shoots. The initiation period determines the expansion and orientation of leaves and internodes, and floral transition determines the number of flowers and bloom period. Additionally, stems along with leaves determine the shape and growth type of plant, which is very important for aesthetic quality. The formation of vigorous shoots an the basal part of the plant, known bottom-break an renewal canes, structural shoots 60 cm above ground level and 5 mm diameter, play an important role in growing roses, production and quality of flowers.
Fig. 4 Plant architecture: Flower opening stages in roses, succession, branching, reproductive part, primary shoot on garden rose; Hybrid Teas Mister Lincoln

**Diameter of structural shoots, diameter flowers number of flowers/plant**

Regarding the diameter of structural shoots according to the cultivars and influence by the rootstocks Rosa canina ‘Laxa’, the highest diameter was achieved with the cultivar ‘Vaj Vicend’ (6.5 mm), while the lowest diameter with the cultivar ‘Graham Tomas’” (4.6 mm). The other cultivars were between these specified values (Table 1).

**Table 1. Diameter of structural shoots (mm), diameter flowers (cm), number of flowers /plant**

<table>
<thead>
<tr>
<th>Cultivars</th>
<th>Diameter of flowers (cm)</th>
<th>Number of flowers</th>
<th>Diameter of structural shoots (mm)</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaj Vicend</td>
<td>6.3</td>
<td>21.5</td>
<td>6.5</td>
<td>White</td>
</tr>
<tr>
<td>Graham Tomas</td>
<td>7.5</td>
<td>23.6</td>
<td>4.6</td>
<td>Red</td>
</tr>
<tr>
<td>Double Delight</td>
<td>6.6</td>
<td>24.2</td>
<td>5.7</td>
<td>Orange</td>
</tr>
<tr>
<td>Gold Wedding</td>
<td>6.1</td>
<td>18</td>
<td>5.5</td>
<td>Yellow</td>
</tr>
<tr>
<td>Mister Lincoln</td>
<td>6.9</td>
<td>17.7</td>
<td>5.8</td>
<td>Red</td>
</tr>
</tbody>
</table>
The diameter of flowers is a feature of the cultivar, from our study about the mentioned rootstocks we have achieved the highest value in cultivar ‘Graham Tomas’ with 7.5 cm and the lowest one in cultivar ‘Gold Wedding’ with a diameter of 6.1 cm. During the growth of shoots, the plant produces flowers even in the first year after grafting. This number is different the highest is achieved in ‘Double Delight’ with 24.2 flowers and the lowest in ‘Mister Lincoln with 17.7 flowers per plant.

Table 6. Plant architecture: Plant height (cm), vegetative part, growth, flower stem, diameter of structural shoots on rose cultivar Garham Tomas

Vegetative stage of the rose plants in Kosovo

The beginning of the vegetative stage of the rose plant in Kosovo climate conditions is the end of March or the beginning of April, while the end of growth is October. Growth of flowering stems is done according to a dynamic where in the first stages we have the largest growth until the end of June, when the flowering ends with a flower. Higher growth was achieved at the Vaj vicend cultivar (96.9 cm) and lower at the Mister Lincoln cultivar (70.3 cm). The other cultivars are at average values between them (Graph 1).
Climatic factors (light and temperature) are very important factors in the development of the flowering stage of the rose plant. Flowering beginning in mid-May, where we have 2.5-4.5 flowers per plant depending on cultivars (Graph 2). The most intense flowering stage for all cultivars was reached in June with 33.5 flowers per plant, depending on the cultivars. The decrease in the number of flowers continues in October as we have 8.55 flowers per plant. While flowering end in mid-November where we have 1.1-1.4 flowers per plant.

Flowering stage of the rose plants in Kosovo

Graph 2. Flowering stage of the rose plants; Kosovo climate conditions, 2017/2018 succession, branching, years of study, area of Prishtina
Conclusions

Garden roses are predominantly hybrid roses that are grown as ornamental plants in private or public gardens. The beginning of the vegetative stage of the rose plant in Kosovo climate conditions is the end of March or the beginning of April, while the end of vegetative growth is October. Plant architecture of roses is linked to flower yield and ornamental value. The formation of plant architecture starts from bud rate, which determines the positioning and number of shoots and flowers. Plant architecture of garden roses was divided into the following traits: the number of nodes on the vegetative part, reproductive part and the primary and secondary branch. Criteria to determine the horticultural quality of ornamental plants include plant architecture, flower characteristics, and resistance to biotic and abiotic stresses. Roses offer a range of color, shape, and scent that is unrivaled.

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Urban Space Transformation in Tirana City

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Abstract. The city of Tirana is experiencing rapid and continuous growth, leading to an intensive expansion and density, consequently a multidimensional transformation of urban spaces. Which leads to greater living pressure and creates a dynamism in the urban environment. The central area is usually associated mainly with these changes due to the different types of function and use they provide. This paper aims are to investigate the urban space morphology of Tirana City by analyzing surfaces cover and functionality transformation. Using spatial data for land use changes and examine the impact of socio-economic factors. Furthermore, the rapid processes have neglected the need for comparability of data for real information relating to the transformation of urban spaces, but with considerable importance for the authorities during the planning and management of services. This requires monitoring and evaluation, based on their measurable capacity and compare the changes to adapt positively and move to sustainability.

Keywords: Urban space, Spatial distribution, Transformation, GIS

Introduction

Changing the populations lives from rural to urban areas has had its effects by increasing the gross output of the city’s, this urban expansion affects as an element of economic sustainability by increasing production, developing and creating new ideas. The importance of the urban development process today is the rapid growth rate and the creation of dynamic environments with different activities that take place in public. Generally, in such cases the experts and actors whose are part of the planning processes, are moving rapidly to make plans for the growth and needs of basic services that expanding populations requires. By encouraging investment in order to create one create a healthy development, social and friendly with the environment and special attention is paid to the evaluation of public spaces, green areas and their components. The city plans often have had little impact on the creation or management of social spaces, on the other side the government can play the role of being the main coordinator of public and private actions. Consequently, the use of space can happen to be developed by the way citizens organize their private needs and However the developments made them with a frequent change of the function by a multiply orientation and an instability in a usability of the space until the lack of accessibility, which directly affect the quality of social life aspect. Also, they loss a clear distinction between public and private space. Making them more dynamic and hybrid in their character. The paper aims to investigate the urban space morphology of Tirana City by analyzing surfaces cover and functional transformation, in order to see clearly the situations created and the reasons that have led to this trend.
The significance of urban space

The use and maintenance of city’s public environments often need to be managed to balance collective and individual interests, discussing accessibility in the sense of being “open”, Lynch (1972a, p.396). Ignoring the fundamental urban design aspect such as connections accessibility and mixed uses, can result in the creation of less sustainable and less socially equitable (UK urban task Force 1999). This leads us to explore and finding a better understanding of the need and the consequences that that lead us to the processes of space transformation and their characteristics such as economic activity, where people live, work, leisure activities and natural elements are important on life quality. Also, the recognition of the different typologies of open spaces transformation, between buildings in the town which include paths, squares, garden, park; and the assessment of influences of changes in the system are of importance in the relationship created by the dynamics of urban development. They can help guide and encourage more solutions and strategies to changes positively and move to sustainability development.

Tirana “urban space” development

As the main city of the country not only as the capital but also by other aspects, such as economic, territorial dimension, population numbers and definitely like a city with the main extent and density of urban areas. Named sometimes as a metropolis, due to its full growth and the intense transformation that urban space has undergone, as a result of moving to Tirana from the rural areas around it but most importantly from other cities. This change is also in the nation's economic and social structure. The movements of the living place are not the only ones to have importance, one not less important are movement flows for daily activities. About one-third of the country's population performs their daily activities in Tirana. The city is going through the stress of population growth and the living pressures. This rapid process of the urban transformations also had its effects on the spatial configuration of the city, which in most of the territory area has reflected as a chaotic pattern, created by the various layers of development periods. There is not a clear definition of what has happened or evaluations of the effects that affect the values of these spaces. The lack of evaluation sent us to clearly defined the formation of some unattainable public places as a result of uncontrolled development. Unfortunately, the current that is not fully recognized by decision makers and urban planners the situation and to assess the impact of changes occurring in urban space. Consequently, a new way of use is seen between private and public matters in the city of Tirana.

Figure 1a. The Spatial Development of Tirana; Figure 1b. Public open spaces in Tirana
The center area as the city of Tirana has passed considerable transformations during different historic periods, leaving its influence also in the way of urban space development. Substitution of the main city structure from Ottoman and Italian periods, during the totalitarian regime times to establish a declaration of the actual status. Almost the largest population growth reached during the period 1990-2000, as a result from the transition of communist regime to liberalization of the country’s market and economy, as well as opening up with all other foreign cultures. The city where had a great expansion, where the old and central part underwent a densification and modification of the previous structures. Recruiting private property, which has changed its status during the regime from private to public had its impact on the privatization of public space and in other cases as a tendency to possess a property. The development after the 90s to the present is characterized by different elements/typologies, but in the most important one we emphasize the economic one that has the greatest role in the urban change form. Mainly the typology of the areas has changed rapidly their balance to small or large activities that are undergoing rapid development. Tirana residents today view the private space more precious than the public ones, except in the cases that they privately use public spaces. The public spaces in the city center have a formation that allows many different uses and which have a strong influenced by socio-economic relations. Open spaces by their characteristics, function and quality, often have a positive-negative impact to the development of urban environment and their dynamic orientation. These factors reflect their impact on the resident’s life and activate them in decision-making for the transformation and development of their environments. This is why these spaces have an important role in the sustainability of the city's development.

Urban space significance

The participation of a diversified number of users which are strongly influenced by socio-economic relations of a dynamic environment, has put urban space and their characteristics, in front of a semipublic development. Factors that reflect their impact on the lives of residents and activate them in the decision-making process for way of space usages. Therefore, these reasons have an important role in the sustainability of the development of the city. This research aims to analyze the effect of the urban space evolution and their morphological transformations typologies. Specifically, the objective is to recognize the areas and define the types of these spaces in Tirana City. Which reveal an important aspect in urban transformation for sustainability and oriented development, by leading us to evaluate the relation between the use of space and the transformation characteristics of the urban form, according to their measurable ability and based on a resilient approach for data classification as well. The importance of the process is to signify a better and more careful actions in decision making, by comparing the changes for positively adapting and to transforming towards sustainability.

The importance of urban space

Our research derives from a hypothesis that the transformation of urban spaces and their characteristics have an important role that reflects the way of urban development and their relationship with the way of citizens life. We want to highlight the effect and impact that these characteristics have in the sustainability and in the way of city life orientation. Therefore, their changes are viewed as an element that can be examined and evaluated through indicators and by building a clear framework to monitor the trend and analyze the values, where it can determine the impact scale and dynamic scenarios. Public space is traditionally differentiated from private space in terms of rules of access, the source and nature of control over entry to a space, individual and collective behavior sanctioned in specific spaces, and rules of use. (Low and Smith 2006). Anderson (1978), for example, devised a scheme that responded to the inappropriateness of the built/not built classification. So, in these classifications of five main types of space: urban/public: pleasure, plaza park/playground sidewalk), urban/semi-public: use
space plaza, markets, group/public: street sidewalk, open land, nature and water features; group/private: untended, bar-restaurants and family/private: controlled space, patio balcony. These knowledge helps to developed a better understanding of space use in general and provide advice to ways in which we might improve the quality of the built environment, by the importance of these spaces to give form and shape to the city; provide space for recreation, interaction between peoples, places for economic activities and to contribute in sustainable development.

**Classification and analyzing the transformation**

The analysis of context, includes different criteria, based on the physical features as well as the relationship with urban development; ownership, access rights, actual or intended use, and economic or social context determine the transformation by typology, theoretical characteristics, categories function and catchment hierarchy. The research of the morphology is one of the important variables of urban form, and a component of the formation and transformation of open space too. Also, might recognise the different ways and changing use of these public area. In the urban design literature space is characterized most often by physical type and function. Over the years, many attempts have been made to characterize morphological types, from Sitter’s (1899) deep and broad squares, to (Ben-Joseph, 2005). Although much cruder standards-based highways types and hierarchies persist in informing actual practice. But with these categories the types are endless as well as their complexity. Carr et al. (1992, p. 79) identify 11 functional types of public space: Public parks; Square and plazas; Memorials; Markets; Streets; Green and Playgrounds; Community open spaces; Greenways and parkways; Atrium/indoor marketplaces; Found spaces/everyday spaces; Waterfronts. Also, many other types of hierarchy-based function provide organizing manage space and green types. UK Greenbelt Spaces Taskforce (2002, 43). Or others look at the ease of fit and use of public space. For example, Frank & Stevens (2007, p.23) develops about space ‘freedom’ and ‘tightness’ as they are linked to the physical and social characteristics of a space. “Thus, loose spaces are more adaptable and variety of use. While narrow ones, it is physically limited or controlled about the types of activities that may occur there. These qualities are relative but the new types of spaces today are often of a limited nature different from those of the past, thus discouraging the types of activities that reflect the defined freedom. From a methodological point of view, the examination of virtual usage-spatial relationships is recommended, by observation and behavior mapping as a combined technique in studying the environment-behavior relationship has been a known and used method for some decades (for example, Ittelson et al, 1970). Defines all the range of urban space types that contains transformation but also many of these areas are not in their ownership and the extent to which the public are unclear. The space-time analysis, based on GIS, resulted in usage of spatial articulation of the area, representing shapes, sizes, densities and intensities of space’ occupancies. Types of public space were able to be traced through field investigations and other supplementary materials, examining the material and creating a geographic information coverage. A set attributes with data for each year are filling each polygon. Ownership, access rights and management attributes are important to understand the institutional structure and the type of use. Percentage of permeable surfaces is used as an indicator of ecological integrity (Forman, 1997; Schueler, 1994). Also, the level of change was investigated using GIS technology. These spaces will be selected with the criteria based on the type of function, historic evolution in the urban morphology, and the mode of urban development. Different materials of aerial photographs, cartographic maps from 1980, 1993 to those of orthoimages in 2007 and 2015 [2018]. The analysis of different examples for recognizing impact and will determine the transformation to the urban space at physical condition and social-economical context. The transformations that
have taken place in the country and from other examples abroad will be part of our study, which will give a comprehensive picture of the change process so that we can conclude the theoretical definitions for decision-making in similar situations.

Results

I) Firstly, we have transformations that have had the negative effects of total elimination or partial elimination without the consequences of using them functionally. The loss of physical surface of open space is a consequence of economic development and liberalization which had an immediate effect on new construction, the transition period from 1990 to 2007 and the 2007 to 2018, see Figure. 1a, Transformation of typologies of public spaces and the categories, see Figure. 1b.

The change and elimination that has occurred in some open spaces are negative examples of the urban development. As these areas have reduced the areas and benefits and have greatly increased the needs for such spaces. Divided into categories as: Family-private, rather than having the shape of a garden, private spaces usually take the form of balconies and courtyards. These spaces have been constructed as the need to increase housing spaces in high-end residential environments. On the first floors, the front of the apartment is surrounded by a courtyard that is used for private use, flowers or as entertainment space. While old private yards that have shaded a small density in construction, represents the largely wide spaces that often become part of the community in social relationships.

Figure 2 a,b,c: The loss and classification of physical surface of urban space in Tirana central area.
II) Secondly, we have the positive changes that create a new area as a result of changes to other spaces or only functionally. Divided into categories as: Urban-Public, that includes spaces intended for daily use and those intended for institution or ceremonial use squares, parks, central areas and government courtyards have a somewhat more careful attention from authorities, than sidewalks, temporary place, greens and playground. Typology’s of public spaces and the categories, see tab.2.

III) While it is seen that all other spaces have undergone transformations which may have made changes not only as physically form but also as a use and accessibility. Divided into categories as: Group-private, the private space, which can often be used as a public space for socialization, business but also for work including bar-restaurants, gardens, parking lots. Day and night bars are one of the most important points in Tirana's life, mainly located in areas with large pedestrian areas, but not only. Group public: The uses of public space for private purposes derives with a widespread development as a result of personal benefits such the use of common space and its position in relation to owned space. They are earning benefits from public space and commercial areas in streets and sidewalks. In residential areas they try to set out contours of their private estates or serious issues are the construction of private premises in these areas. Urban/semi-public: Also, the semi-public spaces are more affected by the lack of attention because they have a greater influence by the pressure of transformation. These are mainly for partial or full-time trade, but also for the squares of the neighborhood spaces. This is easily shown to be due to rapid growth, by observation of what has not been changed or what has left traces in the urban space.
Tab 6: Urban space transformation rate, Figure 2, Tirana image for type transformation,

Some of these spaces relate to the largest and most frequent developments. But even the overall effect of many small developments, such as first floor building extensions, can change a place dramatically for the better or worse over only a few hours. This approach changed Tirana’s overall physical, social and economic face. Subsequently, urbanization boomed in the town, as a consequence many government offices and services as well as trade were built. From a comprehensive point of view, they lose a clear distinction between public and private space which causes an unsustainable situation. Making them more dynamic and hybrid in their character. The transformations are daily and fast, and overall development is growing. This means that in a short time decision are made and intervened in a large number, which affects directly accessibility.
Conclusion

If we would describe the conclusions in general from the use urban spaces in Tirana as open and private space, they would be useful for planners and designers in Albania or someone else. It would be helpful to everyone to have to have a framework of the changes that have happened. Where can identify, actors that can create comfortable processes or evolve methods that enable people to create relationships between spaces without the concern of engaging in its use. Today the most of the spaces that are hybrids has come to this state by a gradual modification and became part of retail or residents, that have introduced to their, the own private characteristics and pretended the public domain and his development, by consequences in the whole public. Behind these descriptions is visible the negative effect of the privatized city, not only spatially, but also as proof of incapacity at the local political level. New urban spaces open up to from the commercial private sector and neglect the democratic role of the municipality and the citizenship. From this poiny of view the citizen is replaced by the consumer These spaces are commercial, similar non-private areas but associated with them and made their users feels uncomfortable. On the other aspect is the balanced type of use that makes the public open space so functional, interesting, lively. It is understandable that semi-public or semi-private spaces can immediately revitalize their function by considering them directing them towards democratic structure. By using a classification, we will be able to analyse the prevailing situation and identify what is good and wrong with the physical and social environment in our urban spaces. We improving the way of their development and the function, can contribute to the attributes of these public areas to make them better, vivid, cheerful and pleasant, functional, or unpleasant or unsafe. Also, the development of a good and effective product depends on the collaboration of many components and actors together. Where
weaknesses in the process are during decision making or how the development is done and how often an area change.
This type of analysis will lead to providing knowledge of the relationship between the characteristics of urban development regarding physical and the socio-economic dimension of public space in Tirana. Increasing the opportunities of sustainability that should embrace and public areas that can be opened up to the private or group use.

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Typology of Settlements Based on Climate Impact

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Abstract. Variable climate conditions affect the environment both globally and locally, impacting considerably on human settlements. Location in the respective climate zone is therefore an important characteristic that largely determines the development or decline of a settlement unit. The lack of an empirical typology of settlements in terms of climate geography thus appears to be a factor limiting further research of the issue. The present paper sets out to outline the existing approaches to urban typology through the prism of climatic influences and changes. The study draws on available sources, summarizing observational data and examples from a geographical-historical perspective.

Keywords: Settlement typology, Köppen climate classification, climate zone, urban layout

Introduction

The effects of global warming and the ensuing climate change upon the urban environment have been widely debated, the problem itself having arisen around the middle of the 20th century. It was long assumed that the environment and climate are determined by human behavior whose changes would mitigate the impacts of climate change and environmental degradation. This approach materialized in the concept of sustainable development introduced by Gro Harlem Brundtland in 1987, the principles of global environmental sustainability being adopted at the 1992 UNCED conference in Rio de Janeiro. The extent of human influence on the environment remaining contentious, climate change has been and will be indisputably taking place. Thus, the living conditions and social environment will undergo major changes both on a global and local scale. “Combating-climate-change” has already proven as a hopeless pathway, the only meaningful strategies being the resilience (increasing resistance to this phenomenon) and adaptation (changing the behavior to suit new situations). Some studies dealing with both resilience and adaptation strategies are underway. Focusing on the current state of the issue, they, however, do not sufficiently discuss impacts of climate change on individual urban settlements in the broader context of environmental space-time processes. And yet, the historical development of urban areas provides a lot of examples of effective adaptation and resilience strategies. Every human settlement has numerous characteristics. One of the most important is its location in the landscape and environment in general, including climatic conditions, namely the specific climate zone. Surprisingly, a climate dependent typology of towns and cities has not been developed yet. The present paper therefore aims to analyze basic approaches to settlement classification in terms of climate change effects. It combines analytical and synthetic methods based on the study of literature and field research, observational evidence in particular.
Typology of human settlements

The landscape “location” typology of settlements was tackled by both Czech authors (see Fiala, 1959, Krásný, 1962, Vágner, 1982, Němec, 1983, Halík, Kratochvíl and Nový, 1996) and foreign ones (e.g. Anas, Arnott and Small, 1988, Scheer, 2010, or Norberg-Schulz, 1994, the latter pursuing an alternative approach). Recently, however, the issue has received less attention than it deserved. The settlement classification in terms of climate change impacts was addressed by, for example, Ferrão and Fernández (2013) and Solecki et al. (2015).

Climate classification

 Climatology systematically deals with climate classifications, having developed several recognized typologies usually based on average temperature patterns and seasonal precipitation or humidity. The most common is the land-based Köppen climate classification scheme, which divides the Earth into five zones (see Fig. 1), each being characterized according to the annual temperature and precipitation regime by the following types of climate – (A) tropical, (B) dry, (C) temperate, (D) temperate-cold and (E) polar (cf. Farský and Matějček, 2008, pp. 51, 54–55). Identical typological features and adequate examples of settlements for each of the climatic zones (types) are given in the present article.

![Figure 1: World map of Köppen climate zones (Peel et al., 2007)](image)

Typology of settlements in terms of climate geography

(A) Humid tropical climate zone
For this climatic belt, which does not have cold seasons, are typical average monthly temperatures above 18 °C and low annual temperature amplitudes (up to 6 °C), trade and monsoon winds contributing to average annual rainfall exceeding 750 mm. It is further divided into types of Af (wet tropical forests) and Aw (savannas, with a significant dry period). The zone forms 36.1 % of the Earth’s surface (see Farský and Matějček, 2008, p. 55). As shown in the above map, Central America and northern parts of South America, Equatorial Africa and part of Madagascar, most of India and Sri Lanka as well as the regions of Indochina and Oceania are located in this climate zone. In search for a typological consensus, traditional, i.e. “premodern or pre-globalized” types of settlements are possible to use as comparative examples – e.g. those in Aztec, Olmec and Mayan Mesoamerica, in India and Sri Lanka as well as Khmer, Burmese and Thai settlements in Indochina; cf. Fig. 2.

Figure 2: Comparison of urban landmarks in Koh Ker (Cambodia) and Chichén Itzá (Mexico)
(Author’s own photo)
A quick preview of the above noteworthy settlements allows for remarkable comparisons of urban and architectural morphology across cultures and continents. The towns are characterized by rectangular street grids, their centers being formed by compounded or individual tiered pyramids. (Due to the limited scope of this paper, this unique aspect cannot be fully graphically documented.)

(B) Dry climate zone

This climate band is characterized by low precipitation and high potential evapotranspiration. Its boundaries are determined by the ratio between average annual temperature and rainfall. It is subdivided into BS and BW types – steppe and desert climate belts, respectively, the former being among the largest on the mainland. Overall, it occupies 10.6 % of the planet. (For details, see, e.g. Farský and Matějček, 2008, p. 55.) The zone covers, for example, Egypt, Israel and Palestine, the territory of present-day Turkey and ancient Mesopotamia as well as that of proto-Indian (Harappan) civilization. The oldest historical cities, such as Jericho or Damascus, Harappa or Mohenjo-Daro, but also Ur or Eridu and other Sumerian, Akkadian and Persian settlements are documented in these territories; cf. Fig. 3.
In pictures of settlements in this climate belt, similarities in urban designs can be seen again. Although the layout of the city is not as regular as in the above cases, basic common features – square or rectangular street networks and houses with flat (often residential) roofs – are also identifiable. The settlements were fortified and mostly protected by a citadel or another walled section for the nobility, these predominant elements being comparable to the aforementioned pyramids. Examples are the Figure 2: Comparison of urban landmarks in Koh Ker (Cambodia) and Chichén Itzá (Mexico) (Author’s own photo) Figure 3: Comparison of urban structures in Lothal (India) and in Babylon (Iraq) (CulturalIndia © 2015 and Reddit) landmarks of the Harappan culture, such as the Citadel mound at Mohenjo-Daro, which represented the administrative center, or the Sumerian ziggurats, which were the cores of temple-palace districts of the majority of Sumerian and later also Akkadian cities in Mesopotamia.

(C) Temperate climate zone

This is a zone with variable weather and significant cyclonic activity, the year having typical seasons with weather irregularities occurring (e.g. winter snow cover periods). It is divided into mild warm climate subtypes Cw (with dry winter), Cs (dry summers) and Cf (with precipitation equally distributed throughout the year). The belt occupies 27.2 % of the total area of the Earth (see Farský and Matějček, 2008, p. 55). In terms of its territorial distribution, the zone includes the Mediterranean, i.e. the Iberian, Apennine and Peloponnese peninsulas, the southern Balkans, the northernmost parts of Africa, Israel (except for the lowest locations by the Dead Sea) and Turkey as well as the British Isles, France and the western regions of Germany. The respective area also comprises vast parts of India and southern China, the Andean region and mountainous areas of Colombia and Ecuador. Within the temperate zone, there are some of the oldest settlements, e.g. Çatal Höyük and Haçilar, or younger Palestinian sites of Jerusalem, Beit She’an, Megiddo, Arad and Lakis, as well as those of the Eastern Mediterranean such as the centers of Minoan and Mycenaean cultures (for details, see Jepsen, 1987). Similar to the above climatic type, city designs are based on an irregular but rectangular pattern; see Fig. 4 below.

Subsequent Greek and Roman urban architecture build on earlier settlement features described and illustrated above. Bouzek (1979, p. 57) confirms that “having been taken over in later Greece as a temple of the immortal gods, the Mycenaean type of a royal house became the ground plan for most variants of Greek temple architecture”. The influence of the Greeks on Roman city building is self-evident. The most widespread model of Roman urban construction
was military camps (castra), which in many sites transformed into actual cities. Interestingly, however, the temperate zone in Europe more or less coincides with the border of the Roman Empire, abounding therefore in its urban manifestations.

(D) Temperate-cold climate zone

Due to the distribution of the mainland areas, this belt (also called continental) spreads only over boreal climate regions of the northern hemisphere. Its southern boundary is given by the 3 °C isotherm Figure 4: Comparison of urban structures in Çatal Höyük (Turkey) and Jerusalem (Israel) (Archeological site of Çatal Höyük and Jerusalem 101) of the coldest month and the northern boundary by the 10 °C isotherm of the warmest month of the year, which is also the boundary of the boreal forests. It is further divided into Dw (dry winter) and Df (uniform annual precipitation totals) – the so-called Baikal and subarctic continental climatic types, respectively. This zone occupies only 7.3 % of the Earth’s surface (cf. Farský and Matějček, 2008, p. 55). It is very interesting, nevertheless, in terms of the urban environment as it covers a large part of Europe – East Germany, Central Europe, Eastern Balkans, the whole Scandinavia, the Baltic and Ukraine, and virtually all of Russia (except the northernmost parts of Siberia) and the north of the U.S. and Canada. Urban architecture is significantly younger than in the above-mentioned climate zones. With the exception of proto-urban Celtic settlements, the first cities in medieval Europe appeared as late as the 10th century, and in America as a result of colonization. Urban culture was spreading from France and Germany further east and northeast, based on the same principles and structures. Basically, two approaches to urban structures have developed within the European band of mild cold climate, namely grown and established cities, respectively. According to Šilhánková and Koutný (2013, pp. 36–39) “[t]he characteristics of an organically grown medieval city are a concentric outline, one or more regular squares, an irregular street network, a high-rise landmark of the temple (town hall), city walls, and partial differences in European countries. The regular (rectangular) outline of established cities was based on a simplified scheme of the Roman city.” In any case, urban areas in the temperate-cold climate zone are younger and basically inferior to those mentioned above.

(E) Polar climate zone

The winters are both mild and very cold in this climatic belt, mostly with frosty temperatures, the totals of precipitation (mostly snow) being rather small. It is broken down into types of ET (tundra regions with the warmest month temperatures ranging from 0 to 10 °C), EF (eternal frost climate, the warmest month temperature not rising above zero) and EH (the alpine climate of moderate and low latitudes). The zone makes up 18.8 % of the Earth’s surface (see Farský and Matějček, 2008, p. 55). It is negligible in terms of its urban manifestations since it includes the northernmost parts of Canada and Siberia, Greenland and Antarctica, where human settlements are scarce.

Conclusion

Adopting the Köppen climate classification system, the above overview of settlement patterns as evidenced throughout historically distant cultures reveals geographical urban morphology differences and similarities between human settlements in respective climatic zones. So far only rough divisions into individual climate regions have been made. Within the five main zones, Köppen distinguishes 29 minor climate areas, urban structures occurring in 27 of them. It has been proved that climates affect the way cities are laid out and built. Apart from finding other examples of urban settlements and their common features related to territorial climate zones,
further analysis is to focus on the effects of historical climate trends on urban landscapes. This will make the research highly relevant in terms of the ongoing climate change, indicating how urban structures develop when transforming from one climate zone to another. Along with that, further refinement of typological characteristics associated with particular climate groups (as addressed, e.g. by Quitt, 1971) will allow to establish principles of new urban construction projects so that they can reflect the changing climate.

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Architectural Reflection in Ferizaj: From Eclecticism to the New Wave of Modernism

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Abstract. Ferizaj has undergone a remarkable, not to say radical, transformation in the last century, both politically and economically, as well as culturally and in the urban aspect, particularly in its architecture. Architectural transformations of the city itself are the traces followed in this research to document and discuss architectural ‘transitions’ that have occurred in various circumstances by leaving traces on the architectural expression of the city. The purpose of this research is to emphasize and present two key moments of the transitions in Ferizaj through architectural evidence: On the one hand, the transition from architectural orientalism to what is known as ‘Europeanization’, and on the second hand, the transition from neoism to the creation of modernism through which Ferizaj gained a new image of socialist city. We must not forget to mention the political influences that have directed not only the economic development of the city, but also the architectural coloring which directly came from politics. The uniqueness of these two major transformations in the city architecture resulted in an extremely short period of time, i.e. no more than seven decades (the period of 1920-1990).

Keywords: History of architecture, architectural styles, Ferizaj, Modernism.

Introduction

The construction of Shkupi-Thessaloniki railway (1873), then its expansion to the direction of Ferizaj up to Mitrovica, represents the first major event of Ferizaj shifting from a small town with oriental character to a town with ‘European’ image, the size of which not only captures the dimension of surface expansion, but also of architectural representations over time. The railway to Ferizaj opened the door of communication with Europe. Trade with Thessaloniki, Mitrovica and Belgrade not only made the city to gradually recognize another world, but it also brought trade in a similar form to the city itself. The second important event is the dissolution of the Ottoman Empire (1908-1910) which made the city experience a level of freedom and convinced it that new political changes would come. These two events sparked the hope of big changes, a better future, which also had an impact on architecture. The latter probably did it best in presenting all conditional transitions in the city, both economic and political. Both of these are evident with all their parameters on the facades of the buildings built in two or three decades of the above-mentioned period. Despite the archetypal signs that were left in the period between the two World Wars, we cannot say that they present a turning point that should be marked after the fall of the Oriental empire and the return of Western-oriented social order. This is because the Kingdom of Yugoslavia, also known as the Serbo-Croatian-Slovenian Kingdom, treated Kosova more as a colony than as an integral part of it. It is sufficient to say that two-thirds of this kingdom’s gendarmerie was stationed in Albanian-majority territory, making clear its approach towards this population. This huge investment, only to maintain order and security
in a rebellious territory whose major population disagreed with its involvement in a social order that was dominated by Slavic population, made public investment almost inexist... (Fig. 1&2)

Fig. 1&2 Man and railway, Ferizaj, around 1900. Source: internet.

The third important factor in creating the image of the city of Ferizaj is the new political order established after World War II, which in architectural implementation was seeking to find expression, and on the other hand, transformations in Ferizaj were enormous, compared to the period between the two World Wars. Depending on the influence of a certain factor, we can see that the skin of the city expands and takes a new look. (Hyseni, 2014)

The escape from the Orient

Under the rule of the Ottoman Empire, nobody would expect that a place on the outskirts of Kosova could have formed a complete organic core of an oriental city. The suburbs at the end of the Empire’s rule were almost forgotten for investments. The city was left feeling proud only with the dominance of the oriental spirit in its buildings, whether they were small houses with only a ground floor and a first floor, built only with the available materials of the time: stone, soil and wood, with narrow switchback roads that constituted the tissue of the city, up to public buildings, such as the bazaar, mosques, dosshouses, and some old water pumps. Ferizaj at the beginning of the 20th century was considered a kasaba (town) with oriental architecture, but with reduced artistic values due to the above-mentioned factors. (Fig. 3-8)

The link of Ferizaj with Shkupi, Thessaloniki and Belgrade thanks to the constructed railroad made it reveal a completely different world from the one it had developed so far, thus gaining other types of buildings, unlike the usual buildings in the city and beyond – up to Prishtina as the largest center. This means that orientalism in architecture was the only story transmitted in the construction of time, a situation that would change soon. The city's architecture fell under the strong ambitions evidenced during the early 20th century for a radical transformation and 'Europeanisation'. Merchant movements, therefore, demanded imitation of buildings from the above-mentioned cities, with the sole purpose of presenting the power of a created micro-bourgeoisie layer which was seeking to cut off at all costs all links with the oriental past and to identify as close as possible to the West. The ‘Europeanization’ of Ferizaj began spontaneously, without implementing any detailed urban plan which in this period of transformation would also control the architectural emancipation of the city. The first buildings through which the 'Europeanism' could be traced back to Ferizaj were those built around the railway - mainly buildings with public character, such as post offices, schools, banks, hospitals, etc. Later, the same approach to transferring new borrowed ideas from Thessaloniki and Belgrade were also identified in merchants’ houses, probably the only way to present the economic power of the

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new layer in the city. Theoretically, here we talk about borrowings, imports, imitations and reinterpretations of isms from frequented cities, an architectural ‘disease’ that was also present in Shkupi, Tetovo and Prishtina, as centers that were undertaking the same borrowings as Ferizaj, though to a greater extent, even artistically prosperous.

Fig. 3, 4, 5, 6, 7&8 Oriental buildings in Ferizaj, 1900-1970. Source: internet.

The role of the architect began to be evident because the city was frequented by foreign architects, mainly Polish, German, Austrian, Hungarian, fleeing the Crimean War of 1856, and some Serbian architects, since Ferizaj after World War I was politically an integral part of what was known as the Serbo-Croatian-Slovenian Kingdom (1919-1940). Different approaches to the production of the architectural style were observed under their influence, depending on the architect’s education or origin. These outcomes were not always seen positive from the society educated for some centuries with Oriental aesthetics. This was not the case only with Kosova’s society. Furthermore, Belgrade, the capital of the kingdom of that time, had experienced the same thing in the early 20th century, where most architects operating in the city were educated in Vienna and their developed projects on early modern principles were often rejected from Belgrade's unprepared society to embrace modernism and consequently ‘they often felt as foreigners at their home, and after finishing their work they generally returned to Austria-Hungary. (Manević, 1986).

The first buildings possessed the following characteristics: the plan tends to have as regular form as possible, the symmetry is tentatively the key element in the formation of the plan and volume (although not always), the plan regarding the size is not extraordinary, the function of the living space, even the mixture of multiple functions in an object, is accomplished in a traditional way and without any attempted changes. The volume usually follows the form and the size of the plan, which means that there are no innovations even in this element. Building materials and constructions are mainly traditional ones, with which the local craftsmen
maneuver easily. Buildings’ covers were constructed in a traditional way, in terms of the form as well as the application of materials. In later cases, there was a usage of concrete and steel, and glass was also imported as a building material. (Fig. 9-11)

Fig. 9,10,11 First ‘European’ buildings in Ferizaj, 1890-1915. Source: internet.

The import of architectural elements should also be noted, for example: columns, chapiter, crowns, decorative elements, motifs applied for decorations, the beam as an element, window frames, etc., all of which mainly originate from Thessaloniki. In different combinations, most of these elements are multiplied during their use as decorative elements in the facade. In Ferizaj, the objects that in their functional and decorative structure contain different elements of borrowed styles to complete the building process begin to be created from these complex influences, which ultimately complicate the ‘reading’ process of the created architecture because it cannot simply be defined as a style from where the applied elements have originated. The origins of borrowings are numerous. The diversity of these combined elements, present in the early 20th century, shows a real possibility that different styles have had to influence the creation of architecture in the city. With the presence of these new elements, the process of changing the tradition was expected to give the first results; an architecture which could not easily be read because of the above-mentioned problems, but that definitely was parting from what was known as the architecture with “Oriental” or “European” style. (Grčev, 2003)

In general, these objects, where both their function and building materials, facades, style elements, ornaments, monumentalism and style requirements of the time are to some extent well-articulated, and these constructions have achieved to represent what is also known as Zeitgeist in the architecture of the city, though with a slight time delay. The separation from the Oriental, in the architectural aspect, is very noticeable, which means that the level of transition of stylistic elements has been high. (Fig. 12-18)
Fig. 12,13,14,15,16,17&18 ‘European’ buildings in Ferizaj, 1900-1935.
Credits: Kujtim Elezi.

While the new buildings in use appeared to be richer with ‘European’ elements with a radical separation from the oriental ones, in Ferizaj there was a second category of buildings, mainly of residential nature where we can encounter a mixture of traditional-oriental and new-European elements. Here we talk about buildings of the more economically poorer layer than those that financed the above-mentioned buildings. These buildings often replaced the old ones. Thus, the skin of the city began to get enriched with more buildings, in which the ‘Europeanisation’, however low, was present. A disadvantage of these buildings is that they contain architectural dualism. While the appearance of the building is linked with the presentation of the ‘European’, the essence of the building expresses an Oriental mentality. Hence, in objects with such a planimetry, facade design, volume handling, oriental elements transfer and traditional roofs, we also find European ‘dressing’, as in the decorations around the windows, highlighting pillar decorations with a capital, presence of a metal fence balcony, or emphasis of the symmetry through any element borrowed from ‘European’ styles. We can see a mixture of traditional and ‘European’ elements in this category of buildings, although the oriental influence is more linked to the essence of construction, while the European influence on construction is present only with decorative approach. Transformation here is complex - not pure, not clear. It is a mixture of both. A kind of local eclecticism-not pure. Being more in number than the former, these buildings began to disrupt the uniformity of the Oriental in the architecture of the city of Ferizaj, because over time these buildings replaced the pure old ones with (oriental) architectural expression, and the stylistic mixture had a poor artistic (aesthetic) level.

Influences are increasingly pronounced in the external appearance of the buildings, in the facades, rather than in the essence– the function. There was a broader choice of decorative elements on the facades in the early 20th century, a choice that shows the return to applying European experiences. As a result, the same transition of elements of style in architecture became available and the same was applied in buildings with residential character, as well as with different functions. The fading process of traditional architecture, which reached its peak during the 19th century, was successful under the influence of permanent European trends, while accepting eclectic methods of compiling elements of the baroque as well as of the renaissance, especially with regards to the volume and facades of the buildings. We can find
elements, such as decorations, pilasters, asymmetry, parts of curves, or in short, a combination of elements of baroque and renaissance, all of which are found under the term city “Europeanization”, i.e., creating the 'new' as an imperative of the time.

Modernism between being ‘ideological’ and ‘international’

In the case of Ferizaj as a case study, we can say that the architectural ‘Europeanization’ until the eve of the World War II did not reach the peak of artistic expression of the style(s), even when it was compared to nearby centers such as Prishtina, Shkupi, Prizren, etc., where the power of style(s) was more present in the buildings of the same period. Works were scarce, while the artistic level expressed in them was scarcer. However, what should be highlighted in this new approach of creating the architecture is the fact that it made a clear distinction between the 'Oriental' and 'European' of the city's architecture, at least in the visual aspect.

World War II (1940-45) interrupted all investments in architecture, and there was no progress in developing it in Ferizaj. However, after World War II, the tendency of creating the new was more evident than it was two decades ago, even in architecture. The political turn after World War II, the new socialist system that regulated all areas of life in the country (including architecture), the tendency for prosperity under the new motto of brotherhood, the fierce fight of eliminating nationalism (necessarily, as well as in architecture) and above all, the belief to create the new socialist man, were some of the elements that were in line with the ideals of the politics of the time, which we can see them as the basis of the creation of the new in new socialist cities. Now, it seems that modernization in architecture, and that in the town of Ferizaj, was delayed for almost three decades, and it was the new architectural spirit, which on the one side it was clearly in service of the country, where the latter were even financing work in the field, and on the other hand, if political involvement in architecture was left aside, the modern would present the nearest style to that time with the large layer of economically poor people, consisting of a large number in Ferizaj. (Fig. 19)

![Fig. 19 Modern buildings in Ferizaj, 1960-1990. Source: “Modernizmi në Ferizaj, 1960-1990”, 2017.](image)

The first post-war urban plan of 1960 for Ferizaj was the most serious attempt until then in accelerating and controlling its development and expansion. The new urban plan brought a new conceptual upturn of the previous expansion of the city plan. The paradigm of this plan was the idea of a 'new start' which can be found in various aspects of the plan. The plan presented a
new attempt for urban reconfiguration of the city, suggested division of the city into functional zones, also by composing different functional categories, such as administrative and trading centre, cultural and historical zones, housing, science and industrial zone, and a zone of green and free areas. With the new urban plan, it was easier to gain control of the territorial and demographic growth of the city itself. In general, the urban plan was transforming Ferizaj into a new growing administrative and industrial city of the modern [socialist] era. Over time, modernism was the architectural spirit that began to seek recognition, and to replace earlier eclecticism. The way of designing the plan, the shape and volume treatment, the tendency of a total purity from the ornament, the straight and clear lines on the facade, the flat roof, and the tendency for regularity and ideal proportions, leave us under the impression that a great turnaround had taken place in Ferizaj in applying what can be called the Spirit of the time, although in this case, both during the ‘Europeanization’ and now in the modernization period, events were presented with a delay of several decades. We say so because while in Europe, the modern was presented with the masterpiece of that period, Ronchamp Chapel by Le Corbusier (1954), while modernism in Ferizaj began to be presented as an access to architecture. It seems that architectural flows from Europe to Ferizaj had always appeared with a time delay, although this does not mean that buildings of each subsequent period had lower artistic level due to the time delay. (Heynen, 1999)

Following the theoretical concepts of modernism, the new urban plan was almost ideal. However, the situation took a dramatic turn in practice. The new modern boulevard of the city destroyed (almost intentionally) an old part of the city that was partially damaged several years before the World War II. A lot of houses with oriental character were destroyed, as well as many other architectural monuments, such as mosques, old water pumps, old streets, bridges, etc. Such a plan was referred to as tendentious, a planning to destroy the old in the name of creating the new. As a result of implementing a new urban plan, Ferizaj lost its symbolic urban and historic core: the old Bazaar, mosque, bridges, part of the old houses. The planned destruction of existing structures to make space for modern buildings was not based on genuine urban plans for the prosperity of the city. Moreover, it was sort of a political vision aiming at the termination of the so-called ‘backwardness’ of the city, and which in fact was conducted through targeting the most symbolic parts of the pre-modern city. (Kulić, Mrduljaš, 2012)

Basically, we must admit that the new boulevard and the new city center accumulated the first modern buildings of the city. The implementation of the new urban plan was achieved through construction of collective residential buildings located around the center and along the boulevard axis. Near the city center, there was the city hotel, the Municipality building, a shopping center and the courthouse. The axis of the new boulevard was gradually completed with public-administrative buildings, banks, post offices and collective housing buildings. The new urban plan also created a new individual residential area, and this was the first urbanized neighborhood after the war, thus expressing new urban concepts that were experimentally implemented for the first time in Ferizaj, but which were different from the old forms of creating residential neighborhoods from the Ottoman period. Urban blocks of collective housing were located slightly further from the center, but in the urban context they represented innovations of the time. Schools and industrial facilities were built on the outskirts of the city to enable economic development and social welfare of the people. The city was also distinguished for its free green areas, park, sport center and playgrounds. (Fig. 20-22)

The trend of modernism, which transformed Ferizaj into growing administrative and industrial center, distinguished itself with an additional, new architectural layer that strongly denied previous layers in existence. The high concentration of modern buildings is mainly a result of a strong influence of imported European concepts and the architectural thought of Le Corbusier. Although never officially proclaimed by the end of the ’50s, modernism with its white volumes and strict geometry became de facto the style of the first strong trend of socialist modernisation, articulated in elegant administrative buildings, institutional and apartment buildings. It can be concluded that each of these architectural works in Ferizaj gained at least several meanings:
purified aesthetics of modernism, abstract expression, functional plan solution, rationalism, form purity, an appropriate new form and physical representation of the idea for a revolution and freedom. This architectural language can be read in all selected buildings that fulfilled the first urban plan of socialist Ferizaj. (Fig. 23-25)

The abstraction became the most obvious and the most logical strategy of representing universality, still enough by leaving space to individual interpretations, the symbol of the post-war purification, by carrying the complex task of helping in the ‘war’ fighting the idea of creating a ‘national form’ in times when the concept of brotherhood, unity and equity needed to be put on solid grounds. This acceptance of functionality, the international style and the rational way of construction in times of low economic development fully matched with the preferred way of building in the country. We deal with what in literature is known as the ‘ideological’ modernism in this part of the buildings, based on which the image of the prosperous socialist city was created, and Ferizaj itself possessed highly developing trend. On the other hand, the ideal and perfection in architecture were present in buildings of the time, although these two features are not qualified as extremely important in presenting them as achievements of the modern in the city.

![Fig.20,21&22 Modern buildings in Ferizaj, 1960-1990. Credits: Kujtim Elezi](image)

After the 1970s, Ferizaj experienced a new cycle of urban transformation and an opportunity to think over the new structures and the city tissue in accordance with the latest architectural paradigms. The newly established collection of valuable and sometimes outstanding architectural buildings, mostly concentrated in the heart of the city center, but also dispersed within its tissue, further defined and strengthened the modern identity of Ferizaj. The sculptural, textured beton brut surfaces and the strict geometric forms introduced the new architectural language of the 1970s. All changes for the creation of the modern in Prishtina and in other centers close to Ferizaj were also reflected in the creation of the modern. Only now, the power and originality of the artistic expression of style was reduced, poorer, and the aesthetic aspect of buildings could not be compared to that of, for example, buildings in Prishtina.
The continuity in presenting International Style functionalism, rationalism and features in the late modernism in Ferizaj went on for some time. It seems that the progress on the ‘turn’ of the creation of modernism in Pristina needed some time to produce immediate results, so the ‘old’ in creating the new would rule for a while. Buildings of this period are not that ‘deformed’ examples of modern architecture. Architects still tend to be good professionals, although compared to the center, suburbs may not always gain architectural quality in their projects. The examples in which the ‘continuity’ with the old rules, a characteristic of early modernism at the turn of the century, are traced back to objects such as the Police Station, 1976; Bankos Administration, 1979 (by architects M. Višnjić and S. Odović). (Fig. 26, 27)

The power of the turn of architectural creativity in Ferizaj (the ‘brutal’ switch) became evident in the next presentations, which clearly show the desire for dominance and monumentality, of the heavy, of the static, rudely expressed through materials in the surfaces of the buildings. These are buildings inspired by Le Corbusier’s work with ‘béton brut’ on the surfaces of which we can clearly see a ‘sincerity’ expressed in the structure and materials, one of the definitions of Brutalist architecture. The most significant example carried out in Ferizaj in this category is the ‘Palace of Sports’ in 1982 by architect Miroslav Ćočanović. (Fig. 28)

Architectural responses continue to speak different languages - from complex, but rigid spatial structures that, in attempt to ‘escape’ from functionalism, explore various typological matrices, mainly based upon the structural principles of fragmentation of the volume in individualised units. We go through powerful metabolists structures made in béton brut, the neo-expressive forms (examples: Municipality Building, 1963; Post Office, 1977, architect M. Višnjić), all the way to the fragmented expressive forms and architecture as a topography - a herald of something that is yet to emerge and become actual in the world of architectural production (examples: Hotel Lybeteni, 1960, architects: D. Šugarčev, I. Šabić, M. Damjanović; Shopping Mall, 1970, architect A. Dimitrijević). (Fig. 29-32)

Based on the fact that all these colors of architectural styles belonging to the modern movement came decades after they had originally appeared in Western Europe, they did not follow the order of original appearance in Ferizaj. Hence, there are buildings with expressionist spirit
before those based on the principles of rationalism and functionalism. This is another fact that these works existed more due to the author's affinity for a particular architectural stream rather than being coherent, or even more original in relation to time.

The process of model absorption and reinterpretation found in local traditions was not taken as element that would lead to the question of expressing architectural 'identity'. Tradition was deliberately cleaned from the mind of the local architects, mostly from the political agenda, but also through the filter of modernism. The attempt to return to the tradition and to create the modern based on well-studied elements by the tradition of earlier buildings almost never became a reality in creating what other countries often considered as the future goal - the one known as an architectural national identity. Regionalism emerging as the new element in the last phase of modern architecture is considered as an example, but in Kosovo, and particularly in Ferizaj, it was not present in any of the buildings. The usage of traditional motifs, such as the cultural, regional and the ethnic, was not a raw material for modern reinterpretation. Regionalism in the modern architecture of Kosovo can generally be traced to a small extent, or individual work, like those of Qemaj Beqiri.

Conclusions

After observing the rise of modernism in Ferizaj, the first thing that we can conclude is the fact that, as in many cities with oriental nuclei, there is some space for accusation for a brutal, unprofessional beginning, as a destroyer of the old and a kind of 'revenge' on the Oriental, a barbaric act on the old. As a result, Ferizaj lost a part of its past, a part of its architectural treasure layered extremely well over time. This loss has remained irreversible to this day.

On the other hand, we must admit that modernism in Ferizaj has above all succeeded in delivering the demands of the time on the political, economic and artistic aspect. Although a little bit late, and with a lower artistic and aesthetic level compared to Pristina as the capital, modernism in Ferizaj managed to be a ‘frozen’ monument of social progress for more than half a century, clearly presented through architecture. Through its implementation as a style in architecture, Ferizaj managed to gain a new appearance, different when it is compared to earlier periods and objects with a new architectural identity. (Gjinolli, Kabashi, 2015)

It is evident that the modern in Ferizaj presents a conglomerate of borrowed, adapted and reinterpreted cases. We speak about the solid interpretation of a universal architectural language. In most cases, buildings have a pattern, with no artistic originality. There are few cases in which the dose of authenticity drives the artistic sensation of being an indisputable part of the creative process.

The representation of the time factor and its understanding in architecture is present, meaning that modernism begins with what is known as the ‘idealization of the modern’ through the basic principles of functionalism and rationalism, to continue with brutalism, international style, structuralism in architecture, neo-expressionism, until the return to the traditional (the local) in the search of creating nationalism in architecture.

Modernism as the approach to the creation of the city and its architecture has managed to give meaning to the critical process known as the relation time/architecture, with an expressed clarity, although only few original artistic examples are available. The spirit of modernism in architecture will certainly and strongly represent the relation time/architecture in the creation of modern living for the people. For the period it was created, it also sealed the meaning of time, as it was consequently its sole purpose.

After analyzing the whole process of modern architecture development in Ferizaj from World War II until 1990, where the social order that was being developed began to fall as well, we can easily conclude that this development, besides being considered as a manifestation of styles,
was also a manifestation of general modernism that the Ferizaj society experienced after World War II. In the beginning, the principles for the development of the city for the ‘new individual in a self-governing society’ were completely inconsistent with the traditional way of life, and consequently with the buildings and the people of Ferizaj, but the situation changed by transforming each other over time – people by changing architecture and architecture by changing people. As a result, this had an impact by transforming it and producing the first elements of urbanism in the city, although in the beginning it was seen with skepticism by the traditional Ferizaj society.

References

From local to global

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Abstract. The adjective “regional” attached to the word “architecture” implies that there is something special about the architecture of a particular locality, something that occurs nowhere else. It is obvious, therefore, that to know what is regional one must first know what is local. With the all-obliterating spread of Modernism in Macedonia, efforts which were made to highlight regional and local concerns were left without enough support to survive. In the early 1970s, few young architects from Macedonia found a medium to exercise their own kind of regionalism which allowed it to exist within the parameters of modernism. There are notable exceptions, for example the works of Boris Čipan, Petar Mulčkoski, Georgi Konstantinovski, Janko Konstantinov, Slavko Brezoski, etc.

The purpose of this research is to present at first the moment of architects’ involvement in presenting architectural heritage as a value on which the question of national identity can be raised. It is obvious that here we explore how architecture and architectural heritage can serve as the basis on which the image of Macedonian national identity will be created.

Secondly, the attempt of this research is to show the way regionalism emerged at different periods during the development of modernism in Macedonia. This includes presenting architectural approaches in borrowings and modifications made to country's architectural heritage details in order to achieve regionalism in modern architecture in Macedonia. Finally, while presenting projects, it is clear that we deal with different variations of presenting regionalism, depending on the period of creation of modernism in Macedonia, and on the authors’ purpose of creating modern style - being close to internationalism, or being rebellious in the search of the national identity through country's vernacular architecture.

Keywords: history of architecture, architectural heritage, Regionalism, Modernism, Macedonia.

Introduction

In the case of Macedonia, the question of identity and construction of national institution was very pertinent because the nation was never recognized before the founding of socialist Yugoslavia. That is why both identity and national(ism) (in)architecture were on the agenda of young architects and institutions in Macedonia in the early 1950s and 1960s. According to researcher Velika Işkovska, “vernacular heritage includes both physical remnants of the past, i.e. the historic environment in the form of archaeological and architectural sites, as well as the non-material aspects of our living past, i.e. the intangible heritage as manifested in music, handicraft, religion and other rituals and cultural practices” (JSVS e-journal, Vol. 3, no.2, December, 2014). In the case of Macedonia, architectural heritage has been used to construct an important aspect of people's identity and sense of place. The research foregrounds the important role that architecture plays in the process of construction of
national identities, because the absence of a well-defined national identity for Macedonia provided a space for competing narratives to emerge. Shortly after the war, the creation of modern architecture was not the only trajectory chosen by local architects. Along with the expressed concern of achieving a strong newborn state through modern architecture, local architects were also concerned about how architectural heritage could serve to the question of building the national identity. This concern did not take long. First Macedonian architects shared the opinion that architecture in public should be recognized as a national heritage, and even to serve for the protection of the newly created identity—the Macedonian identity. The second way, along with the creation of modernism in Macedonia, was the beginning of national identity fabrication and nationalism expression, all by putting architecture at the center of attention. Architects were committed to working in both academic and practical ways in order to achieve favorable outcomes. (works of Boris Ćipan, Sotir Tomoski, Krum Tomoski, Dušan Grabrijan, etc.)

A search for identity and nationalism in architecture

Diana Petkova, in her paper ‘The Concept of National Identity Revisited’ (2006), states that the problem of identity is a product of late modernity. More precisely, the same applies for national identity. It became an object of academic study in the last few decades. If the phenomenon ‘national identity’ appeared with the formation of the modern nation-state, or most probably in the transition from feudalism to capitalism, the concept and the problem of ‘national identity’ are products of modern times and their existence is predetermined mainly by the crises of national societies. Macedonia represents the case of being a newborn state founded under former Yugoslavia umbrella, which means that it needed to create and strengthen its national identity.

On the other side, Lawrence J. Vale in 'Architecture, Power, and National Identity' (2008) shares his opinion about how a newly created nation [Macedonian in our study case] should begin to gain its national identity. He claims that visible symbols of national identity might take many forms, such as: flags, icons, coins, bills, flora and fauna and postage stamps. Works of architecture assume a peculiar place in this assemblage of national symbols. Architecture has often been used as a tool for promoting something that is called national identity, but many dimensions of this phenomenon remain unarticulated. National identity may be promoted through architectural heritage, if such a heritage is able to symbolically express the needs of the people, both spiritual and physical needs. To the nation, therefore, the spirit of an architecture is its most important, its most valuable and its most practical aspect. (Harris, 2007)

The initiative of creating national/architectural identity in post-World War II Macedonia resulted from a person with two occupations—an architect and politician, minister Kiro Georgievski—who was apparently well informed about the course of modernism in Europe. His brilliant idea was that architectural heritage in Macedonia should serve as the basis (core) for the creation of national identity and for this purpose he invited one of the most well-known theoretical architects of the time in former Yugoslavia, Slovenian architect Dušan Grabrijan, to research architectural heritage. In the summer of 1949, Grabrijan together with his three architecture students conducted a three-month research on architectural heritage by documenting, sketching and photographing most buildings of the time in different cities in Macedonia. It is worth noting the fact that architectural heritage in the period between the two World Wars, known in public by Kokan Grčev ‘Architectural Styles’ (2013), as eclecticism or neo-classicism (national romanticism), would not be treated as an objective from which national identity in architecture would be gained. This developing culture was neglected and Grabrijan’s interest on the 19th century vernacular architecture faded, which according to him was providing frequent motifs of national representation.
Vernacular architecture in Macedonia, as Grabrijan identified it during his research, was a product of the country’s native soil, by embodying “the essential core of the nation” and “the soil of its peasant folks”, criteria that should be important topics in the upcoming process of creating national identity in architecture. More significantly, as he would claim in his book ‘Macedonian House, 1955’, the vernacular architecture in Macedonia represented a particular wisdom of buildings purified over centuries. Buildings of the anonymous master were seen as perfect expressions of simplicity, utility, practicality, constructional honesty, and conformity to local materials, climate, and resources: that is, the same basic qualities and criteria that modern architecture sought after. Comparing examples from houses in Macedonia with the ones from Le Corbusier, Grabrijan often concluded that modern architecture has emerged as a critical discourse by those wishing to replace fixed stylistic norms of classicism and academism with an empirical approach to design that had to be, by definition, responsive to local condition. Form would not be an a priori stylistic choice but a consequence of rational considerations of program, site, soil, climate, budget, and materials, just as it had always been with vernacular buildings or folk architecture. Therefore, Grabrijan states that, in its true spirit, modern architecture could not possibly be an “international style”; integral to its very conception was a profound contextualist and regionalist sensibility. The Macedonian house and its analogy to the modern works of Le Corbusier represent an example of that connection. (Fig.1-4)

Fig. 1, 2, 3, 4. D. Grabrijan, comparing houses from Ohri and Le Corbusier’s workers houses in Pessac and Barcelona. Details from his book ‘Macedonian house’, 1955, Ljubljana. Source: D. Grabrijan,

Speaking about the qualities of vernacular architecture in Macedonia, Grabrijan thinks that architects have much to learn about the lessons of the vernacular, which, it was argued, gave superb examples of rationality. In traditional architecture, all elements and materials were appropriately used, logical and functional, offering a source of inspiration to European thought and architecture. The new works of Macedonian architects should be considered in the same way that traditional (vernacular) architecture was considered. Grabrijan encouraged the study of vernacular traditions. In his book, he introduced the inherent connection between the modern architecture and nationalist passion for the homeland, giving examples from Macedonian vernacular heritage and Le Corbusier’s work. ‘Architectural context (or locality)’ is the overall character of the light, air, sun, wind, topography, terrain, water, vegetation, hardness or mildness of nature, distinct quality of the night, and the mysterious ‘promenade’ of houses he visited. In his opinion, Macedonian vernacular heritage can play a major role in modern architecture. Grabrijan then praised the introverted character of the traditional Macedonian house with its cool and shady courtyards ‘open to starry skies above’ and “closed to the dust of the streets”. According to Grabrijan, Macedonia is idealized, and architects should be inspired to explore a pure aesthetics in the spirit of Macedonian vernacular heritage. For modernist architects, the cubic forms, plain surfaces and flat roofs of the new architecture found romantic justification in the poorer mud-brick traditions.

Like most of his colleagues, Grabrijan’s appreciation of the vernacular was motivated by a distinctly modernist agenda. However, as an almost tautological corollary to their argument that modern architecture was “by definition national” (because it was the most appropriate response to context), he proposed that the traditional Macedonian house was “already modern” (because it embodied precisely the same qualities that modernism sought after). The traditional
Macedonian house, concluded Grabrijan, is remarkably similar to today’s conceptions of the modern house. Ample windows and light, free plan, the emphasis on comfort over ostentatious display, conformity to the nature of materials, generous supply of terraces, garden and courtyard intimately linking the house with nature. Aren’t these the same characteristics that we look for in modern houses? We find all of them in the traditional Macedonian house. Le Corbusier might have been inspired by the Macedonian house. He lifts his houses upon stilts, reserving the ground floor for services, garage, etc., just like our storages, and he uses wide terraces above the ground, just like the chardaks (garrets). His windows are oriented toward the line of the view and the horizontal, just like our rows of windows. (Grabrijan, 1955)

Grabrijan concludes his research by stating that Macedonia possesses inexhaustible, impressive and surprising architectural heritage wealth which has served as an inspiration even to the brilliant mind of Le Corbusier in the creation of early modernism, and secondly, the Macedonian house has special characteristics that make it possible to distinguish it from oriental houses. Indeed, he concludes that the oriental house ended in Macedonia, and another typology of houses continues to evolve here, which have been borrowed as an inspiration for modernists in creating the modern. Grabrijan concludes, with a bit of reserve, that it is not certain whether Le Corbusier was in Macedonia (although later Le Corbusier’s arrival in Macedonia reached myth levels), but the fact that he was in Thessaloniki is well known, and this city is only 4 hours far from Macedonia travelling by train. In short, Grabrijan thinks that the vernacular in Macedonia is the basis on which European modernism is built and it deserves recognition as such. While Grabrijan can be judged in his work more on the analogy relationship between the Macedonian house and modern architecture, the issue of nationalism in architecture was studied by another architect, Sotir Tomoski. In his work ‘National Architecture’ (1960), Tomoski pledges to clarify the importance of nationalism for the country and its architecture, and the approach that architects must take to create modernism in the country, always with a national connotation.

Clifford Geertz has observed that the leadership of a new state must face the difficult challenge of consolidating the identity of the “collective subject to whom the actions of the state can be internally connected”. In other words, national identity must be fostered internally within each individual and among the constituent groups of the new state- rather than oppositionally. (Lawrence, 2007) Ernst Gellner goes further, namely in his ‘Nations and Nationalism’, he defines nationalism as a “theory of political legitimacy” which holds that “the political and the national unit should be congruent”. In practice, most historians and theorists agree, that it has been nationalism that has brought about the existence of nations, and not vice versa. (‘We have made Italy, now we have to make Italians’). National identity, in this view, is not a natural attribute that precedes statehood but a process that must be cultivated for a long time after a regime has gained political power. (Lawrence, 2007).

Speaking Geertz’s and Gellner’s language, Sotir Tomoski is more than convinced that ‘political legitimacy’ and ‘national congruency’ can be achieved through philosophical call to architecture, which is able to express every need of the society, and the one from Macedonia was seeking more than ever for the national identity. Tomoski argues in his writings that a national expression is the expression of consolidation. This is because a nation represents consolidated people. The purpose of national architecture according to him is further to unite people as citizens. Since the nation is essentially a symbol of a newly created state such was Macedonia, a national architecture must provide an image of the qualities the nation symbolizes. National architecture must evoke images of the qualities people desire. The nation needs buildings which hold up a picture of what their citizens would like to believe they are, that call their achievements to the attention of the world, that advertise their power. This is what consolidates citizens. This is why conquerors always build. That is why, Tomoski suggests that young architects must follow the pattern of their predecessors-the anonymous master that was able to construct a national architecture. (Fig. 5-9).
Fig. 5, 6, 7, 8, 9. S. Tomoski ‘Women’s gymnasium’, Shkupi, 1939, houses from Ohri, details from Boris Čipan’s book ‘Old City Architecture in Ohri’ (1955). Source: internet, B. Čipan.

As a result of the need to create spiritual values in their buildings, nations often look for a style derived from the buildings of some previous period—an important time in the historical development of the nation and hence useful as a national symbol. As a consequence, the national expression may likely result from the accident of time and place. Same as Dušan Grabrijan, Sotir Tomoski considers the architecture of the 19th century as the core from which architects should begin building the national identity in architecture. The new from the derivations from Europe, according to Tomoski, does not fulfill the national intention in architecture, even worse, they might be seen as a new modern way of colonialism. That is why, Tomoski argues, Macedonia must have its own national architecture—the so-called Macedonian architecture. According to him, for an architecture to be really great it must express the variety, freedom, expansiveness and love of the physical world that is the product of the nation-state. At the same time, it must provide an image of the qualities people want, to believe the expression of themselves and their nation, and that it unites them in a great national expression. Tomoski’s way of searching national expression in architecture was later followed by other researchers, such as Krum Tomoski, Slavko Brezovski, Jasmina Hadzieva, etc. Theoretically, only few important steps were made, because now we can use Tomoski’s words ‘we have from where to begin’ in order to make ‘our national architecture’. Practically, his first architectural works do not show a very promising, idealized transformation of the modern into national (Macedonian) architecture.

From national to regional architecture

Boris Čipan, another architect, lecturer and publicist, in his work ‘Old City Architecture in Ohri’ (1955) takes a slightly neutral stance when it comes to the dose of nationalism that was required to be expressed in architecture as well. His judgment is that all of Macedonia’s archetypal heritage, and he also refers to that of the 19th century which was considered to be (even called) Oriental, should not be treated in the narrow context, especially as a national one. He believes that in a slightly wider region than the borders of present Macedonia the same approach is faced in the creation of vernacular architecture, and this is because a wide region has the same characteristics in topography, climate, terrain, building materials, and taking these arguments into account, the anonymous master would not have been able to create anything different in each state separately, and above all this architectural creation in each state would be recognized as national creativity. We find Čipan as the first person to attempt escaping the dose of nationalism expressed in architecture, and the first person stating that regionalism must be taken into account in new architectural creations. No matter how early such an approach of Čipan is, it is of great importance because it represents a quick demand, because on the one hand the idea of nationalism in the country’s architecture has been strengthened, and on the
other hand such a requirement will be in step with time, if the requirements of European architects for the concept of regionalism and its inclusion as an element in the creation of architecture are taken into account.

Čipan explains that what we call “regional” in “architecture” implies more or less the fact that there is something special about the architecture of a particular locality, something that occurs nowhere else, and it is obvious, therefore, that to know what is regional one must first know what is general. We often discover that what at first seems to be regional is after all only the remains of what was once quite general. For Čipan, regionalism is a state of mind because a region promotes and accepts ideas. Imagination and intelligence are necessary for both. Otherwise ideas fall in a vacuum. Creation is always a happening. Regionalism, as a source for invention, represents a return to the basics in architecture—a return to what is primal and elemental. It offers hope for a responsible and eloquent architecture, constantly renewing itself in service to society. Architecture responds to nearby and distant influences, both in time and place. Čipan’s research and collection of vernacular examples in Ohri led him to the conclusion on how local influences must be used to generate the local character in architecture, which has been called ‘regionalism’. ‘Regional’ architecture, claims Čipan, is the existing vernacular architecture of a region; it is the given built environment; sometimes it is not even recognized as architecture. “Regionalism” is the architect’s response to these regional architectures.

On the one hand, being aware of Dušan Grabrijan, then Sotir Tomoski and finally Boris Čipan opinions, and on the other hand, collecting examples realized on the ground, we conclude that regionalism as an expressed phenomenon in Macedonia can be categorized at least in two periods of time, between 1945-1963 and 1965-1990.

Regionalism between 1945-1963

This period of modernism in Macedonia is recognizable for the theoretical approach of some architects, like Grabrijan and Tomoski, in creating identity and nationalism in architecture. On the other hand, modernism is growing more rapidly on the ground, similar to the political establishment of the country. Hence, we deal with a situation of creating high level architecture by applying Le Corbusier’s and CIAM principles, according to which modernism in Macedonia gained at least several meanings: purified aesthetics of modernism, abstract expression, functional plan solution, rationalism, purity of form, an appropriate new form and physical representation of the idea for a revolution and freedom. The abstraction became the most obvious and the most logical strategy for representing the universality, still sufficiently to leave space for individual interpretations, a symbol of the post-war purification, as it carried the complex task of helping in the ‘war’ fighting the idea of creating a ‘national form’ in times when the concept of brotherhood, unity and equity needed to be put on solid grounds. This acceptance of functionality, the international style and the rational way of construction in times of low economic development fully matched the preferred manner of building in the country. (Deskovska, 2015)

In such a situation, regionalism as an expressed phenomenon in architecture belongs to the category known as ‘Modern (Ideological) Regionalism’. This is a type of Regionalism where architects study vernacular architecture as inspiration source. They were interested in justifying the tenets of their new ideology that architecture should be: utilitarian in its use of materials and technology; functional in its adaptation to climate and site; and beautiful by relying on manipulation of mass and space rather than on surface decoration. Their interest in vernacular environment dates back to the creation of modernism in architecture in the early 20th century. Studies of vernacular architecture produced by architects in Macedonia have a number of common characteristics: a) the attempt to identify and record design elements of the environment, whether typical or unique, that are of interest to them because they illustrate the
tenets of modernism. The elements that have been studied are: details of doors, downspouts of chimneys, interior and exterior spaces, and even streets and house complexes composing the fabric of an entire community, b) discovering of universal and timeless ways of achieving architectural perfection, the confirmation of a new way of doing architecture without reference to the historical styles that had dominated Western architecture until that time, c) the objective was to demonstrate how architectural quality can be generated through the rational use of materials and by responding to climatic concerns, d) valuing the vernacular architecture as a source of inspiration for their own work as well as a corroboration of modernist theories of design. Vernacular architecture was perceived as being successful both aesthetically and functionally. It sets standards of architectural success. Indeed, architects considered vernacular architecture as having attained perfection in serving human needs and harmonizing with the environment, e) The pioneers of Modern Architecture emphasized the rational aspect of architectural design. Vernacular architecture was assumed to provide superbly rational responses to functional requirements such as available materials, climate and requirements of use. (Canizaro, 2007).

![Image](fig10-13.jpg)


Examples from the field show cases where vernacular architecture is philosophically treated and there are no signs of neovernacularism. Architects, through modern regionalism in their works, were looking for confirmation of ideological positions. Some of the key examples are Slavko Brezoski’s ‘Residential complex’ in Veles, 1953, Edo Mihevc’s ‘Hotel Palas’ in Ohri, 1955, Pantelej Mitkov’s ‘Hotel Astra’ in Ohri, 1956, and Sotir Tomoski’s ‘Center for disabled persons’ in Ohri, 1959. (Fig. 10-13). In all these examples we can see a great ‘fusion’ of the vernacular into modern ideology, an almost untraceable transformation of borrowed details from the vernacular. It seems that architects in the creation of the modern regionalism have perfected European preferences towards the creation of Internationalism in the new architecture. Abstracting elements form the past in order to derive building form from it constitutes what it’s called “abstract regionalism”. It is very difficult and fine line to follow. It mainly incorporates the abstract qualities of a building, for example, massing, solids and void, proportions, sense of space, use of light, and structural principles in their reinterpreted form. It also endeavors in bringing back to existence the cultural issues.

**Regionalism between 1963-1990**

After the earthquake of the 1963, Shkupi became an experimental model of the UN. Based on Kenzo Tange’s master plan (1965), Shkupi would experience a new cycle of urban transformation and an opportunity to think over the new structures and city tissue in accordance with the latest architectural paradigms. The new established collection of valuable and sometimes outstanding architectural buildings, mostly concentrated in the heart of the city center, but also dispersed within its tissue, would further define and strengthen the modern
identity of Shkupi. From Shkupi, the model of making new architecture was spread around the entire country. The power of change in the architectural creativity becomes apparent in the next presentations that clearly show the desire for dominance and monumentality of the heavy, the static, rudely expressed even through the surface materials of the building. These are buildings inspired by Le Corbusier with ‘beton brut’ on the surfaces of which we can see the ‘sincerity’ that is expressed in the structure and the material, one of the definitions of Brutalist architecture.

Under the pressure of creating Internationalism in architecture, architects in Macedonia were able to raise the issue of returning the national to architecture. The vernacular again provided frequent motifs of national representation. A very important step further to this direction was the one of ‘imaginary founding’ of the so-called “The Ohri School” that was a tentative category proposed by the end of the 1970s to capture the architecture built in regional Macedonia. New buildings should make distinct break by referring to Ohri’s notable architectural heritage. The Ohri House was taken for granted: it had completed the case. This idea points to the multiplicities of modernism and their entangled histories with critical regionalism. Newly designed structures were about to articulate a different canonical question: at what point can shifts in architecture be identified collectively? The “Ohri School” is signified through the cultural geography of Ohri, but it does not signify the Ohri region specifically.

Regionalism expressed at present in modern architecture belongs to the category known as Experiential (Aristotelian) Regionalism. In contrast with the earlier approach (1945-1963) of Macedonian architects who looked for confirmation of ideological positions, now the architects’ approach is to identify and present the experiential qualities of regional vernacular architectures. The qualities sought for study were those that conveyed a sense of well-being and heightened the social interaction of the inhabitants, such as human scale, great views, opportunities to gather in small groups, and visual variety. The experimental approach discovers formal properties of the built environment and represents it with the same tools as those used by the modern architects. Regionalism resulting from this ‘experiential’ approach is an extension of modernism. Experiential regionalism is based on an interpretation of the vernacular through the poetic sensibility of the architect. While it is more significant than the nostalgic re-creation of folkloric regionalism, and greatly expands the scope of modernist regionalism, experiential regionalism has limitations.

The first examples of an epic transition from the vernacular to international modernism through poetic interpretation are Petar Mulčkoski’s ‘Ossuary Monument’, Kavadarci (1975) and the ‘Government Building’ in Shkupi, (1970). The psychological and emotional sense of radical transformation from the vernacular to the modern of ‘beton brut’ is clearly seen here. (Fig.14-17)
There is a number of buildings that show the inspiration from the vernacular both through the architectural promenade borrowed from Ohri houses and through the ornament, which is now expressed on the surfaces of the new buildings. Such examples are the interiors and decorations of the University Library facade (1967-72) in Shkupi also by Petar Muličkoski, as well as the building of the MASA [Macedonian Academy of Science and Art] (1973-76) by Boris Čipan in Shkupi, (Fig.18-21). An expressive approach, or better said an experiment with philosophical treatment of geometry and emotion, comes from Georgi Konstantinovski with the ‘Razlovec Uprising’ monument (1979) in Delčevo, (Fig.22).

The ornamental treatment as an experiment of the 1970s continues in the works of Janko Konstantinov, as in the Medical High Schools (1973) and the Telecommunications Building (1974) in Shkupi, (Fig.22-23). The ornament seems to have been chosen as a way of connecting with the vernacular for inspiration, and its use for experimentation in creating modernism leads to the philosophical treatment of the inspirational goal towards its final realization with a dose of mysticism present in the works. Such an example is the activity of these authors in the early 70’s. After all, there is an approval for treating vernacular architecture as a national element used by architects towards the noble purpose-creating nationalism, although this is still seen as an experiment in modern architecture.
'Pensioners House' (1973) in Ohri, and even from Kiril Muratoski and Mimoza Tomić in the 'Ethnographic Museum' (1976) in Shkupi, (Fig.25-27). Now, architects are clearly looking for a breakthrough in presenting details with which the identification of the vernacular as a source of inspiration is beginning to be more obvious. The architecture of these buildings begins to reduce the nuance of internationalism by increasing the demand for the national. Such examples are the buildings by Marko Mušić in Manastir, the 'Cultural Center' (1980), then Kiril Muratoski, V. Nikolski and I. Gerasimoski in Tetova with the 'Cultural Center' (1970), A. Nikolski, I. Pulejkov, M. Pretković with the ‘Motel Makedonija’ (1982) in Veles and Trajko Dimitrov with the ‘City Pool Mladost’ in Shkupi (1978), (Fig.28-31).

It seems that the power of international style, the creation of architecture under the fever of Japanese brutalism and metabolism will soon reach a culmination. Exceptionally good works were created, and the artistic world of Macedonia was proud with this. However, it seems that the desire for strong nationalism in architecture was not extinct because it did not even appear to be present in the works of the two periods we consider in this research. In both periods discussed so far, it turns out that internationalism was far too dominant in the creation of architecture, which would have to change. Architects are aware of the need of trying to create an architecture in which, above all and before internationalism, the national element should be present in architecture. Such an approach was known as 'self-recognition'. In architecture, the regionalism to be created now is known as Folkloric (typological, platonic or 19th century) Regionalism.

Here we have once again the case when (folklorists) architects have suggested using folk architecture as a source for developing national architectural styles to be taught at national
universities. The result of examining regional vernacular architecture from the folkloric perspective is a regionalism which tries to recapture a certain period of the past, presumed to represent a timeless reality. It is a revivalist regionalism which tried to construct an iconic image of presumed regional archetypes, thus generating a neovernacular architecture. In neovernacular architecture there is an attempt to re-create the architecture of the past. The quality of the buildings attempting to present the past can vary. However, what gives legitimacy to the design, according to this approach, is how well it evokes the regional archetype. The use of older materials and building methods is thought to lend more authenticity to new buildings, according to this approach. New technology and materials are used reluctantly and only if old materials are prohibitively expensive. Furthermore, when new technologies and materials are used, they are concealed in an effort to deny their presence. (Canizaro, 2007).

The first buildings that improved the turn in using vernacular architecture in order to create the 'image' of the new/old came from Sofija and Margarita Hadzievi in Ohri, ‘Letnica Restaurant’ (1972), Slavko Brezoski ‘Hotel Neda’ in Galičnik (1976-80), Kliment Zarov with ‘Hotel Inex’ in Ohri (1971) and Pantelej Mitkov ‘Hotel Desaret’ in Ohri (1971-73), (Fig.32-35). Other examples improving such a turn in using vernacular architecture are Teodor Paskali’s ‘Hotel Biser’, Struga (1970-74), Slavco Vrencovski’s ‘Public building SIZ’ in Kruševo (1977) and Tihomir Arsovski’s with his shopping mall ‘MOST’ (1977) in Shkup, (Fig.36-38). The articulation of vernacular architecture details is evident in these constructions that are used without hesitation in new creations. Folkloric regionalism seems to work because the created 'image' is clearly evident and presents a direct link to the not too distant past of the country's architecture.


Other examples of such a similar attempt of presenting national architectural folklore are the buildings of Ljubica Nikolski with her ‘Residential building’ in Shkupi (1977), (Fig.39) and Alexandar Smilevska, Ljubica Nikolski ‘Day care center Astibo’, Štip (1978), then Trajko Vasilev with ‘Hotel Montana’ in Kruševo (1973). Dragan Krstev’s ‘Sport Center May 25’, Veles (1977), Vera Qoseva’s ‘Hotel Panorama’, Radoviš (1974), (Fig.40-43) and Todor Paskali’s ‘Hotel Belgrade’, Struga (1989) (Fig.44) clearly present details of local vernacular architecture in the new architectural treatment. Not less identical is the situation with the buildings coming from Jovan Stefanovski-Žan and Liljana Kik with ‘House of Merchants’, ‘Old Bazaar’ Shkupi (1991), Sotir Sundovski with ‘Hotel Molika’, Manastir (1989) and Paraskeva Grebenaroska and Danail Jančulev with the ‘Residential Building’, Prilep (1991), (Fig.44-47).


Conclusion

In Regionalism, as a dimension of architecture, the past informs the future. We have discussed three approaches in the study of regional vernacular architectures and the impact they have upon regionalism, depending on the assumptions they make about the nature of vernacular architecture and methods for studying it. Folkloric and ideological (modernist) regionalism is insufficient to address the issues of memory in architecture, and may even be counterproductive. Experiential regionalism is of far greater value. However, as Frampton states, it is not only the conscious cultivation of roots, but
also the underlying rationality of the work and the collective process that produced it, which contributed to ‘its expressive form’.

In the case of Macedonia, Regionalism, more rather than culture in architectural expression, has been used as the core on which the question of national identity has been raised, even in architecture. This, during the period between 1945-1963, did not provide the expected results over the national architectural identity, not that architects were not capable of proving it, but because the influence of internationalism on architecture was extremely strong, and regionalism created over vernacular (national) architectural research had more philosophical treatment. This Regionalism, if we were to 'identify' or categorize it, would be known as 'Regionalism of restriction'.

However, the conclusion for the second phase, 1963-1990, is that during this period architects found the courage to exploit new circumstances in creating the modern with which they were able to use the elements of vernacular architecture as an 'incentive' to create modern architecture, with a return to the old one. The experiment part encouraged local architects to research even more vigorously to bring out more subtle examples to light to present what vernacular architecture could do well— the folklorization of architecture— even when it was created under the umbrella of modernism between the 70s and 80s.

Architectural examples of the last decade show that even nationalism as a phenomenon required for decades by Macedonian architects now has a significantly more prosperous expression, it is more convincing that the national aspect has dominated architecture, and that Macedonian identity can be read from it. This, under the narrow sense of the country's borders, is known as ‘self-recognition’, while in professional terms it is known with the term 'Regionalism of Liberation'.

Whatever the purpose and the approach of the search for regionalism in Macedonia’s architecture is, I think that architects managed to at least convince the public, if not strongly about the Macedonian nationalism in architecture, then they strongly and convincingly did it with the way how architectural heritage of the past can become an element of study of the architectural creativity of the present, which unfortunately Kosova failed to do the same time, at least not in quantity and in an organized institutional form as the Macedonian part in Macedonia.

References

Degradation of the green spaces in the heart of cities

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Abstract. Greenery inside cities is integral part of their urban area, which affects citizens and life in cities in essential way, supports quality of the city and especially its public space. Today greenery is integral and expected part of a complex, which we call “urbanity”. In our geographical latitudes, conditions for beneficial effects of greenery are good so far, and it was possible to maintain the greenery without too high costs and with huge effect for urban area. In present time with growing influence of climate change on internal municipal environment occurs also increase of influence of a greenery on stability of inner city climate (and not only - protection against formation of thermal islands, increase of habitation of public areas, creation of more humid and cold air at night, etc.). Recent way of adjustment of more municipal parks and squares doesn’t really respond to this requirement, works on renovation of parks and public areas are being disproportionately prolonged, there are used inappropriate cover materials for sidewalks and paths, placement of green spaces and trees is reduced (shading, humid air, absorption and water retention are limited) and full efficiency of municipal greenery (especially trees again), after the works on the park are finished, is postponed for later time. Within our presentation will be given actual examples of inappropriate changes from presence, including examples of strong reduction of greenery and list of possible negative effects of degradation of role of greenery in municipal and public areas.

Keywords: Climate change, urban greenery, urban heat islands

Introduction

The greenery inside the cities is an integral part of their urban space that substantially influences citizens and the life in cities, supports the quality of city and particularly its public spaces. The greenery is today an integral and expected part of the complex, which we call "urbanity". The aim of the contribution is, on the basis of the chosen examples (often unsuitable) of the large changes in the layout of the greenery and city movable facilities in the public spaces of the cities (and also the examples of strong reduction of the greenery), to carry out evaluation and enumeration of possible negative effects of this ongoing degradation of the greenery role in the central, i.e. public space of cities.

Manifestations of the climate change in the Czech Republic

Manifestations of the climate change have been topically and permanently discussed by the professional as well as laic public together with increasing their local impacts. What concrete these manifestations include is stated, for example, by Zahradniček (2016), who divides them into the following categories:

- Increase of topical temperatures and temperature averages almost annually.
• Increase of the number of tropical days in summer season.
• Decrease of average winter temperatures to the temperatures around +3.7°C.
• Shift of the spring beginning and the summer end (longer vegetation season, prolongation of the temperature optimum and consequent former presence of birds and insects in nature).
• Shift of the boundary of the warm territory, i.e. the vegetation strips, to the north, not only temperature changes.
• Drought within the vegetation season – lack of precipitation and humidity mainly in winter and also in the season of crop growth.
• Irregular spreading of precipitation in the course of the year into the impact and short seasons.
• Wild weather – torrential rainfalls and windstorms, hungry and destructive wind, sudden frost,ing, local strong hailstorms, and showers of snow.

The expected interventions into the environment goal-directed to decreasing the climate change impacts have not appeared and despite the existence of various competitions and attempts to stimulate „principal wave of innovations“ focused on the adaptation strategies and „effective outputs and actions“, the sufficient transfer of technologies, algorithms and procedures to adapt to the climate change has not come. First, the principal functions of the greenery in the city space in relation to the climate change will be methodically summed up and then less known functions of the intra-city greenery will be identified. On the basis of comparison of some interesting, but unsuccessful projects, the ignorance to the new social order for the spaces in the city centres usable in the light of the climate change, will be demonstrated. The aim of the summary is to demonstrate practically that little informed or uninformed designers of city spaces or greenery can negatively influenced or at least change the micro-climate of settlement and thus to lower possibilities of using the urbanity and city structures in future. (Pondělíček a Šilhánková, 2018)

**Impacts of the climate change on cities and their public spaces**

The greenery in the cities both in the form of lawns and shrubbery and in the form of actively cultivated trees on the chosen places has, according to all the knowledge, non-substitutable role influencing a positive evaluation of the city environment by citizens. The subconscious positive evaluation of the greenery by the citizens was proved in the past by the series of examples not only from the European cities. What role of greenery and green areas in the cities can be and what actually is may be demonstrated by the following list:

• Greenery inside cities has commonly positive effects regardless the quality and its biological/ecological value.
• From the climate change point of view the greenery inside the city stabilizes (literally buffers – in the chemical meaning) city micro-climate – sustains humidity, stable temperature, mitigates temperature transitions between day and night, and lowers influence of changes dependent on the weather change (strong wind, frost, snow, heat wave, extreme heat).
• Greenery lowers evaporation and water runoff from the settlements, increases water retention in the city (infiltration), ensures production of water vapour and oxygen, production of positive essential oils and commonly affects the citizens rather enthusiastically, the further functions of greenery are connected with other areas of the public life, such as transport, etc.
Greenery reduces on principle effects of heat, noise, dustiness, bad smell, pollutant dispersion in air, vibration influence, and others. If we underestimate the greenery in the city and restrict its functions to the minimum, it may happen that its functions partially disappear, because restricted vegetation is not able to sustain them and thus the quality of the city space falls down. (Šilhánková a Pondělíček, 2014)

Practical examples

Riegrovo Square in the city of Hradec Králové

An area in front of the railway station in the city of Hradec Králové shows on the situation before reconstruction from 2004-2006 that the greenery partially exists in the area in front the railway station, the area in front of the railway station is relatively bare, paved and should be adapted to the higher heat, precipitation (runoff capacities).

Figure 1 Situation in Riegrovo Square in 2003
(Source: Mapy.cs)

The same area after the radical modification of the space, extent and greenery areas as well as transport infrastructure areas carried out within the construction of the new bus terminal and facilities in the surroundings of the Main Railway Station of the Czech Railways Hradec Králové. Although the architect as well as the local authority in 2002 – 2004 tried to do their best, the result is from the standpoint of the real Adaptation of the city environment on climate change impacts rather poor and the range of greenery was slightly lowered in the public area in front of the railway station and particularly its function was restricted for at least further 20 years, which is shown in Fig. 2, where the same place is 10 years after construction. Due to the unsuitably chosen plantation and leaving out the lawns the potential heat island, which will be in summer days despite suitably chosen white paving stones heated to the relatively high temperature, was created inside the city in the mass key space. (Pondělíček, 2015)
It is apparent from both pictures that the utilization of the area in front of the railway station was not properly managed neither to the retention and water infiltration and the potential of shrubbery, which might have divided the space and also might have stabilized the micro-climate, was not used.

**Square of Republic in the town of Žďár nad Sázavou**

The square in the town of Žďár nad Sázavou should have undergone quite logic renovation in the years of 2010-2016 and should have got new attributes and a shape. However, the authors of the square reconstruction neglected the consequences resulting from the climate change impacts so we can state now that the new square design, which is quite aesthetic satisfactory, achieved plenty of negative factors for the stay of the local citizens on the given spot. The reconstruction of the square area as a public space was carried out without emphasizing the elements of adaption for the climate change.
The new reconstruction of the square practically significantly limited grown-up greenery and also limited the possibilities of active use of the public space by the local citizens. After the square opening it was, on the basis of discussion with the local citizens, stated that uncomfortable access for immobile persons has been created (oral notification of a wheelchair user in 09/2016), older trees with big crowns, which protected from sunlight, have been removed and only spruce has been left in the area at the fountain. The radical rejuvenation and the change of the greenery allocation has been realized on the basis of requirements of the architects-creators.

What was a reason for modifications in the stated range is not clear, what is clear that the motivation was „aesthetics” of the effect of the square, without discussion with the public in order to correct the aim. Despite the mosaic of paving, the square creates the heat island in summer months, which restricts the stay in the centre and acts as a heat reservoir even till the evening (Šilhánková a Pondělíček, 2014)

Conclusions and outputs

If we are asking why financial means are wasted and solutions of interesting intra-city projects of reconstructions of public spaces (squares and parks) are ineffective, there exist a few answers, which are frequent at implementation regarding the public spaces.

• CONCEPTUAL LACK OF PREPARATION – under the certain conditions the self-confidence and the routine of a designer not cooperating sufficiently with the local public wins. The solutions that put the public in an opposite mood than the author of reconstructions wanted may also appear; moreover the real adaption on the climate change in the Czech Republic is promoted and communicated with the professional public only at the minimum.
• GREENERY AND PARKS ARE USED according to the survey MOST OF ALL BY CHILDREN AND PENSIONERS – these are groups of citizens that spend in the public space probably most time and are the major active users of parks (Pondělíček, 2013), nevertheless their opinion on the greenery, space zonation and its use is not considered as important and is not examined from the standpoint of the future users that were not allowed to say their opinion.

• ECONOMICALLY PRODUCTIVE MAN PERCEIVES GREENERY in a better case AS A BACKGROUND – an economically active citizen really perceives the city space as a certain hinterland of the working environment and amusement, or possibly living environment, i.e. he/she consumes it substantially less than the previous two groups and thus he/she is not so much interested in the form of the public space.

• THERE DOES NOT EXIST GENERALLY DEFINED DEMAND FOR THE FUNCTIONAL GREENERY OF SETTLEMENTS in relation to the climate change. Nobody declared and clearly stated that the administration of the greenery, plantation and maintenance of intra-city greenery should be adapted to the new conditions, i.e. to the changes of precipitation and temperature in the vegetation season. The climate change put demands on flexibility and effectiveness of services and also on considerations, what tools and how effectively use them in favour of the quality greenery in cities.

• ADMINISTRATION AND MAINTENANCE OF GREENERY IS FINANCIALLY DEMANDING AND COSTS ARE RISING – not only the primary costs, but also the utility value of the greenery are rising and it is shown that the effective plantation of greenery in the city centres stimulate innovations and business activities.

• PUBLIC RARELY ENTERS INTO CREATION AND MODIFICATION OF GREENERY AGAINST PROFESSIONALS – engagement of the public into preparations and projections of changes of the public spaces has not been a standard in the Czech Republic yet and a series of projects arise only in a narrow circle between the city administration and the design authors.

Is artificial intelligence a solution?
As a suitable system solution would serve a multifunctional model of the city within the concept SMART City, at projection and reconstruction of public spaces further used as a relevant simulation basis for organizing the city life. It would be effective work not only with the city greenery, but also the use of artificial intelligence (A.I. – artificial intelligence) for the case studies modelling the space by its elements for the urbanity preservation. The use of artificial intelligence for modelling the situation at the planning of interventions into the public spaces and the city greenery would be an adequate planning tool.

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Memorials and Urban Identity-case study Pristina

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Abstract. The various statues and monuments that are part of the urban memorials represent a landmark for each city and create a connection with the surroundings. After 1999 in Kosovo, the phenomenon of reviving the memory of the heroes from their recent history, memorials are being erected which are settling in cities and important urban areas. In general, memorials create and provide a connection to the community, which strengthens their social and urban memory. Moreover, each monument has its origin in creating the urban identity of urban areas and integrating them into the daily lives of citizens. While this phenomenon in Kosovo, it is the responsibility of urban planners and artists to handle memorials in urban terms so that these works can be better incorporated with their surroundings and context.

Keywords: memorials, community, social identity, urban identity, Pristina

Introduction

Planning and design of public memorials and historical monuments in a city, and especially in capitals, represent significantly the urban identity as well as the identity and values of a nation, giving it both a historical and conceptual meaning. The various statues and monuments that are part of the urban memorials represent a landmark for each city and create a connection with the surroundings.

In democratic states, with an active civil society, the development of memorials is complex. Memorials in democratic capitals are often not initiated, financed or designed by the government itself, but they come from and are derived by civil society. Of course, such memorials are salient investments of not only cultural significance but with long-term consequences on national and local identity as well as on collective memory. The planning and arrangement of memorials, especially in the case of capitals, significantly shape the representation of a nation, urban places, giving them not only historical but also conceptual meaning. These memorials are developed through negotiations between political parties, civil society social, interest groups, designers, historical experts, etc., and most importantly, through gathering the perceptions of the residents of the area or city where this memorial will be built. Such processes reflect and contribute to the democratic traditions of a nation.

After 1999 in Kosovo, the phenomenon of reviving the memory of the heroes from their recent history, memorials are being erected and are settling in cities and important urban areas. While this phenomenon is still happening in Kosovo, it is the responsibility of urban planners and artists to handle memorials in urban terms, so that these works can be better incorporated with their surroundings and context. This paper will focus on analyzing the importance of memorials to Pristina's urban identity. The paper uses an analytical and interpretive approach to memorials and urban identity focusing mostly on analysis of the Prishtina case, as well as a qualitative study of public perceptions various on statues and monuments that are part of the urban memorials in the city of Pristina.
Public memorials in the context of urban identity

As memorials seek to commemorate not only a historical event but they also induce a wide range of feelings to a society, like conflicting social memories, positive as well as negative emotions, unifying or disputing memories, decision-making processes for planning and designing present opportunities to "work through" and try to solve the difficult issues of change in a society, social responsibility, injustice, and social responsibility. (Vale 2008, Halbwachs 1992, Huyssen 1994, Nora 1989) But Memorials also create and provide a connection to the community, which strengthens their social and urban memory. (Gurler & Ozer, 2013:1)

There is often public dissatisfaction and conflict with the forms, meanings, and locations of various public statues or memorials. In practice, the design of public memorials remains controversial and a difficult process, as its planning processes, can exacerbate society's internal conflicts over urban identity and history, rather than resolving them. Problems in finding solutions that are acceptable to all suggest the need for a comprehensive examination of the planning processes currently used and used for public memorials. (Gjerde & Petrović, 2014)

Understanding the historical development of memorials in capitals is of great importance in many dimensions, both for the designers, planners, and implementers of these works, because of the values they represent, the intangible values associated with collective urban identity, emotion and memory. (NCC 2006, NCPC 2006) Furthermore, these memorials not only represent the urban identity of a capital city, but they even create an international city identity, as they help tourists associate the image with the memorial and public space, thereby reminding the state and capital about it. (Brett et al., 2007). Moreover, each monument has its origin in creating the urban identity of urban areas and integrating them into the daily lives of citizens, and try to make their connection with the sorrowing more of a plausible experience.

A perfect example is the Berlin Holocaust Memorial in Berlin, Germany. This represents memories in this way not only reminds people of their social history, without visiting a place especially but also provides a correlation and helps to develop empathy with citizens as tourists. (Gurler & Ozer, 2013:2)

Urban identity in Kosovo

Kosovo's public space has undergone many stages of modification and symbolic changes due to it's political, social and economic state. In his study on state borders and symbolic boundaries and contested geographical space in Kosovo, the author Krasniqi (2013), has shown how space
and territory have been central to the wars of citizenship in Kosovo, putting in distress the urban identity. As a constituent object of group warfare, space has been constantly contested and changed in Kosovo. As a result, Kosovo's public space has undergone many stages of modification and symbolic changes throughout the twentieth century, with changes reflecting a balance of power. Street names, monuments, statues, memorials, as well as other objects of cultural importance and architecture to some extent, constitute those aspects of public landscape (indoor and outdoor) that were generally subject to modification and reconstruction. Urban identity is little studied in Kosovo. Memorials and statues are often immediate, sporadic, symbolic objects consequence as the legacy of war or the cultural heritage of previous centuries. Nevertheless, the very few architectural elements labeled as memorials, express a genuine urban identity that not only awakens a collective memory but also puts it at ease, creating a public space suitable for all but without losing its purpose, namely its collective historical value. Even less studied in Kosovo is the reason why urban identity is under-analyzed in the complex. There is another reverse problem of these memorial sites in Kosovo. Although we have not always appreciated the past, which is identified with the memorials and artifacts that every society institutionally preserves, we often forget the historical and architectural values of these objects that have disappeared. These memorials run the risk of losing their urban identities altogether. The question of the identity of urban space is important for experiencing any city in the new global world. With the development of the globalization process, urban identity has become an important factor in the spatial planning process. (Ylli, 2019) Cities are facing the threat of losing their identity while at the same time being able to change it and create a new identity. And yet we must be careful, as we are aware that the loss of urban identity, intertwined with elements of historical heritage, is at hand. This issue is not just about individual cases, it is also related to the life philosophy of the environment in which we live and operate. (Ylli, 2019)

**Prishtina Memorials**

The Newborn Monument is an iconic sculpture and tourist attraction in Pristina, Kosovo. The monument was set up on 17 February 2008, the day that Kosovo formally declared its independence. "Newborn" was chosen to describe the birth of a new country, aiming to make Kosovo look like a new, contemporary, trendy country. The design and colors of the monument changes in accordance with the events that unveils in Kosovo. It now has become a changing concept.
The main purpose of public memorials are to “remember” people by linking them to the past, present, and future. They often witness power struggles to underline different statements in all these processes in the context of social memory.
The 20,000-pin Heroin memorial presents the tangible memories and contributions of women survivors of sexual violence during the Kosovo War in 1999. The contoured face has double meaning, depicting a surviving woman and a war heroine. The memorial as a whole does not contain individual qualities or personal iconography.

After the 1999 war in Kosovo, in the city of Pristina and other cities, public squares and spaces began to identify with the busts of the last war heroes, who as a message depict the character of the warrior and their weapons in their hands.

One of the many examples of war heroes we encounter in the city is that of Zahir Pajaziti, who holds a gun (Fig. 6).

**Public perception**

This paper uses a quantitative methodology, with a questionnaire as the basic instrument. The questionnaire consisted of 7 closed questions, with 3 alternatives to answer (Yes, No, Other). The selection of the respondents was random. All the participants were residents of the city of Prishtina. Respondents were asked if there should be any memorials or statues across Pristina's city squares, where public opinion was split almost into two parts. Most of the respondents, citizens of Prishtina (55%) stated that they would not like to have memorials or statues in the squares in Prishtina that represent the faces of the heroes or warriors of the last war, while 45% said that yes, they would like to have more memorials or statues of heroes in the city. Asked whether these statues give an identity to public spaces, 55% of them again answered no. These statues are not specifically those which give an identity to public spaces, only 45% of them think so. 57% of respondents stated that they do not think that in the city we should necessarily have traces of post-war heroes. Only 43% of them said yes, that this historical trail must be left in the city. Respondents were then asked what was the message conveyed to them after seeing a statue with a gun. 58% of the respondents claimed that the message was
completely historical, while 42% of them claimed that they received a completely different message from these statues, and none of the respondents felt that these statues had an educational character in themselves.

The next question was referred to as the transmission of positive or negative messages of these statues in the city. 55% agreed that they did not receive a positive message from these busts but had a negative perception and memory of them, only 45% claimed that the message they conveyed was, in fact, positive. Despite the fact that most respondents did not receive a positive message from these statues when asked if they transfer the statues to other possible locations from Pristina city squares, 61% of respondents indicated that no, they would not want this memorial removed from their locations in the city. While 39% of them would like these types of monuments to be removed from their locations to more convenient locations. The majority of respondents (79%) strongly agreed that these busts would be better replaced by a sculpture or a memorial that would have a meaning and also have other functions in public space. While only 21% of them disagreed that these busts would be transformed.

Conclusions

Public perception regarding memorials, function, location, etc. seems to be mixed and divided among Pristina citizens. Although they are aware of the importance of these monuments, statues, they appear to be opposing to the transitional forms of their appearance (e.g traditional statue, a man standing with a gun). Citizens are divided between the values they also represent, only half of the citizens receive a historical perception of them, most seem to receive a completely different perception of these statues located in the city. Although they want these monuments or statues to stay where they are but to transform them into objects and sites not only of historical value, but of cultural, social, and to make e new urban identity who does not necessarily appear to have clear forms of collective memory, but forms which, although reminiscent of historical value, be environments that relate to the whole community and not only, serving multidimensional functions, and giving emotional peace and spiritual for city of Pristina.

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The way of door opening and its symbolits in Albanian Housing Tradition
(Ethnological overview)

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Introduction

Traditional architecture has been and remains the basis of later construction, despite the economic development achieved. But what has remained a precious legacy through generations is undoubtedly the functional side of many elements of traditional Albanian architecture. In this context there are many elements of the architectural heritage, which in the past have served as informative elements for a wider social circle, understandably those layers that could "read" the symbolism of those elements. Thus, the dwelling in general as part of the heritage of traditional architecture, in addition to the function that served to house family members, had other functions, such as the information function through specific parts of the dwelling. In addition to the exterior appearance of the information function, the doors and windows of the residential houses have also been of importance to the information function. But due to the great complexity these two elements have, in this paper I will focus only on the information function of doors. The way of door opening has been information, not only for the residents of the house, but more so for the guests who have entered the house for the first time. Opening the door to the right, or to the left, depends on the apartment. So if the door is opened on the right side in the guest room, or in the Dukagjini Plain - Tower Door, on the left side the door is opened in the dormitories, or as they are popularly known in the crown rooms. But the way the doors opened has changed the informational function even of what the building used to be. In short, the dwelling in the Albanian tradition has also functioned wholly in support of unwritten rules, but in fact those rules have been applicable because the justifications have been convincing and have in time become norms of tradition. How these rules have been transformed into norms and to what extent they have served the family, in the preservation of many traditions, but above all in the
function of reconciling the hostile families and preserving the identity of the guest in a house, through the opening of the door will be the backbone of my work, in the ethnological aspect of Albanian architecture tradition.

**Tower and door opening form as information function**

In Albanian architecture, an important place is occupied by the tower, or the chamber of friends, which is generally a building separated from the dwelling house and other buildings owned by a family. The tower is in many cases built after a family has built a fire house or dwelling, but there are times when the tower is built at the same time as the fire house. So, the construction of the tower, regardless of when it happens, simultaneously or after other constructions, in all cases the place given to it is the main of all other constructions within the backyard of a house.

But depending on the provincial unit, there are rare cases where the tower is associated with other objects such as residential dwellings and in very rare cases the fire house. As such it is very rare in the villages of Has, Reka, since these buildings with other objects are not usually called towers but residential buildings. But Albanian researchers have identified such cases. We have such a case in Zym, such as the tower of Uke Lekë Pecollaj, which today is owned by Zef Lekaj in Zym, besides other premises within this building, in the middle of this building was also the house of fire in the middle.

In many areas of the North, there are very few standing towers, even those that have been protected by the state. Such were the three-story towers such as the Kurpali tower in Letaj, Deme Zenuni in the Ferizollë neighborhood in Vranisht and three Perollaj towers.

On the first floor, respectively on the ground floor, there was usually horse riding, which besides the father of the master of the house there was room for the horses of friends who had come as guests to the tower. Such functional towers have been the Tower of Charri, the Tower of the Kurpals, the Tower of Kadri Çoësa in Gjoanj, the Tower of Hasan Çun in Kojush, the Tower of the Old in Nikolic, the Tower of Ymer Pog Latifi in Rogova. According to experts in this field, there is exactly the oldest tower in the whole territory of the Republic of Kosovo, and this is the Hasan Aga tower in Rogova, now known as the Ymer Pog Latifi Tower. This tower is two-storey and besides the Tower of Kamenica village presents the oldest evidence of Albanian architecture both in terms of architectural-construction and character of the tower.

But it happened that within the tower building on the ground floor there was also the cattle (Vatha) of the cattle of that family. But we also encountered such towers that there were some
living rooms on the ground floor of this building or in other cases a flannel and utility room for the household. Whereas the second floor of the tower was divided into three parts:

a) guest side
b) the small side, which is used only for family members and
c) the porch, where the chardonnay was located, adjacent to the tower turrets.

In the past, the guest room environment has served not only for the reception of guests but also for the family. But in those families, which were numerically large in number of inhabitants, the tower served only as guests, since in that family it was seldom possible to have no friends because of the great friendship. The function of the tower house, besides staying guests, is understood along with other family members to have served as a place where they have been nourished and finally as a place to stay for guests.

In the tower, usually in large families, only the adults and not the children, under the age of 15-18, stayed with the family. Why is this so? According to the elders, who have had the opportunity to talk to them about the tower, they explain that numerous political and military events have affected the people who stayed in the tower to be elected, namely mature people, from whom they have no the words they heard there might come up (if they talked about the strategy of fighting, occupying one's host, etc.) and on the other hand there were people who had the ability to interpret the lessons learned from these in guests room called oda.

Mostly the towers are on the upper floor of the building and as we said to climb upstairs we have to climb the stairs of wood or even stone, depending on what stairs were chosen when the tower was built. At the top of the stairs is the first door of the tower, which in the past has not paid much attention to which side it opens. This door usually leads to a large space called the "sofa", but in some villages in Kosovo this area is often heard as the "tower porch". Indeed, this space is the front porch of the men's room. As a space within the tower building in the past it has played an important role both in organizational and functional terms.

So, according to this tradition, on the right side of the men's chamber, mostly sitting friends, who are more distant. Also on the wall on the left side of the room - the towers are fixed to the wall where the rifles hang.

The hangers we can rarely find hanging on the right side of the room. The rifles hang on the left side, that is, on the Lord's side of the house, to prove that the guns were delivered by guests, as soon as he opened the door and entered the room and in no way should hang on the side of even he sits down.
Opening the door on the right side and its meaning

In special occasions, such as weddings, funerals, organizing various dinners, meetings of the elders for reconciliation occasions, etc., even the chimney brow as it is known to the people most honored place is divided into two parts: on the side left and right, or in some villages this division is heard as the large forehead and the small front of the chimney. On the right side of the room, friends are usually seated by role and importance and close to the host family. But as we shall see in more detail later, the manner of seating the guest has followed its own rules, on the basis of which the rule has guided every guest who has entered the tower. But, it should be noted that these rules not in all areas. Because in the Reka towers, guests prefer to sit on the left side, unlike the chambers that are Has. This time we will describe the functional side of the chambers in Has.

Regarding the way of landing, some rules have been applied: So if the friend was distant, though at a younger age he was given the advantage of sitting on the left side. But if more distant friends are concerned, then some other factors have been taken into account that have determined the "friendliness of the chamber of friends".

1. On the left side of the men's chamber, if viewed from the door, the householder is always seated. And so whenever a newcomer opens the door of the tower, he should not see anyone else in the room other than family members. According to ethnographic memory, it has happened in the past that if a comer in the tower saw the incoming guests, he might not have entered the chamber at all to wait outside and retaliate, having investigated that chamber his enemy has taken refuge. On the other hand if the door is not opened with the right hand, the newcomer does not see the people of the house, but the guests, which is contrary to the norms of hospitality.

2. The door of the men's chamber was preferred to open on the right side, as it was often the case that the women of the house went to the chamber either to bring food or to clean, and as soon as she opened the door she had to communicate with her Lord, home and not with guests.

3. The door of the men's chamber in the tower is always opened with the right hand, also because of the fact that in the past the towers have performed the protective function. In fact, oda fights have also taken place, as they have been equipped with turrets on all sides, where fighters have placed rifle barrels. And in this way every fighter has mainly carried the weapon on his left arm, so that his right hand can be free, to grab the weapon faster and activate it.

And to eliminate all of this, the manner of opening the men's chamber door has, over time, become the norm in the construction of towers.
The way of opening the door in Hasi’s Towers

It is also thought that the door of the men's chamber is opened with the right hand, since on that side are windows, which overlook the courtyard, namely the dwelling houses, or even the fire house. But there are times when windows due to place in the courtyard space have dictated that they be on the left side. And these cases occur if the tower is built near another house and the windows as a rule should not be returned from the neighbors' yard.

So, according to this tradition, on the right side of the men's chamber, mostly sitting friends, who are more distant. Also on the wall on the left side of the room - the towers are fixed to the wall where the rifles hang. The hangers we can rarely find hanging on the right side of the room. The rifles hang on the left side, that is, on the Lord's side of the house, to prove that the guns were delivered by guests, as soon as he opened the door and entered the room and in no way should hang on the side of even he sits down.

As mentioned above, the door of the room was in the middle of the porch, and in front of the door on the base wall, a chamber chimney was built, which was 10 to 15 cm inside the chamber. The chimney was accompanied by another part of the floor, extending up to 80 cm, respectively, up to 10 cm wider than the chimney itself. This square shape of the chimney in the chamber of friends was called the chimney chalice and was surrounded by a decorated wooden chimney, decorations that complemented the chimney decoration in general.

With the space of the door, about the same width, through the chamber, there was a lined paved alley, or a laminated one, and surrounded by a decorative strip of wood. This part is usually slightly raised on both sides of the chamber. To the people this paved and secluded alley is called the "haralloku i odmiqes".

Conclusions

In addition to the opening the doors right-handed of the men chambers in traditional architecture, this way of opening the door is also found in the cattle sheds, in the buildings where the cereals are stored. It happens that usually the left arm is loaded and the right hand should be free.
Whereas the doors of dormitories, respectively dormitories in the Albanian tradition are usually opened with the left hand. According to field data and etongradic memory this is due to the fact that a mother who has the child in the cradle is usually carried with her right hand and her left hand free. But even when she has no children, she [takes whatever is in her right hand and the left is free to open the door.
Abstract. As the result of the decision reached at the Berlin Congress (1878), a neglected Southeastern-European, Ottoman ruled, province of Bosnia was to be ruled by the Austro-Hungarian monarchy. Immediately, the new government established efficient structures to enhance the educational systems as well as the public infrastructure. Through type planning, the necessary new buildings grew in a breathtaking speed. During the 1890s, the planners and responsible Austro-Hungarian politicians developed a special architectural language for the representative buildings of this region was established. The new government aimed to, through their newly emerged buildings, support the identity of the majorly Muslim population. After 1900s, private residences of the upper classes as well as some urban apartment blocks were decorated in a certain “Orientalizing” or “Pseudo-Moorish” style. After an intensive discussion on a potential Bosnian romantic-style, based on the concept of the “Heimatstil” from other European countries, some recognizable attributes of the traditional buildings, mixed with Secessionist and Art Nouveau features, resulted in a rejection of this “foreign” and “exotic” phase of the Orientalizing style, nowadays reflected with credits.

On the southwestern slope of the castle hill at Jajce, located in central Bosnia, we can see buildings reflective of all three architectural styles mentioned above. Next to this distinct group of new buildings stands St. Luke’s tower, medieval monument already listed and protected in 1892 by the Austrian officials. Traditional residential houses from Ottoman-Bosnian times, frame the whole setting. Contemporary travel reports already mark this group of buildings as an “ensemble”, which is worth a closer consideration from the viewpoint of the monument protection theory. Besides, the ensemble represents a condensed microcosm located at a single prominent site – Jajce was once the capital of the medieval Bosnian kingdom but it also represents an attempt of the Austro-Hungarian administration to modernize the country. Currently this distinct cultural landscape, the Habsburg-Bosnian ensemble, in combination with the important medieval monuments and the traditional Ottoman-Balkan residential houses, is deserving of UNESCO world heritage status. This paper summarizes the overall background of the Habsburg-Bosnian building ensemble and its various architectural styles, by comparing it with other, more detailed objects, traced so far through the European Research Council Project titled “Islamic Architecture and Orientalizing Style in Habsburg-Bosnia”

Keywords: Habsburg-Bosnia, architectural ensemble, monument protection, historicism, neo-Moorish style, secession, modernization, cultural landscape

Introduction

From June 13th to July 13th of 1878, the great powers of that time, namely the Ottoman Empire, Russia, France, England and Austria-Hungary met in Berlin to reorganize the political landscape of the European region. Austria-Hungary gained the mandate over Bosnia and
Herzegovina thus replacing the weakening Ottoman Empire as the ruling power of this former province. Hence, in Central Bosnia, in the area of Jajce and Travnik fierce resistance gathered on Mount Lisina. On August 7th 1878, the Austro-Hungarian troops, under the command of Wilhelm Duke of Württemberg, have seized power over this unorganized resistance group, and marched into Jajce.

The town served as residence for medieval Bosnian kings, from 1422 to 1463. The last King Stefan Tomašević (1461-1463) was captured, tortured and killed by the Ottoman Sultan Mohammed (Mehmet) el Fatih. The Austro-Hungarian custodian of the freshly established provincial museum of Bosnia and Herzegovina in Sarajevo, Ćiro Truhelka, was lucky enough to identify and excavate his grave on the mountain Hum in 1888, during his systematic exploration of the Jajce’s history. Truhelka, in the same year, published the first monograph of Jajce [1]. A year before two k.k. military members, colonel Gustav Bancalari and major Reis, had discovered, surveyed, and published [2] on the so-called “catacombs” of Jajce. Truhelka carried on that site research and identified it correctly as the unfinished Christian medieval church of the Tomašević dynasty, which was cut out from the rocks underground near the medieval St. Mary’s church. He later published the encompassing results in Vienna in 1894 [3].

This fact puts Jajce on the radar for the cultural tourism strategy of the Austro-Hungarian government administration of Bosnia and Herzegovina. In 1886, Heinrich Renner writes an elaborate travel book on the province [4], referring extensively to the before mentioned scientific publications about Jajce, and therewith promoting the place to the ordinary traveler. Several other travel guidebooks, published in German and English, will be circulating until the end of Austro-Hungarian rule. The town of Jajce quickly provides the adequate infrastructure in regards to the promised touristic development.

In 1892, the water supply system is finished, and the St. Luke’s tower is put under national monument protection. In 1893 there opens a house for the tourists at the nearby lake Jezero. During that time, the state-financed Grand Hotel, located at the edge of the stunning Pliva waterfalls was already operating. In 1894 and 1895, Jajce gets connected to the railway system to Banja Luka and to Sarajevo. In 1897, based on the erection of a large hydropower plant, Jajce becomes the center of the chemical industry, later known as the Elektrobosna Company (Bosnische Elektrizitäts-Aktiengesellschaft). As result of this fact, Jajce was the scope of the 1903 excursion of the Austrian engineers’ and architects’ association (OEIAV), together with its other cultural and natural sites.

Finally, in 1904 Jajce is connected to telephone communications, and around that time also managed to install street lightning. The first Austro-Hungarian census in 1885 recorded 3.929 inhabitants while the census of 1910 already revealed a substantial increase to 33.128 inhabitants, with multiple ethnic and religious backgrounds. In 1921, still more than half of the population were Catholic Croats, a third were Muslim Bosniaks, and only one eight of the population were Orthodox Serbs. The city’s history, as well as the statistical figures, are taken from a monograph of the town written in 2007/2008 and published in 2009 in order to support its sought-after nomination as a UNESCO World heritage site [5]. As this book is entitled “photo monography”, it provides us with historic views, nevertheless, without exact dating.

The development of the architectural ensemble of Habsburg-Bosnian Jajce

Before the Austro-Hungarian intervention

Various postcards from the Austro-Hungarian period show the characteristic panorama of Jajce in views taken from across the Pliva river, usually depicting stunning waterfalls in the foreground and the crenelated stone wall fortress in the background, followed by the imagery of
traditional Bosnian-type houses whose steep roofs are grouped in the center. On the right side of the protected national monument, namely the medieval St. Luke’s church tower, various service buildings for the new Habsburg administration replaced an existing agrarian estate from the Ottoman-Bosnian times.

A postcard in portrait format, entitled with “Gruss aus Jajce. Lucasthurm und Castell” [6] and taken between 1878 and 1882, provides us with the imagery of the original buildings at that site. Next to the St. Luke’s tower, pointed towards east, sits a small traditional Bosnian house with the typically steep and hipped roof shape, covered with elongated wooden shingles. This object of rectangular base exposes its narrower side towards the valley of the river Pliva. It is least in situ until 1896, as Renner’s guidebook provides us with a watercolor drawing [7] showing the same object depicted from the east. The drawing gives us a more detailed idea of its configuration as a one-story building, with a wooden main floor on a plastered basement of stone. Its window configuration indicates that it was used for inhabiting people but it is obviously not the main residential house of the landowner’s family. They however, lived in a bigger, more fashionable, typical rural-urban residence placed south of the St. Luke’s tower. A traditional narrow, corn drying or hay drying structure, is in the foreground of the watercolor drawing, but no further buildings to the east are visible on the early postcard described above. The other group of buildings seems to have belonged to a different and more extensive farm estate, which formed the main cluster of buildings that were the focus of the early photographs. They might have no longer been standing at the same spot as at the time the watercolor drawing. This farm estate contained several huge barn structures, in different configurations and heights, located east of the before mentioned small house, but none of them were serving a residential purpose. The eastern end of the whole compound, seen in the far right of the picture, a typical Bosnian landowner’s residential building is visible. It stands on the site of nowadays Sarač house in Jajce, better known as Sarenica (the Colorful House). Built in 1899, it is possible it kept the footprint of the former residence or that it was a part of an even older building substance. Lovrenović et al. consider this formation of buildings as an “architectural ensemble which is an example of Austro-Hungarian architecture in the town of Jajce” [8]. The ensemble was located on a terrace shaped slope in the southern foot of the fortress hill above the Pliva valley. It consisted of the Sarenica, and west of it, the Old Primary School as well as the Finance Building. Both buildings were obviously a replacement of the various functional objects from the former agrarian estate.

Fig. 1. Left: Jajce before the Austro-Hungarian interventions (Source: Lovrenović, et al.: Jajce, 2009, 58) Right: The same ensemble at Jajce in May 2019 (Foto: Jaeger-Klein)
Austro-Hungarian building activities

It is with certainty that the eldest of those buildings, erected during the Austro-Hungarian period, is the Old Primary School. According to different sources, it was built in a period from 1880 to 1882 [9]. It is a long-stretched, two-story object in pure Neo-Renaissance style with eight window axes towards the valley side (southern elevation), and five axes towards the street side (northern elevation). The middle axis served as the entrance, accompanied by two windows on each side. The side-elevations do not provide any openings at all. Its façade design is mainly executed as horizontal stripes in plaster, most intensively visible at the high basement on the southern side, above a rough pebble-stone foundation. Modest horizontal cornices served as a distinction between the lower and the upper floor. Ornamental segmented arches placed above the rectangular windows at the northern side, and horizontal window roofs at the southern side, accentuate the composition axes and protect the windows against the rain. The color scheme is a typical combination of alternating yellow and red stripes, which is known as the signature element of the Bosnian Orientalizing style introduced by the Austro-Hungarians. The only colored postcard published by Lovrenović [10] shows that the façade of the historic school building was executed in the typical Schönbrunn yellow with a reddish roof cornice, also found on various public buildings of the monarchy. The overall façade design fitted perfectly into the scheme of the Viennese Historicism style of architecture, which Renate Wagner-Rieger developed in her theory during the late 20th century.

For educational structures of the humanities, during the time when the canonical Historicism of the 1870s and 1880s was at its peak, the Neo-Renaissance style was considered as the most adequate answer for the building task. A slight Bosnian twist on this style was hidden within the color scheme of yellow and red, although the decoration of the school building cannot be classified as a part of the Orientalizing style of Bosnia. The functional space placement of the Old Primary School building follows the type planning models exhibited at the Viennese World Exposition of 1873. The number of windows indicates that it contained four classrooms, one for each class, all orientated towards the south. The teacher’s residence, the necessary administration, and other functional rooms were all placed in the north. The staircase is located at the north-western corner. Today, the building serves as a local National museum, housing a permanent exhibition of ethnographic as well as petrographic specimens.

If we proceed with our description in the chronological order, the next object to be erected as a part of the Austro-Hungarian ensemble in Jajce, was the Sarač house. It is dated through various sources to be built in 1899 (is it not 1888?). According to Vuleta, Suljaga Sarač from a renowned local landowner family, erected this house as a home for his family and also to provide free overnight stay for travelers. Without a doubt, it was composed in the distinct
Orientalizing style, reminiscent of the architectural heritage of Mamluk Cairo and Al-Andalus. It could be that through the use of this style, the Sarač house presents itself as one of the first examples of a residential unit deploying the Orientalizing style. It is also possible that its function as a free accommodation for travelers, made it into a public service building. It is interesting to notice that Jajce, with its Hotel Grand, already had a state supported high-quality accommodation (Ärarisches Hotel), as well as all other major touristic destinations of the province. However, unlike the Hotel Narenta in Mostar, built in 1882 in official Orientalizing Style, indicating its function Hotel Grand does not express the same traits of the style.

If we went back to the Sarač house today and compared its location with the photographs of Jajce before its facelift, we could conclude that it is a double storey building, most likely erected on the same place where a traditional residential house of the agrarian farm estate stood.

The fact that it was built in the same footprint as the house before, could explain why its ground plan is slightly rectangular. The slightly shorter side are following the street, and the longer sides are oriented towards east and west, maintaining its rectangular form. The layout of the house compared to the neighboring school building is twisted at a ninety-degree angle. The façade pointing towards the street contains four windows in the upper floor, slightly grouped as two by two, and on the ground floor, we see asymmetrically placed entrance. When it comes to its eastern façade, it shows five windows arranged as a composition of two flanking units and a single centered window. The southern façade, facing the valley, is composed in the two-by-two window rhythm and the western façade simply has three rather uncomposed window openings. Hence, none of those façade designs is intended to be symmetrical, in comparison to the Neo-Renaissance school building next doors, which followed strict composition rules.

Sarač house’s general proportions are pretty orderly and based on the Neo-Renaissance canonical approach, reflective of a distinctive style employed by Western European architects. On the other hand, there is an abundance of elements which are reminiscent of the Orientalizing style. One of the examples are the horseshoe arched windows. Their rectangular lower parts are accompanied on both sides by half-rounded plaster columns with capitals. On the top of the rectangle sits another half circular window surrounded by murals painted to look like red and white stone arches.

The building material of the house is actually baked brick, but when observed from the outside, its painted decorations as well as plastered striped façade, make it seem as though the house was made out of stone and decorated with stucco. Pale yellow and red striped pattern is interrupted with horizontal cornice placed between the basement and the first floor. They are however almost completely faded, but if one were to look more closely it would become obvious that the cornices were decorated in an oriental crenellation motif in blue and white. Finally, there are faded circular ornaments to be seen underneath the roof’s cornice, which show the same color, scheme, and pattern as mentioned above. When it comes to the eaves of the roof, they seem to exhibit the typical wooden decoration (“hanging” Venetian-oriental crenellation motifs) cut out of the wood, which various other residential buildings of this specific Habsburg-Bosnian style do use, too.

The painted basement walls of burned brick sit on foundation walls of quarry stone with a net-like surface design, reflecting Roman opus reticulatum. This indicates that the architect in charge was well trained in classical history of architecture. The roof of the Saračeva house is the classical hipped roof with brick tiles in a modest angle of steepness, used by the Austro-Hungarian technicians to replace the traditional Bosnian wooden roof, which was much steeper.
The latest erected building of the Austro-Hungarian ensemble is the Finance building. Vuleta dates it with 1882, which is most likely too early, while Lovrenović is vaguer and suggests that the building was from the end of the nineteenth century [11], which may still be too early considering the style used. The objects’ purpose certainly was to house foreign officers preventing and controlling the smuggling of state monopoly goods, like tobacco and alcohol. This might explain why its stylistic language is purposefully “foreign”, but still adequate enough to fit into the Jajce ensemble.

Its volumetric composition, as well as its details, completely match with Southern-German and Austrian Heimatstil examples. If we consider that some Austro-Hungarian architects active in Bosnia, like Josef Pospíšil (born in 1868 in Moravia and educated through Carl von Hasenauer at the Academy of Fine Arts in Vienna) start to develop a Bosnian Heimatstil, the Bosanski slog (originated in the period between 1904-1909), it is strange, that this building is not configured that way. If we compare various historic photographs, the Finance Building is certainly not erected before 1901. As visible on Lovrenović’s published historic photographs [12], the district administration building (Bezirksamt) and the Old Primary School are already built, while the Finance building cannot be seen. According to the plans from the state archive in Sarajevo, the district administration building (Bezirksamt) is dated to 1901, which proves that the Finance building could not have been built before this date.

The floorplan of the Finance building is based on a rectangular footprint across the direction of the terrace shaped slope. Its narrower side looks down into the valley, and the wider sides accompany the slope of the hill. This simple volume is crossed with a wing of modest height which extends towards the west and forms a gable shaped facade which is facing St. Luke’s Tower. This gable façade is marked by a single rectangular window, and another smaller one on top which is accompanied by plaster arches. The roof of the building has a steep hip and part-hip roof’s covered with beaver-tail brick plates. On the valley side, the elevation is clearly a German Neo-Renaissance composition with vertical buttresses running into the roof part and forming a false gable motif designed to achieve high visibility from a distance. The elevations are not using the typical red-yellow Habsburg-Bosnian color scheme, but a sound Schönbrunn yellow with bright white plaster accents around the windows.

All in all, the Finance building is executed in a typical German-Austrian Heimatstil, also identifiable as the National-Romantic style. It differs extremely from the Saračeva house on the other side of the ensemble, which through its distinguishable features of Orientalizing style offers a warming welcome for its potential residents. The Finance building also differentiates itself from the humanistic public-school building though the lack of pure Neo-Renaissance elements. Though the existence of this specific Jajce ensemble, although erected in close proximity, the three case studies of this paper all differ in function, style, and date. What unifies them is the fact that they were all built under the same ruling power, which facilitated a unique

Fig. 3. Left: The still incomplete Austro-Hungarian ensemble at Jajce, without the Finance building (Source: Lovrenović, et al.: Jajce, 2009, 54) Right: The fully developed Austro-Hungarian ensemble at Jajce including the administration building from 1901 and the state-hotel in the front, undated photography (Source: Lovrenović, et al.: Jajce, 2009, 84)
form of expression that reflected a condensed microcosmos of European fashionable styles of the late 19th century.

**Contemporary critical discussions of Old and New**

Heinrich Renner already mentions those new European style buildings within the otherwise still very oriental and therefore – for European eyes – picturesque city panorama: “An sonstigen städtischen Besonderheiten bietet Jajce nichts; es ist ein eng gebauter Ort, der sich nach und nach etwas europäisiert, aber noch immer überwiegend Orientalisches zeigt. Dadurch ist da Gesamtbild umso malerischer und wir würden, mit Ausnahme der Amts- und Schulgebäude, auch gar nicht wünschen, dass sich da Äußere der Stadt sobald verändert” [13]. Interestingly, also Loverenović et al. translates exactly that passage as the following: “That Jajce is a narrowly built place, which is little by little being Europeanized, but still predominately Oriental. All the more so the overall image of the town is more picturesque, with the exception of the administration and school buildings, and we wouldn’t like Jajce to change its appearance a bit”. [14]

When Renner wrote his text, there was already some awareness and discussion within the ruling scene about the new buildings, and their styles, as well as the integration into the existing traditional building substance. The chapter by Johann Kellner on the architecture (Baukunst) within Bosnia and the Herzegovina in the so-called Kronprinzenwerk, the monography-series of the Austro-Hungarian Empire and its provinces, published in Vienna in 1901, discusses critically the same issue. “Wohl mußte vorerst manches morsch gewordene Object entfernt werden, um den dringend nothwendigen Neuschaffungen Platz zu Machen. Dadurch wurde naturgemäß das bis dahin einheitlich orientalische Bild empfindlich gestört. Das kolossale Bedürfnis an Amtsgebäuden aller Art für die sich stetig entwickelnde Verwaltung, an Schulgebäuden für die Jugend aller Religionsbekenntnisse, an Gotteshäusern für die christliche Bevölkerung, an Wohngebäuden und Humanitätsanstalten für die eingewanderte Bevölkerung, konnte vielfach nur durch Aufführung reiner Nutzbauten, welche mit der Kunst nichts gemein haben, befriedigt werden. So traut an Stelle jener schönen orientalischen Städtebilder, die den Landschaftsmaler entzückten, ein Gemisch von Neuem und Altem.” [15]

Long before, Edmund Stix, the head of the Bosnian building department at Sarajevo, has foreseen this development, when he critically stated in 1887 that a lot of modern buildings within the first nine years of the Austro-Hungarian command have been erected, hence not always contributing to the beautification (Verschönerung), and partially already fading the “oriental character” of the towns. “Es entstehen daher insbesondere in den Kreis- und Bezirksorten zahlreiche Neubauten, welche stellenweise, wie z.B. in einigen Mahales Sarajevos, in Dolnja-Tuzla bereits anfangen, den früheren, nennen wir ihn orientalischen Charakter der Städte zu verwischen.” [16]

Finally, the renowned Austrian art-historian Max Dvořák proofs that this discussion happened not only in the remote province, when he recommends in 1916: “Man zerstöre nicht Altes nur deshalb, um Neues an dessen Stelle zu setzen. Man ändere nicht ohne zwingenden Grund diese historisch entstandene Anlage der Ortschaften und Städte, die Form der Plätze, die Breite und Richtung der Straßen. Man zerstöre nicht alte Stadttore, Türme, Stadttüren, Bildsäulen, selbst wenn sie einige Unbequemlichkeiten bedeuteten. … Man bauet nicht Häuser oder öffentliche Gebäude mit falschen Prätentionen als Talmipaläste in verschiedenen Stilarten, sondern einfach und praktisch, wie sie früher ortsüblich waren und durch eine lange Tradition erprobt und bodenständig wurden. Man achte darauf, daß sich jeder Neubau seiner Umgebung und dem Gesamtbilde des Ortes unterordne …” [17]. Even today and more than a century later, there is hardly anything to add to this. Nevertheless, Jajce proofed something most important – the different styles of “modern” buildings do not disturb or destroy an ensemble, as long as the new
structures keep the proportions and volumes of the existing. Jajce could exhibit in all density of the distinct ensemble the great variety of styles, Habsburg-Bosnia experimented with. Hence, the identity of the place remained untouched, besides its dynamic development!

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Seismicity and distribution of maximum intensity in territory of Kosovo, Period 2008-2014

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Abstract. In this scientific work are presented basic characteristics of the seismicity of Kosovo, for the period 2008 to 2014 with emphasis on the most active regions. The territory of Kosovo is characterized by a relatively high seismic activity. Compilation, study and updating of earthquake data was made in order to define intensity distribution for territory of Kosovo, which will provide a basis for determination of the main characteristics of the seismicity in territory of Kosovo. These investigations have great significance from scientific and applied aspect and provide reliable of Kosovo seismicity. Results can be used as input for further investigations in the field of seismic hazard, risk assessment, engineering seismology as well for physical and urban land use planning and design in seismic prone areas.

Keywords: Seismotectonics, seismic hazard, Seismic Risk

Introduction

The territory of Kosovo is characterized by a relatively high seismic activity. Earthquakes and their accompanying natural hazards (e.g., ground shaking, ground failure, surface faulting, tectonic deformation and inundation) pose a widespread threat to human activities and to man-made structures and facilities. Seismic hazard analysis, the quantitative estimation of the hazard of earthquake ground shaking at a site, provides valuable guidance for informed decision-making on mitigating the earthquake threat. This study presents some seismic data for the period 2008-2014 with calculated parameters of seismic hazards and has been studied by mathematically combining models for the location and magnitude of earthquakes with data enrichment for seismic hazard mapping.

Seismic data 2008-2014

Based on seismic monitoring in the territory of Kosovo for the period 2008-2014, our country, results in a relatively high seismic activity and on the basis of seismic data from this network, we have done a study on the distribution of maximum intensity and acceleration for this period in the territory of Kosovo.

Our place in the last seven years, 2008-2014 was hit by 650 earthquakes, with magnitude of 1.5 to 5.2, Richter scale. Kosovo hit by five large earthquakes and 545, small earthquakes. Strong earthquakes and the average that our country hit, those are:

- Istok earthquake, 5.2, Richter scale,
- Vushtrri earthquake, 4.8, Richter scale,
- Gjilan earthquake, 4.1 on the Richter scale
- Decani earthquake, 4.1, Richter scale and
- Prizren earthquake, 4.1 on the Richter scale, tab. 1
Table 2. Number of earthquake, Magnitude, Intensity period 2008-2014

<table>
<thead>
<tr>
<th>Magnitude</th>
<th>1-2</th>
<th>2-3</th>
<th>3.1-3.5</th>
<th>3.6-4</th>
<th>4.1-4.5</th>
<th>4.6-5</th>
<th>5.1-5.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nr. Earthquake</td>
<td>495</td>
<td>127</td>
<td>16</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Intensity</td>
<td>I-II</td>
<td>II-III</td>
<td>III</td>
<td>IV</td>
<td>V</td>
<td>VI</td>
<td>VI</td>
</tr>
<tr>
<td>Nr. Earthquake</td>
<td>495</td>
<td>127</td>
<td>16</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Acceleration of Earthquake and distance from Epicenter to other areas within of the Kosovo

It made the calculation of all physical parameters for five earthquakes during this period and as a result of these calculations, we have earthquake acceleration values for each area, estimated as follows, tab. 2.

\[ a = 654e^{(0.54M)} / (R+20)exp^{(1.33)} \]  \hspace{1cm} (1)

Table 2. Acceleration of Earthquake - distance from Epicenter

<table>
<thead>
<tr>
<th>Earthquake of Prizren</th>
<th>Earthquake of Dečan</th>
<th>Earthquake of Gjilan</th>
</tr>
</thead>
<tbody>
<tr>
<td>M = 4.3</td>
<td>M = 4.1</td>
<td>M = 4.1</td>
</tr>
<tr>
<td>D = 5 km</td>
<td>D = 6 km</td>
<td>D = 7 km</td>
</tr>
<tr>
<td>( a = 0.086^* g )</td>
<td>( a = 0.075^* g )</td>
<td>( a = 0.072^* g )</td>
</tr>
<tr>
<td>Prishtinë D=6km=0.019 * g</td>
<td>Pejë D=3km=0.056 * g</td>
<td>Prishtinë D=3km=0.030 * g</td>
</tr>
<tr>
<td>Prishtinë D=6km=0.018 * g</td>
<td>Gjakovë D=2km=0.044 * g</td>
<td>Ferizaj D=2km=0.035 * g</td>
</tr>
<tr>
<td>Gjilan D=6km=0.018 * g</td>
<td>Klinë D=25km=0.038 * g</td>
<td>Kopaonik D=3km=0.032 * g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Earthquake of Istog</th>
<th>Earthquake of Vushtrri</th>
</tr>
</thead>
<tbody>
<tr>
<td>M = 5.2</td>
<td>M = 4.8</td>
</tr>
<tr>
<td>D = 5 km</td>
<td>D = 6 km</td>
</tr>
<tr>
<td>( a = 0.136^* g )</td>
<td>( a = 0.107^* g )</td>
</tr>
<tr>
<td>Istog D=5km=0.136 * g</td>
<td>Prishtinë D=2km=0.057 * g</td>
</tr>
<tr>
<td>Prishtinë D=5km=0.034 * g</td>
<td>Pejë D=3km=0.027 * g</td>
</tr>
<tr>
<td>Pejë D=2km=0.080 * g</td>
<td>Ferizaj D=2km=0.022 * g</td>
</tr>
<tr>
<td>Mitrovica D=3km=0.055 * g</td>
<td>Leposaviq D=3km=0.044 * g</td>
</tr>
</tbody>
</table>

Intensity of Earthquake and distance from Epicenter to other areas within of the Kosovo, period 2008-2014

<table>
<thead>
<tr>
<th>Earthquake of Istog</th>
<th>M=5.2 D= 5km</th>
<th>Intensity VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from epicenter to Istog, 10 km</td>
<td>------------------</td>
<td>intensity VII/2</td>
</tr>
<tr>
<td>Distance from epicenter to Peja, 20 km</td>
<td>------------------</td>
<td>intensity VI</td>
</tr>
<tr>
<td>Distance from epicenter to Mitrovica, 33 km</td>
<td>------------------</td>
<td>intensity VI</td>
</tr>
<tr>
<td>Distance from epicenter to Prishtina, 56 km</td>
<td>------------------</td>
<td>intensity V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Earthquake of Vushtrri</th>
<th>M=4.8 D= 6km</th>
<th>Intensity VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from epicenter to Prishtina, 24 km</td>
<td>------------------</td>
<td>intensity V/2</td>
</tr>
</tbody>
</table>
Distance from epicenter to Leposaviq, 30 km ........................ intensity V1/2
Distance from epicenter to Ferizaj, 63 km .......................... intensity IV1/2
Distance from epicenter to Peja, 68 km .............................. intensity IV1/2

During this period, based on seismic data, with the highest Intensity are affecting these areas as: area of Istog, area of Mitrovica, area of Prizren, area of Gnjilane and area of Decan-Gjakova, shown on the map below, fig. 1.

Fig.1. Acceleration and Intensity of Earthquakes, distance from Epicenters

The report in question shows that given square in same distance by hypocenters has to have the same value of intensity for certain earthquakes. Based on seismic data, damage assessment, based on grade of destruction and structure of buildings and seismicity is achieved to create map of the intensity distribution of large earthquakes for period 2008-2014, (Sh.Mustafa).

**Isoseismal Map of maximum intensity and seismicity, period 2008-2014**

Seismic intensities are estimated based on principle on MSK Scale. The earthquake field phenomena, the damages in structures of different types, and the earthquake as it was felt by people were the main data collected for the seismic intensity estimation be possible. In the territory of Kosovo, based on the above reports, of the damage and susceptibility, seismic intensity is estimated as follows: (Sh.Mustafa,2010).

\[
I_0 = b \times M - a \times \log h + c
\]

\[
I_i = b \times M - a \times \log r_i + c
\]
This study is based on seismic data and calculated physic parameters, represents an achievement on the methodology and the practice of seismic hazard assessment of hit zones from earthquakes above mentioned.

It is a normal practice in many countries, that in certain time intervals, the seismic hazard maps are updated continually, in order to include and reflect the latest achievements of seismology on local, regional and global level.

The hazard results can be improved in the future if we’ll have:

- Further refinement of the seismicity parameters, through updating and improving the earthquake database for Kosova and surrounding areas.
- A regional seismotectonic model that assigns the observed seismicity to the active tectonic faults, their focal mechanism, etc.
• More accurate models for the prediction of ground-motion parameters, based on regional strong motion records, in Kosova and surrounding areas.

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Encouraging the eco-mobility in context of sustainable urban mobility planning - Evaluating the EcoMobility capacities of Bozcaada island in context of sustainable transportation

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Abstract. Experiences show that urban mobility based on fossil fuels is not the way forward and cities that have prioritised private automobile mobility in their planning have turned out to be disadvantageous for people from a health, safety, and economic perspectives. It has been proven that building automobile friendly infrastructure will not solve the traffic challenges in cities. The development of sustainable urban transport systems requires a conceptual leap and paradigm shift. In this context, Eco-Mobility is a new application practice that covers all the policies and principles of sustainable transportation and as such, it is developed for the application of this transportation concept. The EcoMobility SHIFT’s 20 indicators will be used for measuring the sustainability and emobility level of our study case, Bozcaada Island, Turkey, thus by raising awareness of the existence of an instrument for assessing the level of EcoMobility of cities, it finally aims to prepare them for a transition towards sustainable and eco-friendly ones.

Keywords: Sustainability, Sustainable Transport, Eco-friendly City, EcoMobility, Urban Mobility

Introduction

As of the period of industrial revolution, people forced to live in urban areas separated in residence, commerce and industrial areas (Tuna: 2013) and to live away from their work places, as result they turned to use transportation facilities such as train and tram (Ragon: 2010). These mechanized cities, which were called as dormitory cities by Paquot (2011), have seen themselves in a such situation that they can neither work nor live without the means of transport (Tuna: 2013).
On the other hand; cities will contribute almost entirely to the increase in the world population, which is expected to rise to about 10 billion by 2050 (cited by Davis). Being considered as ‘the most important and biggest physical product that man has created to regulate his life and the surrounding structure that directs human life’ (Cansever: 1996), most of the cities were built as if everyone was moving in the same direction at the same time. As a result of this approach and because of inefficient use of the infrastructure of the cities, the last ones have become characterized by congestion on the roads in the morning and jam in the public transport services from the residential areas to the work places (at the same time, opposite roads, buses and trains are empty). Except this; the transportation system is facing many difficulties worldwide and it is among the main problem areas of today's societies (Keleş, Hamamcı & Çoban: 2009).
Blumenfeld (1996) relates the interest in the urban transport problem to the fact that people spend a significant portion of their income on transport, and buy mobility, a product of the transport industry, in return.

As the economic dimension of the challenges attracted the majority of attention, most of the strategies and policies tried to address the traffic congestion, as a result, proposed solutions did not go beyond building more infrastructure for automobiles. On the other hand, one should know that transportation sector is also responsible for a number of challenges (greenhouse gas emissions that result in climate change, early deaths due to traffic accidents, noise and air pollution, etc.) that cannot be solved solely by the construction of new infrastructure (UN-HABITAT: 2013). Further; while those who have the possibility of owning a private car and / or are able to use public transportation regularly see congestion and jam as a major concern, there are many people living in urban transportation poverty with walking as their only option for transportation (UN-HABITAT: 2013). Low-income groups, as well as women, young people, elderly, disabled, ethnic minorities and other vulnerable groups are among those living in transport poverty.

The development of sustainable urban transport systems requires a conceptual leap and a paradigm shift. The purpose of transportation and mobility is to provide access to the places (points), activities, services and goods willing to be reached. Access is thus the ultimate goal of all transport. Therefore, what needs to be done in this regard is that urban planning and design should focus on solutions that reduce the need for movement by bringing people and places together and should create cities that focus on accessibility rather than increasing the quantity of urban transport infrastructure or increasing the movement of people and goods. In this context, the form and functionality of the city emerge as a very important issue.

The sustainable urban mobility system, defined in the Brundtland Report of 1987 (cited by UN-HABITAT: 2013), is based on the principle of meeting the current mobility needs of cities without compromising the ability of future generations to meet their own needs. The idea of sustainability in urban mobility includes social, economic and institutional dimensions as well as ecology and natural environment dimensions. In this regard, a new approach, namely Organic transport is also to be considered. It’s a transportation system that places human mobility at the center, gives priority to transportation types such as walking & cycling and considers public transportation and automobile use together and in harmony. Organic transport, which is a tool for creating sustainable society, aims at sustainability by providing not only physical but also social change in traffic (Üstündag, 2012). Thus, the Ecomobility, which is considered as “an integrated, socially inclusive and equitable, low-cost, eco-friendly and efficient mode of transport that gives priority to walking, cycling, public transport and shared transport” in the Johannesburg Declaration of the Eco-Mobility in Cities (Johannesburg Declaration: 2015) is adressed in this context.

**Ecomobility**

Dealing with topics as such as Green Logistics, Urban Transport, Travel Behavior and Renewable Energy Systems, the EcoMobility brings an innovative approach in economic, social and environmental areas. In this context, this approach aims to achieve a more sustainable development which uses new approaches to existing transport policies and legislation structure, by discovering new strategies in decision-making process and demand management as well as enabling more efficient use of infrastructure and resources (Carlsson
and others; 2012). This approach aims to reduce the environmental impact of transport while increasing economic growth and accessibility (Jensen et al. 2012). The EcoMobility SHIFT, a project of the EU, aims to evaluate, develop and support environmental sustainability of cities (Carlsson et al., 2012). In this context, this project, which was developed in the EU but its application is spread worldwide, is the first system that measures the quality of urban transport. This system allows cities to evaluate the policies and actions they have developed in order to achieve sustainability in the areas of environment, accessibility, security and equality, and in this context, it appears as an assessment tool. It uses two separate processes during the assessment: the first process that measures the performance of the city and the second process that controls this performance. Cities can develop short- and long-term policy and intervention actions using the results of both processes (ICLEI: 2015).

**EcoMobility SHIFT Indicators**

The EcoMobility SHIFT Scheme is based on 20 Indicators that emerged as a result of assessments with experts in the field of Urban Transport (ICLEI: 2015). This scheme measures and evaluates urban transport through 20 indicators - in the context of sustainability and EcoMobility, while mentioned indicators are divided into three groups, namely ‘Enablers’, ‘Transport Systems and Services’ and ‘Results and Impacts’. The scoring made in the context of evaluation shows the weight of an indicator in the total scores of the Eco-Mobility performance of the city. In order for a city to be considered successful in terms of Eco-Mobility, the total Eco-Mobility level of that city should be 70% and above. Otherwise, intervention suggestions are made for indicators that have not achieved at least 70% level.

**Indicator Description**

**E1: User Needs Analysis:** City management should analyze the mobility needs of both residents and visitors. E1 indicator aims to determine the level of knowledge of the city administration about the needs of pedestrians, bicycle users, public transport users and private car users. In these terms, analyzes covering at least the next 5 years should be conducted.

**E2: Participation:** The E2 Indicator investigates how city administrations involve citizens in decision-making process, in particular whether people with disabilities, pedestrians, bicycles and public transport users are involved. This indicator, which sees the meetings and their frequency as a very important factor, also cares whether the suggestions and feedback of the citizens involved in the decision-making process are taken into consideration.
E4: Human Resources (Personnel) and Financial Resources: The E4 indicator examines whether local governments (municipalities) have the personnel capacity to implement sustainable transport policies and practices, as well as the level and form of cooperation between management units.

TSS1: Planning of Development Areas: The TSS1 indicator aims to confirm the planning of areas that will reduce the dependence on private vehicle transport. According to the TSS1 indicator, which takes care that the planning of new urban areas is in line with the public transportation planning, all new developments in the ideal cities (level 5) should support Eco-Mobility.

TSS6-TSS7: Walking and Cycling Conditions: The TSS6 and TSS7 indicators analyze walking and cycling conditions and in this context aim to confirm whether walking and cycling paths (routes) are secure, accessible to all, attractive to pedestrians and cyclists and adequate for both of them.

TSS9: Usability of Public Transport: The ICLEI Report (2013) shows that when experts consider/evaluate the level of usability of the public transport, the level of information on network design, intermodality, price and availability of tickets, the ratio of monthly tickets to total monthly income, public transport vehicles and accessibility level of stations (stations) and so on elements are taken under consideration.

RI1: Modal Split: In order to measure the impacts of organic transport policies and practices, it is necessary to analyze the type of transport used by the city dwellers. In this context, the rate of travel made by private car in the ideal cities (level 5) should not exceed 40 percent of the total travels.

As a result, the results of the assessment made to Bozcaada within the framework of Eco-Mobility Indicators can be summarized as follows:

EVALUATING BOZCAADA IN TERMS OF ECOMOBILITY INDICATORS

BOZCAADA ISLAND – PROFILE

Bozcaada (Tenedos) Island is a small Turkish island with an area of 40 km², positioning in the northeastern part of the Aegean Sea, inhabiting about 2,700 people. It’s an extraordinary case due to low population & density, tourism-oriented specialization and the presence of external & internal geographical barriers (climate and hydrology). The main industries are tourism, followed by a low wine production and fishing. The island has been famous for its grapes, wines and red poppies for centuries (Üstündag et al. 2017).

Having a standard public participation mechanism, Bozcaada has a low settled population (2730 people in 2017, with a big fluctuation varying from more than 10,000 people during summer to less than 1000 during winter months), underdeveloped inland infrastructure and absence of subcenters. In the present, the population of island community cannot be increased, neither registered population can be encouraged to stay there during the whole year due to service sector only, namely tourism business and due to uncontrolled privatisation coupled with protection areas designed by local government.

In order to analyse the current situations and activities/actions planned in transport field, we’ve examined following plans and strategies: Turkey's Tourism Strategy (2023), Balıkesir and
Çanakkale 1/100.000 scale Environmental Plan, Bozcaada Tourism Master, "Bozcaada & Gökçeada: an Evaluation Report" and Bozcaada Urban Design Guide Draft. The main focus was on transport decisions in general and the provisions, strategies, actions and decisions concerning the Eco-Mobility Indicators.

Evaluating Bozcaada Island in Terms of Ecomobility Indicators

The researches and analysis conducted within the framework of a total of 6 indicators belonging to the Enabling Indicators group showed that; The User Needs Analysis required by the E1 Indicator is not made yet.

E4: Human Resources (Personnel) and Financial Resources Indicator research results showed that the Municipality of Bozcaada does not have an available staff to prepare necessary strategies and policies related to sustainability.

Researches and analysis conducted within the framework of 10 indicators belonging to Transportation Systems and Services Indicators group showed that;
- In Bozcaada there is no any public transportation system, apart from the dolmuş (a paratransit kind of transport), and the lack of such a projection in the near future is reflected in the decisions regarding new development areas.
- Apart from the results of the surveys, it can be said from the observations made during the fieldwork and from the information obtained from the interviews with the residents or visitors that the biggest problem damaging the safety of the roads across the Island is caused by the excessive speed of the vehicles using the main road (Çınar Çarşı Street).

When it comes to the Results and Impact Indicators group;

No data has been obtained from the authorities and / or all plans, strategies and reports on Modal Split, but the results of the surveys conducted with the residents of Bozcaada show that 33.3% of the trips within the Island are carried out by private vehicles. While 50% of the journeys are on foot, the remaining 16.7% are made by bicycles.

In order for Bozcaada to increase its Ecomobility level, detailed suggestions for future steps for each indicator have been made. But due to limited space of this paper, it’s not possible to elaborate them.

CONCLUSIONS

This study examines the current situation in transport and establishing the relationships between mobility and urban form prior to emphasize the need to place accessibility on the core of urban mobility planning.

Urban planners and decision makers should take initiatives and lead to a conceptual leap and a paradigm shift towards an urban planning and design which focuses on solutions that reduce the need for movement by bringing people and places together and creating cities that focus on accessibility rather than increasing the quantity of urban transport infrastructure or increasing the movement of people and goods.

Subsequently, the Eco-Mobility concept was examined in the context of the sustainable alternatives in urban transport, while the indicators of the mentioned concept were applied on Bozcaada case.

Through these detail examined indicators, the current sustainability situation in our cities can be evaluated; in this context, their institutional capacity can be measured, the availability of sustainable transport approaches and policies in existing plans can be assessed, the level of integration between different types of transport and whether the planned new areas correspond to the public transport plans can be determined. The amount of budget allocated to sustainable
transport is another important issue that can be measured in these terms. In addition, recommendations can be developed in all areas where indicators measure and evaluate.

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The connection between urban land use planning, land structure and urban land development instruments – Kosovo case

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Abstract. A rational use of land often requires changes in land structure that can be made only if adequate urban development instruments and methods are adapted to suit the socio-economic conditions of the country, its government and the land tenure system. These instruments must have adequate legal support that is often needed to break the barriers that are imposed by individual landowners’ interests influenced by strong property rights.

This paper aims to highlight the importance of the link between the land use planning, land structure and instruments or methods applied to urban land development. In order to emphasize the importance of links between these elements to urban planning process in Kosovo there have been analyzed the urban planning legal framework of Kosovo and a number of Urban Regulatory Plans in main city of Kosovo. These urban plans have been analyzed in various aspects such as the approval procedures, the legal support and the instruments used to implement them. Results from the study show that there is a strong connection between these land use, property structure and ownership and urban land development instrument chosen to implement the urban plans. This is especially important in cases where the land is very fragmented and where the strong property rights hinder the plan implementation.

Keywords: Land use planning, instrument, land development, transition, Kosovo

Introduction

Urban land use plan is a spatial planning document that defines how a certain urban area will be developed in the future. In other words, it determines whether a certain land parcel is going to be used for building public infrastructure, public parks, the areas for public facilities, residential or commercial uses etc.

However, in general there is a connection between land use, ownership structure and property structure (Larsson, 1993). In specific urban development cases the land use plan doesn’t require big changes of property units inside the area covered by plan. In other cases, fundamental changes in land structure are required to adopt it to planned development. In this way, land use and property structure are interdependent. In certain urban land patterns, the border lines of the properties can be easy changed to fit the planned use of the land. In other cases, changes in the boundaries of the parcels are necessary to allow the change in land use. Changes in land structure are difficult to be achieved especially in the conditions of legal uncertainty, the changes in system of governance, property rights and economic system, which are characteristics of most of transitions countries.

Moreover, the flexibility in adapting of physical urban patterns in a specific area is highly depended on the form of land tenure (Dunkerley, 1988) that is again linked with, system of governance and legal framework of a country. In urban situations where the land structure is
not to stand in the path of planned development it should be found an efficient method or instrument to change and adopt it to the planned use. If one or another method or instrument is going to be used in the process of land-use change it largely depends on the planned land use, ownership structure and property structure (Larsson, 1993).

During the past decades, all European transition countries have reached significant improvement in their alternation from the economies which were socialist and centrally-planned to the market-based and democratic systems. “The transition introduced institutional reform and planning innovations in most of those countries. However, in many cases the governance modalities of former state control and closed decision-making processes have not been fully disassembled “.(UN-Habitat ,2013). However, the legal framework on urban planning remains challenging for most of countries in transition. The institutional reforms have been followed by reforms in other parts of the system. Still, the governance is characterized by non-transparency, informality in economy, legal uncertainty and non-conformity.

Kosovo belongs to the group of transition countries, characterized by weak institutions, weak economies, legal uncertainty, etc. The country is yet politically instable and due to its unclear status internationally the country is facing problems in integration process of the regional and international organizations. Still, the country is facing different urban development problems relating to urban planning and management. The most significant reason for this is the “transition from a rather centralized form of urban planning, a typical aspect of the Yugoslav planned economy into a markedly free form of development” (Boussauw, 2012 p. 143). The transition is characterized by the loss of control by the authorities and their inability to find appropriate methods and tools to facilitate a certain aspects of these processes.

Despite the efforts of the institution of country in these last two decades to transform the urban planning system in Kosovo it is still suffering from many urban development problems. The socio economic transition a characteristic of countries of the former socialist bloc has undoubtedly contributed greatly to the creation of urban development problems of the country. However, the armed conflict in 1999, in addition to the consequences for the country's population and economy, has also contributed greatly to the creation of urban problems. The newly constituted institutions after the conflict in Kosovo in 1999 were unprepared to manage a huge migration of populations toward urban centers of Kosovo. As a result, a very huge number of illegal constructions (around 350.000) is a picture of main urban centers of Kosovo including its capital city Pristina.

Concerning the urban planning process, the country has inherited some of the past urban planning system's features and procedures that do not fit the existing circumstances in Kosovo. As a consequence, the urban planning process in Kosovo is still to a certain degree top-down driven and the participation in the process of landowners and other interested parties is very limited. Since 1999, the international organization UN-HABITAT is assisting the central and local institutions of Kosovo to shift “from the former centralized, top-down planning system towards an inclusive, participatory and multi-disciplinary approach to planning” (D’hondt, 2006 p.4). However, the authorities' efforts have not been successful. Kosovo's municipalities continue to face various urban development problems, which are mainly manifested in the difficulty of implementing urban plans.

On the other hand, the property rights in Kosovo after 1999 have been substantially increased and the land purchase by the municipality for public uses has become challenging due to legal procedures and economic constrains of municipalities.

The urban development issues such as the land assembly for (re)development, the adaption of parcel border lines to the planned use, the purchase of land for public purposes and the finance of public infrastructure construction are the key issues in which the current urban planning system is hindered in the efficient implementation of urban plans in Kosovo.
The urban planning legal framework

Kosovo Spatial Planning Law no.04 / L-174 (2013) (MESP) represents the legal framework for urban planning in Kosovo. According to the Law, the spatial planning in Kosovo is a competence of both central and local administrative institutions. The spatial planning for the entire territory of Kosovo through Spatial planning documents, such as the Spatial Plan of Kosovo (SPK), Zonal Map of Kosovo (ZMK) and Spatial plans for special areas (SPSA) is a competence of the central authorities, while the local level of planning for the territory of the municipalities through Spatial planning documents, such as the Municipal Development Plan (MDP), Municipal Zoning Map (MZM) and Urban Regulatory Plans (URP) is a responsibility of the municipality.

Characteristics of urban land pattern and ownership in Kosovo

The protected property rights are considered as a social value of a democratic society. The question is: how these property rights contribute to, or at worst impede the sustainable urban development.

After 1999, in Kosovo there has been a transformation of land tenure system. Most of the state-owned land properties have been privatized. On the other hand, the property rights are more advanced than in previous governance system. The property right in Kosovo is a constitutional right. According to “Article 46 (Protection of Property) of the Constitution of Kosovo” (CK), the property right is guaranteed and protected by the law.

“The use of property is regulated by law, in accordance with the public interest and no one shall be arbitrarily deprived of property. The Republic of Kosovo or public authority of Kosovo may expropriate private property if such expropriation is authorized by law and if it is necessary or appropriate to achieve the public purpose. The expropriation is allowed to support the public interest and is followed by providing immediate appropriate compensation for the person or persons whose property has been expropriated” (Constitution of Kosovo, 2008 p.13).

Based on the “Law on Expropriation of Immovable Property” in Kosovo, Law no. 03/L-139 (LEIPK), municipalities have the right to expropriate the private property or their parts to implement the urban plans and projects that are under their authority. The Law on Expropriation of Immovable Property in Kosovo defines cases in which the municipal authorities have the right to expropriate the private land.

Besides, the “Expropriating Authority of a Municipality may expropriate immovable property only if the expropriation is clearly and directly related to the accomplishment of one of the following public purposes” (LEIPK p.6):

- The implementation of an urban and/or spatial plan that has been adopted and promulgated by a Municipal Public Authority;
- The construction of a building or facility to be used by a Municipal Public Authority;
- The construction, enlargement, establishment or placement of any of the following infrastructure and/or facilities if this promotes the general economic and/or social welfare of the municipality or provides a public benefit to the population of the municipality and otherwise complies with applicable legal requirements:
  - For the construction of municipal roads
  - Construction of public facilities needed for the provision of public education, health and/or social welfare services;
  - Installation of pipes for providing public water and sewage services;
- Providing land for municipal landfill sites;
- Providing land for municipal public cemeteries; and
- Purchasing land for municipal public parks and sports facilities (LEIPK p.6, 7).

Another important issue in the selection of methods or instruments for urban land development is the physical urban land pattern. As it was pointed out above, it is not always easy for authorities to adjust the boundaries of plots to the planned land use. Whether this adjustment of property lines will be easy or difficult to be achieved it depends on the land tenure system and selected urban land development instrument for altering urban land structure.

It is worth mentioning that the urban land of Kosovo is a very fragmented one, with a small surface of plots inside the cities and larger in their peripheries. The land has been subdivided informally for long time. The land parcels inside urban centers are too small and have different irregular shapes that in most of cases are not suitable for construction of buildings according to the urban plan.

The country continues to use expropriation as an instrument for the development of urban land but in completely different social and economic circumstances than in previous governance system. There is a difference concerning the circumstances in which the expropriation instrument was used before 1999 when Kosovo was part of the former socialist state of Yugoslavia and after 1999 to the present. In the past the state institutions were centralized they had the state power to carry out certain projects including urbanization. In order to implement the urban plans the state used the pre-emption strategy for the land included in urban plan. This means that all properties situated within the planned area were expropriated by the state nevertheless of their planned use.

After 1999, the situation has changed in favor to landowners. The property rights are much more advanced and nobody can be arbitrary deprived from his property. Although the expropriation is still the only instrument available to state authorities it has very limited scope of use. According to the law, the private land can only be expropriated for the public purposes mentioned above.

The absence of sufficient funds for timely expropriation of land surfaces planned for public use such as the areas for public infrastructure, schools, kindergartens, etc. is not the only concern of the municipal authorities. Based on the current legal framework, the local authorities in any situation cannot take the land foreseen by the plan for nonpublic uses. In any case, the expropriation instrument cannot be used for solving urban development problems related with regularization of private land foreseen for nonpublic uses in sense of reshaping or reallocating of plots in accordance with an urban plan. The central and local relevant institutions still have not consolidate the legal framework that would equip the local and central institutions with efficient mechanisms and instruments that could ensure the efficient implementation of urban plans and at the same time not violating the private property rights guaranteed by the law.

The current urban planning system has been shown to be inefficient in addressing number of planning issues. The planning system does not ensure the land assembly for development before the plan is approved for any urban situation. The relocation or reshaping of the parcel is emphasized only in the moment of urban plan implementation, exactly at the phase when the landowner or the potential investor applies for construction permit. The alteration of land structure after the plan approval has been shown to be very difficult because of individual interests of landowners. In most cases, the cooperation between the landowners is required. This cooperation is voluntarily and difficult to be reached due to planning procedures and different individual interests.
Case studies

In order to show this dependency between the land use planning, land structure and land development instrument in Kosovo conditions, the urban plans of the city of Pristina have been selected as case studies. The URP has been analyzed in different context such as the planning procedures, planning documents, implementation methods and instruments used. The impact that the instrument has had on changing land structure and implementing urban plans has been analyzed and compared.

The impact of the instrument of expropriation on changing the land structure is analyzed for different urban situations: urban redevelopment, urbanization of new areas and redevelopment of the redevelopment of the area with illegal constructions.

Urban area “Qyteza Pejton”

The first case study is concerning the urban redevelopment of the urban area “Qyteza Pejton” in city of Prishtina. According to "Urban Strategic Development Plan of Prishtina 2004-2020" (USDPP), the area has been defined as one of the key areas for urban redevelopment. The purpose of drafting the Urban Regulatory Plan (URP) for this area has been the creation of legal conditions for the redevelopment of the area as one of the central city zones. The plan has been initiated by the municipal authorities. The neighborhood was initially built as a residential area mainly for individual housing units. New urban regulations set by the municipality through the URP enables the density increase of the area. Inside the area covered with urban plane there are some of public facilities such as the primary school. Other public facilities are planned to be constructed in private owned land. However, the new urban land plan has been approved by municipality assembly without prior changes in land structure or ownership.

The land inside the urban blocks dedicated for multistory housing is mainly private owned and the municipality authorities cannot take the land from landowners or in other ways to alienate it. Because of their size and shape, the plots individually are not suitable for construction of multistory housing buildings. Landowners have to join their plots in order to allow the density increase of the area. In any case, cooperation between landowners /developer and municipality is needed. This cooperation is voluntary based because the municipality does not possess any legal instrument or mechanism to enforce the landowners to cooperate with each other. To
explain better the situation with urban development of the area, an urban block inside the area has been selected to be analyzed.
Adapting the parcel boundaries with the planned development depends on the agreement reached between the landowners after the development rights are attached to the area. The process of joining several small plots to create a larger plot defines the future boundary of the newly created parcel. Since the rearrangement of the parcels borders is left for the later stage of the process, the adaption of parcels border lines according to the plan is very difficult to be achieved. The municipality does not have legal mechanisms that would force landowners to reach an agreement on joint development for their parcels.
The urban plan has been approved by the municipality assembly in year 2011 and since there a very little is done in its implementation of plan mainly because of planning procedures, the level of involvement of interested parties in decision making process and the method and instrument used to implement the plan.
Although the new urban plan use foresees changes to the land structure, namely the merging of parcels within the block to allow for increased housing density, this has failed to occur in almost any part of the area. The figure below shows the difference in land structure before urban plan approval and how it is now.

![Fig. The land structure of urban area "Qyteza Pejton" before URP and now](image)

**The suburb area “Mati 3”**

The urbanization of peripheral areas of cities is the most common case in the urban developments of Kosovo. This is due to the fact that cities are constantly expanding as a result of demographic developments in the country. As it was already mentioned, after 1999 there was a migration of population from rural areas toward urban centers. Consequently, significant land surfaces that have been used for agriculture are part of the urbanization process.
The suburb area “Mati 3” is one of the peripheral areas of the city of Prishtina. According to Urban Development Plan of the city of Prishtina the area is defined as a low density residential area mainly for the construction of one-family residential buildings.
Concerning the ownership structure, the area consists of private and municipality owned properties. The presence of municipal property was an advantage for the area because it was planned for public uses, such as the areas for the elementary school, kindergarten and green areas. The Regulatory Plan “Mati 3” covers a large area of the city suburb, while only a part of its area consisting of a total of 13 private property parcels and one municipal-owned parcel has been taken for the case study.
Fig. The existing land parcels and use plan of the part of the urban area “Mati3”

No changes in parcels’ border lines have happen prior to final approval of the plan. The re-parceling of parcels that involves the changes in the parcels boundaries is required from the landowners / developers in the case of their application for construction permit. The application for a building permit is individual, thereby causing the development of the area “parcel by parcel”.

Such individual method approach to landowners is restrictive in parcel reorganizing and adjusting their boundaries according to the plan.

In order to enable the re-parceling and the planned development according to the plan it is required a cooperation and legal agreement between the most landowners of original parcels. The current legal framework and procedures do not force the landowners to reach any agreement in sense of land assembly for development. For example, to enable the re-parceling and adapting to the planned development of the planned building plot no. 9, it is required a cooperation and agreement between the landowners of original parcels 1, 7 and 8. In total, for 17 planned building plots it is required a cooperation of three landowners, while for the other planned building plots it is required a cooperation of two landowners of original parcels. Only in few cases the newly created parcels in private ownership do not require an agreement between two or more landowners, such as the case with parcels 38, 42, 48, 55, 56, 57, 58 and so on.

The agreement between the landowners is voluntarily and it is not subject to any legal enforcement. In general, based on the current legal framework, the agreement between two or more landowners to exchange part of their plots in order to fit them to the planned development is difficult to be achieved due to various individual interests.

Expropriation as an instrument can only be used by the municipality for the purchase of surfaces that have been foreseen for the construction of public infrastructure but it cannot interfere in parcels planned for the construction of family residential buildings in this case. Therefore the issue of adjusting the boundaries of the parcels and adapting them to planned use is left to the free will of the owners which in most cases has not worked due to individual interests.

Suburb area “Mati 1” in Pristina
The case study area is a part of the suburb area located in the eastern part of Pristina in the direction of the rural settlement Mati. The land parcels are mainly privately owned. A very small amount of land is owned by the municipality. The area was not covered by any urban plan until 2012. The informal divisions made in different time periods have created a highly fragmented structure of the land. Furthermore, some parts of the areas were populated by the people that constructed their houses informally. Recently, the area has attracted the land developers’ interest due to its favorable location in relation to the city.

In the urban development plan strategy the informally constructed zone is foreseen to be transformed and regulated through the density increase of the zone. In 2012, the new zoning
regulations are set by the municipality through the urban regulatory plan “Mati 1”. In most of the urban blocks defined by the urban regulatory plan a density increase is enabled, thereby allowing the construction of multistory housing buildings. The new zoning regulations set by the municipality for the area have attracted the landowners / developers interest for re-developing of the area.

The adaptation of the parcel border to the planned development; the provision of land for public purposes and public infrastructure finance are the main challenges of local authorities during the implementation of the urban plan.

The minimum parcel size for construction of multistory residential buildings is set by the new land-use regulation of the area. The majority of parcels are too small to get the construction permit for residential multistory buildings. The area consists of informally subdivided parcels of different sizes and shapes. The merging of two or more existing parcels to create a larger building parcel suitable for the construction of multistory building is voluntarily. The agreement between landowners to create a critical mass of land for development is determinant of the newly created parcel boundaries. These agreements are subject to negotiation between land developers and landowners. The boundaries of newly created parcels are a derivative of the original parcels boundaries. These boundaries of the newly created parcel do not fit the design of the plan.

In order to implement the plan the municipal authorities have improvised the solutions which in most cases have been unproductive because in many cases haven’t been in accordance with the urban plan. In other words, the planning process and the instrument used for implementation did not produce a land structure that would allow easier and rational implementation of the plan. Today, the neighborhood can be considered as a bad urbanization example.

![Fig The situation with land structure and urban development in suburb area “Mati 1” in year 2019](image)

**Conclusion**

Kosovo is a new state emerged from the disintegration of former socialist state of Yugoslavia. Like other countries in transition it is facing different urban development problems. The most significant reason for this is the transition from a rather centralized form of urban planning into a markedly free form of development. The legal framework on urban planning remains challenging for most of countries in transition where Kosovo belongs too.
The country has inherited some of the past urban planning system's features and procedures that do not fit the existing circumstances. As a consequence, the urban planning process in Kosovo is still to a certain degree top-down driven and the participation in the process is very limited.

On the other hand, the property rights have become more advanced than in previous governing system. Now it is a constitutional right protected by the law.

A method or instrument cannot have the same effect in different situations and circumstances. Therefore, expropriation as an instrument for urban land development can only be effective in certain social and economic circumstances. The country still uses conventional instruments such as the expropriation for urban land development. The private land can be expropriated exclusively for public purposes like the areas for public infrastructure, schools, kindergartens, parks etc. In most cases the municipality lacks of funds for timely expropriations of land for public purposes that impact in timely implementation of urbanization projects.

The urban development issues such as the land assembly for (re)development, the adaption of parcel border lines to the planned land layout pattern, the purchase of land for public purposes and the finance of public infrastructure construction are the key issues in which the current urban planning system is hindered in the efficient implementation of urban plans in Kosovo.

**Recommendations**

The relevant institutions of the country need to make further reforms to the urban planning system in order to adapt it to the new conditions created as a result of the social and economic transition.

The legal framework should ensure the stakeholder’s involvement in decision-making process at all stages of the planning process for reaching consensus before the documents are sent for approval to the relevant institutions.

Active involvement of landowners in the decision-making process will make them more cooperative between each other and the institutions. Non-discriminatory policies and transparency of the process are essential to enhancing mutual trust and co-operation as a preconditions for successful implementation of the plan.

A deliberate choice of method or instrument is achieved only when it succeeds in harmonizing private interests with the public, ensuring sustainable development and at the same time not interfering with property rights guaranteed by law. Developing and developed countries all around the world use different methods and instruments for urban land development. Kosovo can learn from the experiences of countries that at certain stages of their development history have faced the problems of the same nature and use them in creating of its own policies.

**References**


The social effects on the architecture form; in the case of rural dwelling stone structure so called “Kulla”

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Abstract. The changes made in family structure that reflects to the way how we live, undoubtedly changes the physical surround too, that makes dwellings vulnerable either for abandon or for destruction in order to build a new or release the space. This occurrence mostly affects in rural zones, whereas the main focus unfortunately now days has not the required attention.

The focus of the study is mainly the rural dwelling stone structure so called “Kulla” that is settled in the west part of the Kosovo (that usually lie in the western part of Kosovo), respectively in the area of the Dukagjin plane. By computing the information about the stone structured dwellings, study aims to provide knowledge, whereas the form, plan and method of construction, simply follows a tradition for the time and place of their conceptions within the cause-consequence aspect. In this regard the social aspect of determining the form and the structure is prioritized. Therefore, regarding to the paper is chosen as a case study Kulla (Isniq village / Municipality of Deçan) in the Dukagjini region that relates to the area that has lifelong continuity by passing different civilization and administration, but always preserving the built identity.

Keywords: stone structures, Kulla building, social aspect, method of construction, dwelling, vernacular architecture.

Introduction

When we look at the main factors that shape the dwelling architecture mainly can be listed as climate conditions, geographical position, used material, construction technique, social, economic, administration, religious factors etc., what we can add forth the case of the Kulla house, is that certain ethic codes can determine the shape and usage of the building. In this regard the field of the research is focused more in social effects on dwelling unit.

Historically, dwelling is the organized pattern of communication, interaction, place and sense. While it reflects characteristics, way of life, codes of conduct, environmental preferences, images and time-place taxonomies of the ethnic group it belongs to, it also reflects images of its owner regarding its essence, its tendency for proving and explaining itself. Thus, it reflects a person’s character and distinction via its design, decoration and its style (So, 2000).

General criteria of the Dukagjini Kulla house

Although Kulla house is well known for the different researchers, such as Cerasi, Riza, Thomo, Yorgi, Doli, Kuban, Akin, Drancolli, etc., very rarely is explained in particular. The Kulla house as a formation that took place firstly in rural zones, it shows the way of treatment of space in a manner that creates specific identity of Albanian vernacular fortified structure. It is
called fortified because of the structure mainly masonry and the small gaps within the wall besides a tiny window called frengji were used to secure the building from outside threats. The concept of Kulla in generally is spread in different regions and treated in different way. This type of building within the classification of researchers like Cerasi classifies as Epirus and Albanian Kula Houses (Cerasi, 1999), Akin classifies as the city and rural kulas in Albania (Akin, 2001), while Riza puts the Kulla house in to the specific house type that spreads over the northern Albania and Kosovo, (Riza E., 2013) by claiming that the formation of the kulas is in early 19th century firstly in the villages then in the cities too, like Peja, Gjakova, Junik, Peshkopi, Diber etc., (Riza & Haliti, 2006) furthermore researcher Pojani Kula building names as an Ottoman detached tower-house which served the dual purpose of defense and habitation. Mostly built between the 17th and 19th centuries, as for Several Albanian cites, including Gjirokastra, Berat, Shkodra, and Kruja, have Kulla houses (Pojani & Mezini, 2014).

![Kulla houses](after Pojani and Mezini, 2014)

**Kulla in the historical point of view**

The structure of the building that is multi floor three to four floor shows the concern of building technique placed in rural zones in a way of fortified building that relays to the built time social, economic conditions. In this regard the end of the ottoman era, of its weak impact in rural zones created self-defense buildings such as Kulas. So in this point of view can be said that Kulas provide not only shelter and habitable space but should offer a secure measurement for eventually threats within its surrounding. Also the tiny gaps in the upper part of the wall that is known as place where can be shoot with long rifle weapons, weapons of the 19th century makes it possible to believe that this kind of structure spread out from end of the 18th century, as declared the researcher Riza, too. Also some of the building has the inscriptions that show the built date in 1884 (the Kula of Peja) (Riza & Haliti, 2006) The built time of this kind of building in a specific area in a time nationalism rise in Balkans against to the Ottoman empire, as the spatial solution of the Albanian community lived there created its own type of architecture.

**The spatial organization**

Building is three stories, rarely four story building. As the rural building is related to the rural life needs, therefore the ground floor is dedicated to the domestic animals like cow, horse, etc. In a certain organization in order feet the take after and easily move in or out the animals.

![Kulla houses](after Pojani and Mezini, 2014)
Usually the ground floor is linked to the first floor with inner wooden stairs. Second floor is dedicated to the family especially female and family unit for each one multifunctional room. While the main floor, is the rest one that it is in the upper part of the building. The main floor that reaches usually from outside stairs to the first floor and then with inner stairs to the main floor, consist the space called divanhane, the utility, and the main space called oda. The core of the house inside the room called oda is rectangular shaped, has the windows openings, and has the fire place. The organization is in a certain order of usage due to the habit that will discuss further more as main topic of the study.

Figure 9 1) Kula in Peja; 2) Kula in Gjakova; 3) Kula of Haxhi Zeka in Peja (Riza, 2013)

Like every building Kulas too cannot be imagine to appear in a specific day, but this is a long process until take form the way how we know the Kula. While analyzing the spatial organization of the room clearly can be seen that main activities that come from even ancient times. If we look at the nomadic life that was carried out with nomadic tents we can find similarities in spatial organization. Like in nomadic tent we have spaces around the fire place that is in the middle, surrounded by sleeping are, cabinets, earth floor, space for goods of life, etc.

Figure 10 Nomadic Tent from the central Asia (Eruzun, 1990)

Dwelling unit as the earliest gender of construction is side by whole historical journey of human being as for undoubtly same can be said to the ancient dwelling unit that can be seen similarities due to the recent archeological remains of the antic dwelling in this region. (Riza E., 2013)

Building techniques and material

Building with its masonry view dominates the perception as a huge cubic stone structure. This type of buildings usually is in a square base with 10x10m and approximately 9m high.
The thickness of the wall are around 90 cm, while outside is stone structure inside is covered with lime mortar. The floor structure lies on wooden beams and also the inner wall separators are from wooden structure.

Case Study: Osdautaj’s Kulla

Placed in the Isniq village is one of the three Kullas survived and the only one with four stories high. It is known to be constructed in the second half of the 19th century the most characteristic elements of the building remained originally. Recently was restored and turned in to the museum.

Mainly Kula house differs from other dwelling in main category that is placed in rural zone, where the main activity is agriculture and farming. As spatial solution meet the logical concept of organization by concentrating the space in a compact frame that allows more reliable spaces for agriculture and farming activities. As for the surrounding of the building, is constructed with other utility spaces too.

The main focus of the research is to create the link between the story facts that were gathered from the site by the people who lived in this space in order to meet the right manner of explaining the reflection of the day life as main impact on formation of the Kulla houses. In order to get the information on the site expedition has been articulated a questioner that is shown below with the answers that we get in the field of the village:

1. Approximate construction time – what about the building material?
2. How is organized the space inside the house?
3. How are winter heated and summer how are they protected from the sun?
4. Has there been any in-house production, such as vek, for silk or similar and was there any special space for those activities?
5. Is there water inside or outside the house?
6. Food, where is it prepared and how is it served?
7. Food storage where and how is it done?
8. How many family units did they live in?
9. When someone in the family gets married the spatial organization changes inside the house?

1. – When the Kulla was built?
1.1. - there are no exact sources of information regarding the time (year) of construction, but it is thought that the towers in Isniq Village, Municipality of Deçan / were built in the middle of the 19th century, mainly in the 1840s to 1860s.

1.2. – Where the building materials were provided?
1.2. - The towers were built with surrounding materials, mainly stone and wood, which were not far from the construction site. The stones for masonry exterior walls of the towers are brought from Lumbardhi river of Deçan and from Behovci (a trough between Isniq and Strelc village - Municipality of Deçan). Limestone for limestone is brought from Isniqi Mountain, Deçan and Belleja (village in Deçan). Whereas the timber material, treatments for floor construction, roof construction, partition wall construction, as well as enterriaer were brought from Isniq Mountains.

- For the construction of stone buildings, at that time, the craftsmen from Debar were distinguished, from which the towers of Isniq, Deçan and the whole Duagjin were built.

2. – Can you explain the Spatial organization of the Kulla.
2a) - First level (ground level) - this level on the towers is designated as the first floor and is usually intended for pets (cows, calves, oxen and horses), for safety reasons and for protection against cold during winter season and is called a cot. The entrance door to the coffin is usually located near any corner, rarely in the middle of the base planar rib, and has a semicircular arched finish, made of carved stone called arches. The cot space is illuminated and ventilated through one or more of the small windows and the high parapet, which are always oriented towards the courtyard of the tower.

- On the exterior walls of the tower, even at this level during construction, small openings (francs), oriented to the road, were placed, which served for protection.

- Housing in the towers has been developed as a gender-disaggregated area, with the second level being dedicated to female and children, and the third level to male.

- Entrance to the residential area - to the second level, is usually done through the entrance of the cot, while in some towers there was a separate entrance to this level.

- In some cases - later, the ground level has been used for housing, where the fire house has been located (daycare mainly for women and children and where preparation - baking and cooking is done). At this level there is also a dormitory room, as well as auxiliary cabinets: for cooking, for storing food, for exercising any craft such as eggs, etc.

2b) - Second level (1st floor) - this level in the towers is designated as the second floor - at this level is usually the fire house (daily stay mainly for women and children), where the preparation - baking and boil food, then 2 to 3 bedrooms. Within each bedroom there is a corner for cleaning, for adults (hamamgjik), while infants and children from 2 to 3 years old are cleaned in a tub, made of wood and called troughs. - Then the space next to the stairs, where one part served as a corridor, in the other part is a crate made of wood. The uncle is used for cooking and preserving food (bread), while near the maxhe (garden), the place for cleaning dishes.

- These spaces were accessed with shoes, which are barefoot near the bedroom door, and in some cases in the bedrooms - near the bed. - The exterior walls of the towers, which are also retaining walls, are made of limestone and mortar as a bonding material, plastered internally.
with limestone and lime-plastered, while the partition walls are made of timber. Mud filling with straw or reed yarn and painted with lime. - The fire house (daycare mainly for women and children), usually has two windows, with a parapet (60 to 80cm), and oriented towards the courtyard of the tower. Bedrooms have a front window (60 to 80cm), tower-oriented or neighbor-oriented - in cases where towers are removed from the boundary of the parcel, they are rarely street-oriented. In cases where the second-level windows (Floor 1) are street-oriented, they have smaller dimensions and higher parapets. The food preparation area, where the maxi is located, usually has a window, which when street-oriented, usually has smaller dimensions and a higher parapet. - The floors of all pavilions, at this level, are earthy, while the ceilings with boards and boards of wood.

c) - Third Level (2nd Floor) - this level on the towers is designated as the second floor and is intended for male members. At this level there is usually a men's chamber with sofas, with special entrances for guests through the outer wooden stairs, which lead from the courtyard to the third floor - to the sofa.

- In some types of towers, the outer staircase for guests did not extend up to the sofa, they ended up in the courtyard to the second level, where the branching is to the second and third level, then through the internal stairs which have been shared is continued to the third level - on the sofa. The interior space, where the outer stairs met with the interior stairs, was separated by a door. This entrance is used for the first floor - for living, as well as for guests, but not at the same time! Through these internal scales, which connected the second level to the third level, internal communication was developed under normal conditions between these two levels, and in cases of organizing different manifestations, these scales served to carry food.

- Usually up to the sofa is a shoelace, and in some cases even inside the men's room.

- In sofas (divanhane), the floor surface is usually made of wood boards, while the hallway to the WC is earthen. - The part of the sofa in which the lighting fixtures (mattress) were developed, in some towers is made of stone and some of wood. In this part (the mattress), the windows are placed on one of the walls - on one side, usually on the wall in front of the chamber entrance door, and sometimes on two walls of the tower - on both sides. These windows are usually smaller in size than ordinary windows, but in larger numbers, usually arranged in separate but separated into 2x3, 3x2, 3x3, 2x4 modules, and so on. When these openings are made of stone, they have a semicircular arched-stone mattress finish, while when the openings are made of wood, they have a decorative finish cut out of small arches placed in different positions.

- The exterior walls of the tower, on the floor in the portions where the openings were made, from the window sill up to the top have a significantly lower thickness. The part of the parapet has good wood processing and has been used for various purposes, such as: placement of material for landing in the chamber, lying of bedding, etc. During the cold and rainy weather, this mattress area was used for carpentry work, where working tools and various decorative elements of wood worked.
- During the summer season, the sofa and mattress were also used as a sleeping area, usually in the event of various events, but also in the summer when it was hot.

- At a corner of the divan, usually near the inner staircase, is the place for the abbad (abdest'hanja) to cleanse before prayers (prayer), and this space has also served to cleanse the vessels (mainly cups and cups). Opposite the interior stairs, in the divahane, is a door where through a corridor about 1m wide and about 5m long, you reach the toilet (WC), which is located on a console construction, usually made of wood and sometimes of stone and resting on one of the outer walls of the tower. The walls mounted on the console structure, in order not to create weight, were worked with wooden posts and stone wall coverings, but of a low thickness.

- The men's chamber (oda) that has served as a residence for men, toilets as a guest room, for organizing various parties, as well as for sleeping. There were elderly people and single bachelors - as well as male guests. - Even at this level, the exterior walls or at the same time the retaining walls have been made of stone, plastered with lime mortar and whitewashed, while the partition walls have been made of timber, with mud fill. straw or reed and dyed with lime. The dividing wall between the men's wardrobe and the sofa, on the side of the sofa, was decorated with wood-decorated elements. - The men's room had 2 windows, 2 windows - 1 on the front side and a smaller window near the abbey. - At this level, the floors have been made of different materials. - In the cabin, the whole floor surface has been earthy, while on both sides of the cabin, on the left side - the large side or the large hatch and on the right side - the small side or the small hatch, above the layer from the ground, there was a layer of straw; and on the straw the workmanship of sheep wool. These surfaces on both sides have been used for standing - sitting and sleeping. - In some towers in the last part of the large side (the large door) there was a simple wooden bed, 25 to 30cm high, which served as a floor, for sleeping, for laying the bedding, for sleeping and in mortal cases it was oriented according to the criteria of the Islamic Faith and above, for several hours during the rituals the corpse was placed until it was buried.-- Approximately 2/3 of the surface of the small side (the small door) have been paved with coal, while 1/3 of that surface, near the entrance door to the cabin, has been earthy and in some cases the floor of porches. This surface has been used for heating, where during the winter season there is a tanguy with fire in the middle of it.

- These two surfaces, intended for different purposes, are separated by a decorative element of wood, worked in the form of a fence of decorative wood, about 50 cm high, on the floor surface and is called a trapezoid. The upper part of the trapezoid has a finished finish in the form of decorative wooden beams, with a square cut of approximately 10cmx10cm dimensions, which in addition to the spacer has also served to reduce the heat around the tangar.

- The area between the two sides (rags), served as a wood supply to the hearth, had earthen floors and in some cases wood floor boards and was restricted on both sides along the two beams. decorated with wood.

- In the front portions of both sides (rags) existed from a closet, inserted into the wall, with wooden doors. The large closet, on the large side, had two-sided doors, made of decorative
parts of high quality wood and served to preserve valuables, various documents and carpets, money, and so on. While on the smaller side, there was a closet, a little smaller, which had only one door also made of high quality decorated wood and served to hold coffee, cups, jars, trays, sugar, etc., which are used almost exclusively for guests and for holidays.

- At the front of the cabin - in front of the door and between the two sides (the rails), there was the place for the fire. The surface near the chimney, for safety reasons of non-spreading fire, has been made of stone tile and is called Sandrach.
- The whole (large) rug, especially the front part, near the chimney has been reserved for guests, while the small (rug) side has a sitting head

3. - How are winter warmed and summer how are they protected from heat?
- During winter and in cold weather they were heated by fire. The fire was set on fire place, which, due to the chimney created by the smoke removal, was located near of the exterior wall. Usually, the fire is only ignited in two spaces: in the fire house (daycare mainly for women and children) and in the men's room, while the other beds are not heated! In the fire house, the fire is lit all the time - in all seasons, even during the summer for food preparation, water heating, etc.
- There was no fire in the bedrooms, although it was not necessary as they were located at the middle level, above and below the men's room.
- Considering the thickness of the outer walls of the stone tower about 80cm, as well as the very small openings for lighting, have influenced the creation of suitable microclimate even during the summer season.

4. - Has there been any production within the home, such as separate or similar and was there any special space for this activity?
- Although there was no separate place for towers in the tower, it has been an indispensable tool for women in almost every family, and is usually housed in a fire room - during the winter or in the dormitory or in the bedroom. conductive pads during the summer.
- While as a place for practicing men's crafts, such as carpentry, sofa and mattresses have been used during the winter season, and sometimes for fine workings such as deep carving - engraving of decorative elements of wood has served behind the trapdoor in the men's room.

5. - Was there water inside or outside the house (tower)?
- The water supply to the towers is made from natural water sources (wells or deep wells). There was no water supply system in the tower, the water from the well was extracted with wooden pots, and then transported to the pier again through wooden pots, but of slightly larger size and different shapes (bushes and centuries). The water used for drinking is housed in a barrel-shaped wooden container, called a barrel, while the sanitary one is also housed in a wooden, open-top cylindrical container, which has been called a century. both of these pots are usually made of mollusc wood obtained in the Isniqi Mountains.
- In cases where the water is required to be warm, it is placed in a metal container made of copper, called Kusi, which is heated in hot water. After heating, the water is again restored through a wooden container (sheka).

For this information, two persons from the village of Isniqi who were living in the towers were interviewed: 1. - Smajl Rustem Osmonaj born in 1939, a master of construction, and 2. - Xhafer Mala Ahmetaj, born in 1950, a teacher of Technical Education.

Interviewees' expressions during the interview:

1. - Smajl Rustem Osmonaj, disa herë shpreh falënderime për angazhimet tona për të punuar diça për kullat, ai shprehet „Ah bre burra, shumë mire po m'vjen që paski vendosë me punu diçka për kullat, se ato te na gati u zhduken, e besa u harruan krejt. Neve na u dogj kulla gjatë luftës, e me i vetë tash nipat e mi diçka per kullat, ata veç i rrudhin krahët se nuk dinë as për çka po bohet fjalë. Ishalla keni sukses e ky punim i juvi mrrinë ne duart e të rive tani“.
Smajl Rustem Osmonaj, sometimes expresses gratitude for our commitment to work something for the towers, he says “Ah, men, it seems to me that they decided to work something for the towers, that they almost disappeared, and they were completely forgotten. We were burnt down during the war, and now my nephews have something for the towers, they just shrug their wings because they don't even know what they're talking about. You have been successful and this work puts us in the hands of our youth."

2. Ndemsa Xhafer Malë Ahmetaj, përgjigjet i jap gjithmonë duke u nisur nga përjetimet e tija personale dhe familjare gjatë asaj kohe, madje gjatë bisedës rreth pikave të ndryshme për kullat shpeshëherë ka emocione dhe shprehët „Ai bre djema, m' fënë pak se kom emocione kur flas për kullat, tash m'keni kthye në kohën e rinisë e besa edhe të ëmësinë. Tash kaq shum po e përjetoj atë kohë saqë po m'duket se jam në kullë. Edhe ma herët disa njerez muaren shënime për kullat por ato punime kurrë nuk e panë driten e Diellit, e ju ishulla boni diçka e ky punimi juvi mrrinë në dorën e atyne qe kanë interesim për kullat”.

3. Xhafer Mala Ahmetaj, I always give the answers based on his personal and family experiences during that time, even when talking about different points about the towers there are often emotions and he says “He boys, please excuse me when I talk for the towers, you are now back in my youth and besides my childhood. I am experiencing it so much now that I seem to be in the tower.

Conclusion

As can be seen from the examination formation of the vernacular architecture, Kulla houses in particular in Dukagjini reagion is related to regional necessitation. Structure of organisation of the Kulla houses shows the impact of natural, enviromental factors and socio-cultural characteristics as an essentialachievment of the human kind in that area.

Based on the field research and the interviews too, we matched the story to the designe in order tounderstand the spatial organization, whereas the main floor as main objective of this study rulsats to have atleast 10 zones that has different meaning, in terms of arhitecture different functions.
As a result, this study aims also to provide the awareness for the restoration project that should be carried out with an huge consideration of the story (scenario) or stories that makes the structure served for.

References

Appendix
Transformation and revitalization approach of cultural heritage in Prizren in the 20th century

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Abstract. It is well known that cultural heritage is said to have never reached to now its source state. Over time they have undergone changes depending on the circumstances of the time. Changes and modifications that affect the monuments can be divided into two main groups. The first group comprises mainly privately owned buildings, especially residential buildings where the owners have made various arbitrary modifications depending on their needs. The second group includes state-owned public buildings or various religious-social communities that have served the general public.

Interventions in this group (second) were mainly carried out by the competent institutions that were obliged to preserve and promote cultural heritage. So there are times when monuments, ensembles or entire complexes have been demolished to pave the way for new urban planning with new buildings "for the general good of the population". Monuments that have survived new urban adjustments, conflicts and wars, and natural disasters, some of them have been abandoned at the mercy of time while the rest have been reused for different cultural, tourist and commercial needs.

During the reuse process the "restoration" interventions were different depending on the ultimate purpose planned for the monument. In general the preservation of the originality and the identity of the monument was the criterion that was least important during restoration-conservation and revitalization interventions. The main focus was on the new function of the monument, thus "mutilating" the original parts and elements of the monument. These modifications were made in order to change the source identity of the monument, to adopt the monument as a legacy of their culture, and to make the monument adopted for a new function as functional as possible. Of course these changes have often not been the proposals of heritage specialists and they have usually been opposed by them, but the social system and various national and commercial interests have ignored their suggestions.

In this study we will analyze some of the buildings of various public and private typologies in Prizren that have been restored and revitalized in the XX and XXI century. A brief analysis of the interventions will be made for: Archaeological Museum, Church of St. Spas, Gazi Mehmed Pasha's Hammam, Church of St. Friday, Complex of Prizren League, City Fortress, Beledije Building, Shehzada House, Complex Arasta, Shadervan Square, etc.

Keywords: Restoration, revitalization, reconstruction, transformation, museum, complex, mosque, church, dwelling, square, hammam, fortress, shops, urban silhouette

Introduction

In this study, the situation of the architectural development within the late Ottoman socio-cultural framework in the Balkans was examined and the architectural development within the
The socio-cultural framework of the post-Ottoman Balkans was examined too. It was considered as a study showing how the change took place by exemplifying the structure production organization that developed in the environment followed by the development and change under the Ottoman rule at the end of the Ottoman Empire, followed by the withdrawal of the Ottoman Empire. The aim of the study is to provide information and documents that show the effects of architectural development on urban and individual buildings between the years of 1912-1960 by considering the case of Kosovo. Due to the size of the study area, the study covers the different types of buildings in Prizren, one of the most important cities in Kosovo.

Methodology

The aim of this study is to investigate the effects of the late Ottoman period and after it in the Kosovo region and especially in city of Prizren, by styding in three separate chapters and at the fourth chapter the results of the study, the findings of the Ottoman Archives, literature and field research on the Balkans of the Ottoman period were tried to be concluded.

Socio-Economic Environment, Urban Structure and Architectural Development in the late Ottoman Period in the 19th Century Balkans

The Balkan Peninsula, which remained under Ottoman rule for centuries and known as the European provinces of the Ottoman Empire, witnessed radical changes between 1820 and 1920. During this period, the emergence of nationalist movements caused the fragmentation of the multinational Ottoman Empire and as a result of the establishment of the Greek state in 1828, the acceptance of the autonomy of Serbia in 1815, Romania and Bulgaria between 1829-1878, Albania and Modern Greek states between 1910-1922 have been announced. In these periods, the Ottoman Empire in order to keep with the rapid development of Europe started the Renewal Movements from official institutions to civilian life. The most prominent example of this is the declaration of the Tanzimat in 1839 and the start of a radical reform movement. This period, affected political, literary writing and social life too, trying to change this attitude also affected architecture. (Sözen, 1984) However, in 1795 Mühendishane-i Berri Hümayun'nda architecture courses in accordance with the new understanding, and in 1883 opened the Department of Architecture in Sanayi-i Nefise Mekteb-i Ali (Cezzar,2005) bureaucracy and organizational sense of the new state of the Ottoman Empire, which will shape the new physical environment, fashion architecture trends of the period, followed by the development of architects has led to know. (Uzun, 2008, s.23)

Until the beginning of the 19th century, the baroque style in Ottoman architecture showed its development with influences from Western Europe. This new style can be seen in particular members of the educational family Armenian completed in Europe (the family Bale) architects from Turkey, then France and architects and education brought from Germany completed in France and Germany of Turkish architects (Hayrettin Bey and Vedat Tek and Kemalettin Bey) by the Ottomans Neo-Ottomans or Ottoman revivalism, which was described as a new era in architecture, marked the architectural development in the last years of the Ottoman Empire. (Freely, 2011, s.392)

The Küçük Efendi Complex (Figure 1), which was built at the Belgrade Gate in Istanbul in 1825, shows that examples such as Nusretiye Mosque, Teyvikiye Mosque (Figure 2) and Ortaköy Mosque, built by Krikor Baylan in 1822, developed due to the westernization of the Ottoman architecture.
In other words, in all areas of life, there are movements of emulation in western Europe under the name of westernization. Examples of these are the Dolmabahçe palace, built in neoclassical style. The palace was built in 1844 by Garabet Balyan (son of Krikor Bayla) and his son Nikogos. In the same way, the structures such as Yıldız Palace, Beylerbeyi Palace, Küçüksu Pavilion, Tophane Pavilion were interpreted and constructed in neoclassical style and within the logic of westernization. (Freely, 2011, s.410-417)
Before the 19th century, in the Balkan countries where Ottoman administrative sovereignty was
strong, there was certainly a different urban physiognomy and physical environment
dimensions from Central Europe or Italy. In this period, environmental physiognomy in the
Balkan countries was definitely marked by the Ottoman Empire. The reasons are clear: there
was no aristocracy under Ottoman rule, and the urban bourgeoisie had not developed as in other
European countries. The territorial regime was specific to the Ottoman Empire. There was a
definite Istanbul based autocracy. Apart from residential architecture, Islamic cities such as
mosques, madrasas, Turkish baths, inns, caravansaries and bedesten were built in cities with a
certain Muslim population. Their style was also defined in the East. For these reasons, the cities
of the Balkan countries, which were not in line with European culture and art, resembled
Ottoman cities, not European cities. The monumental structures were also Ottoman. Cities such
as Sarajevo, Plovdiv, Skopje, and Thessaloniki are more Ottoman than Diyarbakır or Urfa. 19,
the introduction of European influences in the year, the weakening of Istanbul's power, the rise
of nationalist currents, the surrender of the economy to European capital and a conscious
destruction and restructuring since then, destroyed the components of an Ottoman Balkan
architectural environment that continued until the 19th century. (Kuban, 2007, s.596)

Although the architectural development of the Ottoman lands in Europe in the last period was
not as intense as in the pursuit of the architectural currents in Istanbul, however, in the general
sense, after the arrangement, the construction activities started to be constructed as a regular
differentiation and neoclassical structures or building annexes. In this sense, the applications made to build their own structures especially on the demands of non-Muslim people have been accepted. These structures have been built as well as being more influenced by European currents. In this context, the Saborna Church in Sarajevo, which was built during the reign of Sultan Abdul Aziz and with his permission in 1859, was added to the bell tower in 1872, and it was dealt with in the neo baroque conception of the late Ottoman period in the architecture of Bosnia and became an indicator of change. Similarly, the Frnjevacka Klisesi in the town of Livne in Bosnia was built by architect Franjo Moise in the late Balkans (in 1854) and was handled in the general approach of emulation to the west with the historisist approach.

The granting of a license for the construction of a church called the Virgin Mary on the household and garden land purchased by the church foundation in 1872 in order to meet the avaazaz tax of the poor people of Prepol's Varos District, on the condition that the Orthodox community will be fully covered by the foundation, reveals the change of the Ottoman structure of the last period. (Anonymous, 2007, p. 269)
The administrative structure of the Ottoman Empire, 19th century did not show a comprehensive change. With the modernization process, some changes have been made considering the needs. In this process, when the administrative structure of the province of Kosovo is defined, the confusion of the concept is one of the most common issues. However, the name of Kosovo was not the name of a settlement but was given to a geographical region. However, 19th. For the first time in the last quarter of the century with the legal arrangements in Kosovo began to be used as a province name. (Yiğit, 2010, s. 123)

Within the Ottoman administrative structure 19th century Prizren, the most important city in the province of Kosovo, took part as Sancak and continued to bear all the characteristics of the Ottoman Empire. The city of Prizren 18th century and 19th. At the beginning of the 18th century, with its lifestyle, cultural activities, there was no difference from a city in Anatolia, the most important reason for the Ottoman domination, as well as taking an important role in the management of Prizren, is known as the place where the activities of the leading scholars. (Solmaz, 2012, s.189)

19th century. In the political arena, there have been great events that will change the fates of the people living in all the Balkans and thus in the Kosovo region. With the Berlin Conference, the Prizren Union was founded in 1878, which had political and military consequences, despite the unfair division of Albanian lands into Slavs and Greeks. In this way, Albanians declared that independence in 1912 and showed that Albanians were not a community, national identity was formed and they were on the way to becoming a state. In the same year, the Konferans Great Powers ’convened at the London Conference and accepted the autonomy of Albania. Accepted autonomy was included in cities such as Ulcin Tivar in the north, Black Sea in the east, Kosovo in the east, Sjenica, the New Market, the kingdom of Yugoslavia, and Çamuria in the south (Judah, 2008).

In the last periods of the Ottoman Empire, in the periods when the central system was experiencing the difficulties of the central system and had difficulty in controlling it, the granting of broader rights in political and administrative administration to the provinces allowed the operation of autonomous provinces. However, this situation led to the rebellion of the Balkan people during the reign of Sultan Mahmud II, in 1831 with the introduction of military, tax and administration reforms, and policies to restore and strengthen centralized authority. The Bushatliu family from Shkodra and the Rrotla family from Prizren, which were known to be the leading mmutars of this period (Haskuka, 2003, p: 134).

**Urban Structure and Architectural Development in the Late Ottoman Period in Kosovo**

Religious structures, mosques and churches are also important in cities. First mosques in Kosovo 15th. century, and in every city there was necessarily a large mosque (Shtylla, 1974, p. 121). The mosque and the bazaar are generally located side by side and are known as the places where the city movement is most common. In addition to religious buildings, baths were also built. Nearly each of the baths in Kosovo belongs to a separate period. These baths XV., XVI., XVII., XVIII. century. (Shtylla, 1974, p. 121)
Development of Religious Structures

Religious activities in the late Ottoman period in Kosovo have continued without diminishing their importance and the construction of mosques, although to a lesser extent, has continued. In addition to the construction of new mosques, the addition of existing mosques are all the annexes constructed in the general neoclassical manner of the period. Examples include the last congregation annex of the Taş Mosque in Pristina and the last congregation annex of the Terzi Memi Mosque in the Terzi District in Prizren (Figure 10). As seen in both examples, the annexes were dealt with in a completely different, neoclassical approach, far from the classical mosque architecture.
The mosques of this period were generally built by families who were prosperous. From 1770 to 1843, the Rrotla family in Prizren played a major role in the management of Prizren and its surroundings as well as in its urban structure. Emin Pasha, a member of the family, built the last Ottoman mosque in Prizren in 1831. Along with the mosque, the construction of four madrasah buildings was completed. (Hartmuth, 2006, p. 89)

The architecture of the mosque in Kosovo during the late Ottoman period did not change significantly. The biggest change occurred in interior decorations. Emin Pasha in Prizren and Yaşar Pasha Mosque in Pristina are examples of this. Emin Pasha Mosque is a scaled copy of Sinan Pasha Mosque, which was built approximately two hundred and twenty years ago. It reflects the baroque period in terms of interior decoration, and it is seen in Sinan Pasha Mosque as well as Emin Pasha Mosque. This suggests that the decoration could be done at the same time and probably by the same person. (Hartmuth, 2006, p. 90) (Figure 11)
On the other hand 19th century, in Kosovo architecture, the effects of the changing environment will be manifested in different types of structures. In this sense, granting permission for the restoration or reconstruction of the religious structures of non-Muslims as in the Balkans will reveal the change in architectural lines. As an example, the construction of the Catholic church in Prizren came together in 1869 and the demands of the Ottoman administration for the construction of their own churches were allowed (Anonymous, 2007, p.264).

In the same situation, the Orthodox Serbian community living in Prizren was allowed between 1856-1887 (Nikolic, 1998, p. 321).
Apart from the Ottoman lines, there are religious schools among the developing structures. In the application made for the construction of the religious education school of the Slav people of Prizren, construction was made in 1906 with the permission of the Ottoman administration for the permission of the plan drawings. It is known that the plan was drawn by the architect Peri Popovic (Stankovic, 1987, p.50)

**Effects of Post-Ottoman Balkan Geography on Socio-Economic Environment, Urban Structuring and Architecture**

The renewal of the architectural language of the Balkan region took place later than Europe. The reason for this was that when the Turkish wars came out under Turkish rule, it was obvious that there were problems in following the Balkan wars and following the innovations. Le Corbusier 20th century. While creating purist and white volumetric new architecture, which was formed on the basis of five basic points in the early years, the Balkans demonstrated the development between the neoclassical and neo-baroque dilemma eclectically. (Sampo, 2012)

In this period, the coast of the Balkans, the Adriatic, developed under the influence of the Italians, in fact, Italy's "black side" as described as a return to classicism Novecento Italiano as the oldest doomed architecture, will be the most prominent features (Fuller, 1988). This will probably affect Arnauntism, which is ruled most by Ahmet Zogu. In Tirana, almost all the proposals were prepared and implemented by the Italians. In 1917, as seen from the military map prepared by the Austrian Hungarian army (Figure 24), the city of Tirana, whose arrival is in a beautiful, organic city fabric, will take the first steps of the change with the proposals of the square to be renewed.
On the other hand, following the 1848-49 uprisings, Bosnia and Croatia continued to develop under monarchic order under the Austro-Hungarian rule. With this new order, differences in the field of architecture will be felt immediately. In particular, architects passing through the education system based in Viena, also known as architect Friedrich von Schmidt students, will come to the fore and start to build neoclassical structures within the eclecticist and historisist approach. In this period, especially in Bosnia and Croatia, the most mentioned architects are Herman Bolle, Josip Vancas, Janko Holjac, Martin Pilar, Janko Josip Grahor and Vincenz Raucher. (Damjanovic, 2011)
Herman Bolle, Zagreb, design for the Evagelichka Church 1882-84 (Damjanovic, 2011)

Josip Vancash, Sarajevo Cathedral, 1884-89 / sv. Blaza Church, Zagreb, 1892. (Damjanovic, 2011)

The radical change after the Ottoman Empire was re-considered in harmony with the newly formed political and military environment without demolishing the existing buildings. For example, the clergy in Đakovo, Croatia, makes it clear. The Seminary was built by the Croatian architect Dionis Sunka in 1804-05, and with the adaptation of Josip Vrancja in 1908, the building reveals a difference in the façades and in one storey increase, the decorations and inserts on the façades (Figure 28) (Bagarić, 2007). This change includes different types of
architectural structures as in all areas of life. For example, with the change of education systems, they are arranged according to the new education in the places they are needed and built considering the emulation (Figure 29).

Josip Vancash, Before and After the Seminary in Djakovo (Bagaric, 2007)

Change is considered as adaptation to the new environment under the name of renewal in the urban area and the practices that they sometimes see as successful examples have been implemented in other cities as type. For example, they applied examples of urban renewal in Thessaloniki and Seres to Eastern Macedonia.

1920 Eastern Macedonia, city plans (Yerolympos, 1996)

The Impacts of the Socio-Economic Environment in the Urban and Architectural Areas in the Post-Ottoman Period in Kosovo

Immediately after the Ottoman withdrawal from the territory of Kosovo in 1912, the Serbs established dominance over these lands. From 1915 to 18, the sovereignty of the Serbs would follow the Bulgarian sovereignty and later developed under the borders of Yugoslavia and under the rule of the Italians and Germans. (Judah, 2008)

In the region, in the newly formed and constantly changing socio-political environment, the urban structure did not undergo serious changes at first, and the structure character that is
changing at present was seen as continuing. New additions of old buildings or decorations on the façades were seen as the first steps of the change. Foreign consulate buildings have played a leading role in this sense. The changing socio-economic environment and the new demographic situation created new necessities, revealing the necessity to rethink and redesign the buildings, and with this, urban new restructuring occurred under the influence of new administrations.

The city plan prepared by Serbian soldiers in 1913 (Haskuka, 1985, p.217)

In this period, the Orthodox Serbs, which were in power, started the destruction in order to remove the city from the Islamic world. Among the first demolished buildings, it is known as Arasta Bazaar (bazaar on the bridge), Gazhane building, Saray building, Mahmud Pasha Mosque, Beg-zade Mosque in Prizren. (Haskuka, 1985, p.217)

The ottoman organic urban fabric and structures in Kosovo remained relatively unchanged until the Second World War. In 1950, serious changes occurred within the slogan of Let's demolish the old and do it new". (Anonymous 2006. p.3).

Consular Building in Pristina, 2) Hotel Union Building in Pristina, 3) Public building in Mitrovica
Development of Religious Structures

In the development of post-Ottoman religious structures, the first practice was to convert the churches converted into mosques back to their original function. For example, the church building in Prizren was converted into a mosque before 1756 and the building called the Cuma Mosque was converted into a church again. (Shukriu, 2001)

The development between wars, with the emergence of Marxist thought and its adoption within a short time, brought socialist as a new order and then communism, making it a society that completely excluded religion. It is seen that the activities of religious buildings were forbidden and the buildings were abandoned in a useless condition. During this time, some religious buildings, especially the large number of mosques, were completely demolished and new spaces were created instead. For example, the construction of the Bank instead of the Mustafa Pasha Mosque in Prizren (Virmiça, 2012, Volume II, p.244), or the demolition of the Arasta Mosque in Prizren and the construction of a public building (only minaret is standing today) mentioned.

II The new order that emerged after World War II, more precisely the time when the old interpretation is interpreted differently, after the destruction of long wars and the new structure in this sense, and the new order in this sense of Marxist thought as the adoption of communism in all areas of life will be reflected in the architecture as reflected in all areas of architecture. This reflection, especially after long wars in the Balkans, rejects the Old, as the construction of the Yen to renew the cities on a macro scale, micro-scale will extend to the interior furniture. At this point, the majority of Muslim communities in the Balkans will see a resistance to protect the old unlike (Virmiça, 1999, p.26). The local people who perceived Islamic culture, lifestyle and this as a part of their own culture, and their tendency to preserve and maintain traditional architecture as a part of this system have been a natural result of this process. As of this period, it is known as the period in which the most abolition of religion was experienced. With this resistance, the demolition of some of the old buildings was prevented, especially in the regions inhabited by Muslims. Nevertheless, religious buildings are not active, either used as warehouses or the lucky ones have been turned into museums. The example of Sinan Pasha Mosque is turned into a museum of manuscripts. (Virmiça, 1999, p.28). The construction of new mosques was allowed only after the 1980s and started to be built. (Virmiça, 199, p. 23)
Development in Residential Buildings

Residential buildings continued their changes in the late Ottoman structure organization after the Ottoman Empire. The fact that kouts are placed directly in daily life is perhaps the fastest and most sensible type of change in terms of size and cost required. The most prominent feature is the replacement of the large eave roofs in the houses with the roofs hidden among the ornamented parapet walls. These trarz buildings are located on the sides of the road and are thought to be six commercial buildings and they are structures that allow the living space. Considering craft as a traditional business line, on the contrary, the need for industrial products, causes differentiation in their spaces and it is seen as developments affecting commercial life in general.

The City of Prizren in the early 1900's (from IPMP, Archive)

Views of the changing structure after 1920 (from IPMP, Archive)
Development of Management, Health, Education and Industrial Buildings

The change in administrative buildings started in the general framework and within the newly established socio-economic conditions, primarily as the adaptation and change of existing buildings. Another important role of the change in the architecture of educational buildings has been the change of education system within socio-political change. Accordingly, the high school building (Haskuka 2003, p.261), which was started to be built in Prizren in 1930, shows how the neoclassical elements on the facades, the capitals of the entrance with large columns and the capitals of the Ionic imitation column and the erasing ends and the historisist approach.

Plan, Section and View of Prizren "Gymnazium" high school building (Nikolic, 1998, p.346)

Post-Ottoman developments in Kosovo have led to the construction of new buildings, such as the establishment of power plants, the expansion of railway tracks, and consequently the construction of new buildings. These buildings, as well as the technical and technological needs of the period and gave answers, in terms of architectural approach has shown the differentiation.

Plan and Appearance of Hydroelectric Power Plant Building (Shukriu, 2001, p. 210,211)

The Hydroelectric Power Plant was built in 1929 by a Viennese company near the river in Prizren. The first hydroelectric power plant in Kosovo, 160 kVA, then 320 kVA, has met the electricity needs of Prizren for 44 years. (Shukriu, 2001, p.209) The railway, which was built in 1874, was connected to Mitrovica via Fushë Kosova from Skopje and from Belgrada, and later expanded to Prizren and Silk City (Figure 40). With the expansion of the rail network, new buildings have been built at the railway station points. (Anon, 2010, p.4)
Conclusion

Although the Ottoman administration continued its development within the centralist system in the last period, the reinterpretation of this system with the regulation brought westernization and played an active role in all areas of life. With the loss of power of the Ottomans, more internal issues were directed, increasing the powers of the provinces, and especially in the Balkans, nationalism under the name of “National Renaissance developed rapidly. (Hartmuth, 2006, p.132) The Westernization movement in the Ottoman Empire tried to keep up with the changes in the Balkans by taking into consideration the commercial relations of the more specific communities and their proximity to European lands. The fact that this change, which is the main purpose of this study, is examined with examples of its development in the Balkans during and after the Ottoman period, and its concentration on the territory of Kosovo, gives the impression that the neoclassical approach, which is one of the most important elements of westernization, is interpreted differently in the Balkans and is seen as an element of separation instead of development. The construction of the churches in the Balkans and the different architectural features used, especially under the late Ottoman rule, make this differentiation more pronounced. In this context, it can be seen as one of the most important elements of the environment, which has begun to take an active role in the architectural consciousness of religion. Unlike the Muslim religion in Kosovo, as a part of the culture of the people here in the five-century lifestyle, the post-Ottoman “past traces” emerges as an obstacle to the erasure. This is of great importance for the preservation of distinctive structures from the Ottoman period. But even if this lifestyle has survived to the present day, it has not developed within the building organization. The newly constructed structures were dealt with in the differentiation movement that started in the Ottoman period.

References

21. YİĞİT, Y., (2010), ”Prizren Sancağı’nın İdari Yapısı”, History Studies, Volum 2/1, Balikesir Üniversitesi
Abstract. Identification as a problem and treatment of the illegal use of land of socially owned property in Kosovo, with the focal point in Prizren, is the fundamental body-content of this study paper. The illegal use and exploitation of socially owned land in Kosovo, respectively the construction of residential, commercial and public buildings on the socially owned land, is the core subject elaborated in this study. These constructions are considered illegal since they are performed on socially owned land, without any permit, previous approval, and license or similar and this topic hasn’t been discussed or elaborated much in Kosovo. Land on which the houses/buildings are constructed, at the cadastral official registers in Municipal Cadastral Offices (MCO), even today are registered as social ownership; actually, they are in the name of Socially Owned Enterprises (SOE).

The violence of war caused the destruction of public records about public and private rights to land and buildings, including the cadastral and court records and the archives of the enterprises that managed the socially owned land, apartments, and other assets. Property maps, cadastral books, possession lists and transaction document archives, which comprise of the “authoritative” identification about, who has what rights to what land and buildings, have been removed to Serbia. In addition, people avoided the formal transaction recording system and carried out transactions informally for several decades due to transaction taxes and the legal prohibition of transactions between Serbs and Albanians. Therefore, in general, the study represents the research of very complex problems of two interactive systems, the land use in the specific state of social ownership and construction of individual buildings in specific illegal status and social/economic implications as consequences. Treatment of this research paper work, will be done through a short question presented as below.

Keywords: Illegal use of land, illegal constructions, socially owned property, treatment of the illegal use of the social property

Introduction

Prizren Municipality lies in the south-west of Kosovo. On the West, it borders with Albania, with the FYR of Macedonia in the South-East, with Gjakova/Djakovica municipality in the North-West, with Rahovec/Orahovac in North, with Theranda/Suvareka in the North-East, Shterpce/Strpce in East and with Dragash/Dragas in North. It is of an area of 640 km² (5.94% of the territory of Kosovo) and consists of 74 Cadastral Zones. The average height above sea level is 412 to 500 meters, while in the mountainous (Sharri peak) exceeds 2,000 m. Prizren is one of the main and oldest cities in the region. One of the oldest streets “Road Egnatia” used to pass through the city of Prizren and united the East and West. Being the subject of great social movements during the certain periods of time, Prizren has had its ups and downs in its economic, social and cultural development.
What exactly means the socially owned land? - Socially-Owned enterprises (SOE), were created by the Law on Enterprises and the Law on Associated Labor of Yugoslavia. The Serbian Law on Registration of Real Properties in Social Ownership in 1971 states in Article 1. “Real property in social ownership shall be registered in the public registry which registers the right to use such property...” An important instrument is the Law on the transfer of immovable property promulgated in 1981. The first provision: “The transfer of farmland, building land, forests and forest regions, buildings, apartments, business premises, undivided parts of the immovable property and other immovable property shall be governed by this law.” These laws are the result of a political philosophy. The principles of ownership in old Yugoslavia are based on the old Roman law categories. Ownership of land depends on the type of property, natural or juridical, public or private. Properties are regulated according to their nature, civil or commercial, movable or immovable. Ownership is divided as the Romans divided it, the jus utendi, the right to use, the jus fruendi, the right to enjoy its benefits and the jus disponendi, the right to alienate, to transfer. The property was not considered as belonging to the State. But a new concept was introduced. It was the concept of “social property” which was introduced in the early 1950s.

How was social property created? - To create social property, land and buildings had to be taken in some way from the private ownership. Five different legal institutions were created to take away property from private ownership. Expropriation, colonization, and confiscation were the main three.

- The land was expropriated against payment of compensation. Frequently the compensation was not paid. You have a decision by a Municipality to expropriate land for public purposes, but the Municipality had no funds.
- The land was confiscated from people who were declared enemies of the people by a criminal procedure.
- Under colonization rules, land in excess of 20 hectares was forfeited to the state

What are illegal constructions? - Illegal constructions on land with the unsolved ownership issue were considered those building, buildings settlements in which the user or resident, is not the title holder of the property.

These cases are addressed as illegal constructions, because of the following:

- On the Socially-owned land the user of the property does not possess the necessary documentation of ownership;
- On the Socially-owned land, the user of the property has usurped/occupied the social property, Forest Enterprise lands, lands of agricultural cooperatives (SOEs), all these socially owned.
- On the Socially-owned land, the user of the property is a partial owner or co-owner with the Socially Owned Enterprise (SOE) property, he/she has “expanded used property” in social property - land in possession of Socially Owned Enterprises (SOEs) etc.
- The socially-owned land which was taken by the owner through the form of expropriation, but not executed, the project that has become the expropriation and the real owner has used the delay administrative procedures and, take back the land owned-use. Land appears to be registered on the name of the SOE but used by homeowners.
- Socially-owned land which was the matter of execution of ‘verbal contracts’ for the sale of land.

Administrator of the socially owned land/property in Kosovo - Since the year 2002, legislation is changed in Kosovo and according to the applicable law in Kosovo, the administrator of the social property in Kosovo since June 2002 is the Privatization Agency of Kosovo (PAK). In this cases, Identification of the assets/buildings build or constructed without an official permission of a respective Social Enterprise (SOE) or privatization Agency of Kosovo (PAK),
by PAK are considered as illegal constructions over the property administered by PAK, and are treated as such.

Treatment of illegal constructions on socially owned land - PAK being the administrator of the socially owned property is also responsible for the treatment of the illegal constructions, as well as illegal uses of the socially owned land and entire social property. In compliance with legal qualification such constructions cases are mainly qualified as bona fide construction when the builder didn’t know that he/she built a construction on somebody else’s land) and/or Mala fide Construction (bad faith - builder knew that he/she built on somebody else’s land). However, regardless of their legal classification and consequences in both cases, mutual agreements of the party are considered as primary solutions, be it an administrative or court proceeded.

Why did it come to illegal use? - Numerous invasions of the population, migration from rural to urban areas or to the suburbs close to urban areas, create multiple movements and changes in urban spatial structures around the periphery of the cities of Kosovo. Placement of residents in parts of suburban cities creates urban uncontrolled and illegitimate areas. In these lands construction of private houses begins. With time the number of houses built on social land increases, expand to the neighborhood, to some other neighborhoods in the naturally urbanized areas. It is a question of constructions that started in the late 50s and which still continue today. Reasons for migrations and influx are numerous. A better life, getting away from problems, vendettas, blood feuds, employment, marriage, etc. Consequently, most significantly the illegal users of the social properties, i.e. 95% of the cases (personally visited) do not have any ownership documents, any agreements, decisions, certificates or any other documents. According to the statements of family members, there is only a ‘verbal/oral contract’, oral agreement in good faith/trust, a sale based on good trust/faith, or similar. The area that is subject of the research is not a non-urbanized area or a highly poor location. The area itself is very well urbanized; an urban area that has solved the issue of infrastructure, areas with the regulative urban plan, but on the other side the property issue was not solved for 50-60 years now. Since the construction of these buildings, we can say that in general any actions have not been taken, any legal actions or any administrative actions in order to try to solve the property issues of the houses build on the socially owned property.

Who is the research addressed to? The main focus of the thesis will be legal treatment of the issue of illegal constructions on socially owned property, possible solution for the parties involved (illegal users and municipal institutions), therefore, this study may be considered as a guide for the solution of this problem to users of the social property and institutions such as state bodies within the legal framework.

What are illegal constructions? - Illegal constructions are defined as settlements that do not allow its residents to enjoy their rights to a standard of living, particularly housing. As such, they are distinguished by the following characteristics:

- An informal or insecure ownership;
- Inadequate or deprivation of basic services;
- Inadequate or non-participation in governance;
- A risk up to discrimination;

What do we mean with illegal use of socially owned land/property? The land of social ownership that today in the cadastral registry of the Municipal Cadastral Offices are registered as e.g. ‘Social property – SOE PIK Progres Eksport – Prizren’ or any other Socially Owned Enterprise (SOE), but the factual situation does not appear to be as such. In fact, the property is in use by private persons, which do not possess any single document proving their ownership over the property that they are using. The number of cadastral parcels is huge and the number of houses constructed on socially owned land is also huge. There are entire neighborhoods covering a lot of hectares. Until the year 2017, in Prizren Region there are identified:

- 1708 cadastral parcels in the name of SOE
• 1528 cadastral parcels with constructions/buildings on it
• 167 without any construction, only used as agriculture land
• 1929 different type of buildings (private and commercial)

In total there are 1,442,007 m² of land social ownership, are in use without premisions by SOE. These cases appear in several forms as follows:
• The socially-owned land where the user of the property does not possess the necessary documentation of ownership;
• The socially-owned land where the user of the property has usurped/occupied the social property, Forest Enterprise lands, lands of agricultural cooperatives (SOEs), all these socially owned.
• The socially-owned land where the user of the property is a partial owner or a co-owner with the Socially Owned Enterprise (SOE) property, has “expanded used property” in social property - land in possession of Socially Owned Enterprises (SOEs) etc.
• Socially-owned land which was taken by the homeowner through the form of expropriation, but not executed the project that has become the expropriation and the real owner has used the delay of administrative procedures and took back the land owned-use. Land appears to be registered on the name of the SOE but used by homeowners.
• Socially-owned land which was the matter of execution of ‘verbal contracts’ for the sale of land.

Part of the research was a questionnaire distributed to 441 houses/families. During the research, 441 houses were visited and all of the families were asked to fill out the offered questionnaire. Out of 441 families visited, we have received 150 outcomes on questions related to (see table 1 below).

Note: 1 ARES = 100 m²

Table 1 - Outcomes of the questionnaire

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Question</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Textual answer</td>
</tr>
<tr>
<td>1</td>
<td>Are you the owner of the property you are using?</td>
<td>84</td>
</tr>
<tr>
<td>2</td>
<td>Do you possess any cadastral documents for the property you are using?</td>
<td>2.7</td>
</tr>
<tr>
<td>3</td>
<td>What property documents do you possess for the property you are using?</td>
<td>95.3 % Verbal contract 2.7 % Agreement; 0.7 % Ownership Cert.</td>
</tr>
<tr>
<td>4</td>
<td>For how long a period you have used the property/land you have constructed your houses on?</td>
<td>93.3 % &gt; 50 Years 4.7 % &gt; 30 Years 2.7 % &gt; 20 Years</td>
</tr>
<tr>
<td>5</td>
<td>How many houses have you built on the land you are using?</td>
<td>48% 2 Houses 47.3 % &gt; 2 Houses 4.7 % 1 House</td>
</tr>
<tr>
<td>6</td>
<td>What is the size of the area</td>
<td>7.3 % 1 – 5 ARES –</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Percentage</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>7</td>
<td>If you are not the owner of the property you are using, did you ever file a claim in any court to certify the property?</td>
<td>69.3% 5-10 ARES 23.3% More</td>
</tr>
<tr>
<td>8</td>
<td>If you filed a claim, at which court is your case?</td>
<td>68% Municipal Court 28% No Info 1.3% SCSC</td>
</tr>
<tr>
<td>9</td>
<td>Did you ever apply to the Municipal Cadastral office to register your property?</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Are your houses legalized by Prizren Municipality?</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Do you pay property on the property you use?</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Have you been contacted by the institutions below while using the property/land?</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>For the period while you used the property, did you requested any of ownership-cadastral documents to be issued to you by respective municipal Directorates?</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>If yes and you possess property documents for the land you use, do you know in whose name the land is registered?</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>If the land you are using results to be social property, are you interested to enter a contractual relationship with the administrator of the social property, in this case PAK?</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>If the property you are using is social property, would you interested in buying it if the same would be on sale?</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>If the property you use is social ownership and you are interested in buying it, in what form of privatization you think it should offer for sale?</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>If the is of social ownership and you are interested in buying it, do you think that previously the property needs to be evaluated? If yes, who do you think should do the</td>
<td></td>
</tr>
</tbody>
</table>
If you are against privatization, please offer your proposals for the solutions?

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 If you are against privatization, please offer your proposals for the solutions?</td>
<td>Transfer of the property to the users, since these properties are already bought. Agreement with the reasonable price Negotiation State has to transfer property to users without payment Process through PAK Process through Courts Property is already bought, just needs to be transferred and registered to users</td>
</tr>
<tr>
<td>20 If you do not agree with the PAK privatization process for the property you are using, who do you think you should contact to solve your property matter?</td>
<td>71.4% Prizren Municipality, 28.6% Other</td>
</tr>
</tbody>
</table>

Analysis of the questionnaire outcomes with the Statistical Program on Social Sciences - SPSS – Crosstabs – Cross tables with the SPSS system

Ownership and use of land, possession of any cadastral or property documents, the period of use of land, how many houses were built, area of land used as an owner and user, have they applied to any court, which court have they applied to, have they applied at the municipal cadaster, have they applied at the municipality for the legalization of the building, have they paid the property pay tax, have they visited any State institutions. In the period of use, have they asked for the cadastral documents in MCO, if they were interested to enter into contractual agreement with PAK if they were interested in buying the land they were using, was the evaluation of property needed, any possible solution for the privatization, etc.? From the outcomes, attitudes, behavior, mimics, body language of the interviewed people, it could be seen that in most cases, they were not willing to talk about this painful issue, or didn’t want to answer at all.

Hypotheses

An operational definition of hypothesis is a definition that is stated in terms that can be observed and measured. The way that I used to construct hypothesis in my research paper is to turn my research question into a hypothesis. In this respect I need to operationally define all the terms in my research question. Hypothesis on this study paper are confirmed by ‘Chi-Square’
analyses, through cross tables using Statistical Program on Social Sciences - SPSS sistem. Hypotheses are presented as follows:

1. The users of the land/property consider themselves as the Owner even though they do not have related documents of the property.
2. The users of the land/property are aware that the ownership of the land/property belongs to SOE and are interested to negotiate with PAK for gaining the legal ownership, since PAK is considering a trustee agency.
3. The users of the land/property do not take legal action (Municipality Cadastar or Court) for Ownership as long as they do not contact first from the legal institution/agencies.

It is applied ‘Chi/Square’ analysis, through cross tables using SPSS system related to 4 for interrelations.

Conclusion is as follows - All present Hypothesis in the study, are confirmed by ‘Shi-Square’ analysis through cross tables.

Conclusions

In order to conclude we have gathered the legal technical and primary data from the field to clarify the socially owned land in Kosovo and Urban Development in Municipality of Prizren:

H1  The users of the land/property consider themselves as the Owner even though they do not have related documents of the property.

Based on the results of the Pearson-Chi-Square statistical test and the cross-tabulation analysis, the first hypothesis was verified. Its confirmation indicates that the users of the land/property which consider themselves as the Owner whereas they do not have related documents of the property.

The users of the land/property are willing to gain the ownership through the negotiation process since they seem to be aware that their development on current land/property without the legal ownership will hold them to develop further, therefore consequence the second hypothesis was introduced:

H2  The users of the land/property are aware that the ownership of the land/property belongs to SOE and are interested to negotiate with PAK for gaining the legal ownership, since PAK is considering a trustee agency.

Based on the results of the Pearson-Chi-Square statistical test and the cross-tabulation analysis, the second hypothesis was verified. Its confirmation indicates that the users of the land/property which consider themselves as the Owner their awareness regarding the missing legal ownership and are interested to negotiate with PAK as trustee agency for gaining the ownership. The users of the land/property are withholding to gain the ownership only after they get contacted, in mean time they hold to not take an action for legalization the ownership, therefore consequence the third hypothesis was introduced:

H3  The users of the land/property do not take legal action (Municipality Cadastar or Court) for Ownership as long as they do not contact first from the legal institution/agencies.

Based on the results of the Pearson-Chi-Square statistical test and the cross-tabulation analysis, the third hypothesis was verified. Its confirmation indicates that the users of the land/property which consider themselves as the Owner withhold by not taking any action at first to legalize the used land/property.
As the result of the research conducted on this matter and subject, the following statements will be presented:

- Houses/ the entire neighborhood constructed illegally on socially owned land are part of the general mentality in rural areas.
- Thousands of houses have been built, entire neighborhoods without any documents, contract or anything else proving ownership over the land on which the houses are constructed.
- Through the discussions with the representatives of the families, in each and every house I have been told that the land is bought, or exchanged with some other land. 'But we do not have any contract; we do not have any single paper that can prove the ownership.
- The land is bought based on ‘BESA’ (‘the given word’ in Albanian) meaning the real estate is bought in trust – good will’, or as people used to say ‘verbal contract’. In the past, the method of ‘verbal contract’ for the sale of real estate has been an accepted way of trading property rights due to cultural and traditional norms applied in parts of rural areas. This is not a legal base for any legal transfer of the property in the name of the buyer.
- The cadastral office cannot change the name of a legal holder of the property. Legal property documentation remains the same.
- This concerns the urban area having an urban regulatory plan and a solved infrastructure issue but still unsolved property issue for 50-60 years. Since the construction of the buildings, not any action, any legal or administrative action for treatment and solving the property issues for the houses built in the socially owned property has not been undertaken.
- Being part of the social property, and PAK being the administrator of the social property, the matter of illegal constructions on the social property is treated only by PAK, and not by any other state or governmental institutions.
- All the facilities built without permission on the social property are exempt from an institutional review of the legislation in force in Kosovo and as such are not considered at all by the state institutions and official documents.
- The Municipal Development Plan and Urban Regulatory plans in Municipalities so far did not cover and treated issues of socially owned property.
- Considering the factual situation in the field, the nature of cases, and complexity of work and comparing them with explicit authorization of the Agency, the phenomenon of illegal constructions in SOE properties and/or other specific cases overcome the rules of ownership transformations through public bidding.
- Legislation in force, Law on Construction, Law on the treatment of illegal constructions, did not include the issue of social ownership.

In general, we can see more dimensions of the problem of illegal constructions in Kosovo and Dusanovo, not only administrative, nor social and economic but also cultural, technical and political at least, as the complex of sustainable habitat in present time, but started seven decades ago. So, Dusanovo is a specific case and of historic importance in general.

**Recommendations/solutions**

1. Illegal constructions in social land cannot be treated the same way in the 20th and 21st centuries, due to the different conditions, statehood and nationality. Illegal
construction has become actual and acute across Yugoslavia, Serbia, Montenegro, and Kosovo, only in 70s, and this issue is quite different in the 21st century. Therefore, based on the research done, analysis, outcomes of the questionnaire and discussions with the users of the property there are two possible recommendations:

2. Land has to be offered for sale only to the user and no open sale, for users of SOE land. Negotiation between PAK and the user of the occupied property/land or and building. PAK will sale/privatize as a special sale the land as a social property, land on which are build houses. This means that the users of the property/land have to buy the land used from PAK, being the administrator of the social property.

3. Each land/social property, because of negotiations with the users, previously it should be evaluated before offering for sale.

4. PAK LAW in force needs to be changed – amended in relation to two issues:
   i) For the part of illegal constructions on social land. In this respect, PAK and Ministry of Environment and Spatial Planning need to sign a Memorandum of Understanding for the legalization process. Since PAK will offer for sale land on which houses are build, than Ministry in cooperation with the respective Municipalities in parallel has to continue with the legalization of the houses identified in social ownership and property issue to be solved completely by registering in official cadastral registries of the respective Municipality. Municipal Cadastral offices in cooperation with the Directorate of Urbanism through the legalization of the building, in the same time will complete the process by covering the issue of land and building. Therefore, respective families will solve their issue of property by legalization of entire property with the two cultures – land and building.
   ii) Establishment of Sustainable Development Agency of Kosovo for Habitat, Environment and cultural heritage

5. Task force comprised of PAK officials, municipality and officials from Ministry have to work on identification of the cases on the Kosovo level. After preparing the list and verifying the cases, for each case being in use of the property for more than 35 years, the commission should issue a decision for use of the property, for having the right to transfer the property in the name of the user, so that families would able to apply for the registration of the property in cadastral registries. Properties that are in use for less than 35 years need to go through the process of sale.

6. The recommendation is to revise the existing urban regulatory plan in order to include and treat the property of social ownership. The Area needs to be treated as an informal settlement.

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Role and importance of permit on use for building of category 1 on safety and quality of life.

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Abstract. This paper treats procedure of issuing a permit on use of category I building, statistics from municipal archive data and the method of awareness raising programs for the importance of possessing permit on use for this construction category. Paper also aims to show the current procedures of getting permit on use for the 1st category of construction (low hazardous buildings). In addition, paper shows exact number of certificates of use in the Municipality of Pristina since 2001, until 2019, the importance of possessing the certificate of use as well as the citizen awareness method for initiating the procedure for getting permit on use. Furthermore, paper treats and analyses risk and consequences faced for safety and security of users (inhabitants) at the building that did not passed through process of verification and final control before issuing permit on use.

Keywords: permit on use, safety, procedures, municipality, quality of life

Introduction

Permit on use (Certificate) is last process determined by law on construction in Kosovo before getting certification on use and it is regulated by law 04/L-110. A focus of this paper is more to residential (individual) houses all data presented shows that this process has no focus from owners and neither from authorities. Building community, being not obligated to conduct last control on constructed houses, are not interested to invite authorities for final professional check of house before handover to families. Families as well being enthusiastic on getting a new constructed house and having no pressure to get through final professional house check, they do not take any action to fulfill criteria set by construction law for new residential construction. In this regard it is clear that family awareness for getting in at the house without any professional check. Aspect of completing entire process of construction permit can be related with mentality and awareness that users of the residential building have. Mainly this final process can be determined as lack of focus of Permit Issuing Authorities in municipal level and central level as well. Having less control in the process give possibilities to create impression from users of less importance of getting certificate on use. In fact process is very important and focuses on control of building stability, infrastructure and heating and cooling elements and factors. Below picture presents steps and main systems to be controlled during final check to ensure users for aspects of structure stability, safety and health condition. Some of issues are determined during process of application for permit, but final check make sure professional implementation of project. Considering well established process by law and implemented in multi apartment housing building, there is no need to create new concept of inspection groups for certificate on use. The only gap in this process is law implementation on completing permit process after construction of residential buildings. Certificate on use, not
only in Prishtina-capital, but as well in other municipalities of Kosovo is not part current process of permit process although there is a good base in law for successful completing of last stage of construction permit that is Certificate on use.

THE MAJOR SYSTEMS OF A HOUSE

Roofing

Interior

Heating

Electrical

Insulation

Plumbing

Exterior

Structure

Cooling & Heat Pumps

https://clarkandsonshomeinspections.com/about-inspections

Benefits of having certificate on use

Process of issuing certificate is accompanied with benefits for local authorities and mainly for house resident. As this process contains control of all parameters that have impact on safety function performance of living activities. As house construction has components that directly have impact on life and health of inhabitants this process is considered of interest and mainly in developed countries is strictly implemented. Kosovo as post war conflict country considered as country in transition with several local and regional political impact, did not managed to implement final stage of permit that is certificate on use. This process, a part that is legally obligatory, brings several benefits to users as:

- Safety
- Quality of life
- Legal opportunity

Safety - Final check of all implemented systems after completing building means ensuring all systems have final approval from experts of the fields for the respective systems. The final control involves expert of every field that are part of the residential building that are grouped in the fields analyses (at the residential building) and prepare report for local authorities based on permit issued from them for residential building. Report, a part that provides measurements of current parameters and performance of residential buildings, trays to analyze implementation of current standards that are established or approved for respective system applied during construction. Having final check and positive feedback ensures users and local authority a safety performance of all components applied in residential house. Safety for users is not only
certificate but as well gives psychological satisfaction to users and guarantee for secure components performance during use of residential unit.

**Quality of life**- is determined by having all quality control of all systems and ensure quality implementation of systems during construction. Quality of life in not anymore control before certification, but quality performance of all systems during use of residential building by being safe on use and give satisfaction to users. Certifying systems before use at the residential buildings will have big impact in life quality as guarantee for maximum safety performance and providing quality of service during use.

**Legal opportunity**- Are important part to the users for any legal involvement of building during use. Certificate provides important figures for building performance that can be taken in account during, Loans, leasing, energy performance, value of building, market value of building, insurance value, compensation in case of natural disasters, etc.

Having no permit completed with certificate on may end up with following:
- Less Safety and Security
- Legal Consequences
- Health

**Less Safety and Security**- Testing all systems before use is a very professional and important process for protecting human life. Therefore having no test performed in the residential house, as it is now in all Municipalities of Kosovo may end up with no certificate on following systems performance:
- Installation (water, sewage)
- electricity
- Gas
- heating and cooling system
- Structure Stability (after construction)

All above mentioned systems as a permanent threat to the users as the users have to rely on producer certificate without being insured that implementation was performed accordingly and based on standards. Although it may happen that implementation was correct it could be that performance of system is not satisfying user’s needs. Being not tested before use and certified based on requirements and standards, system will always be threat of less performance and reduce quality of life by having a psychological impact to users.

**Legal Consequences**- considering residential building as potential for destruction during natural disasters and those created by humans it is a big threat of determining value of building that can be part of legal dispute. Furthermore residential building without having permit and certificate on use may not be considered and potential to be accounted on:
- Responsibility (after accidents at residential houses)
- Loans
- Market value

Therefore, residential buildings without legal documents completed (certification on use) may not be suitable for legal action mentioned above and will not be considered a real value as asset for legal activities residential building and residential building performance. Human life is the main focus and determination why we should perform process for getting a Certificate on use to ensure that users are safe to use and in any case of accident easy identify responsibility for legal argumentation/

**Health**- Is main factor to be provided by residential building to users. Being as very complex and multidimensional, health can be considered that is influenced by several building
performance and systems that are main components of the residential building. Following are some of the components that have impact on users health:

- Humidity
- Stability of the building structure
- Proper ventilation
- Appropriate electricity voltage
- Psychological

Certificate on Use Statistics for Municipality of Prishtina

Although all Municipalities in Kosovo are presented with very low number of certificates on use that have been issued after the war (since 1999), our focus is at Prishtina Municipality and analyses is conducted at the municipal level starting from the period of 2001-2018.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total number of construction permit issued</th>
<th>Residential buildings (houses)</th>
<th>Multi store buildings</th>
<th>Permit on use request</th>
<th>Permit on use granted</th>
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<tr>
<td>2001</td>
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</table>

The results are presented in the table above divided by year. It is clear that numbers for Certification for use are increasing every year but not enough as they have to be equivalent with number of permits. Although problem identified as to be related with political potential to
implement construction law, Prishtina Municipal government has to make sure that all completed residential building get Certification on Use.

Conclusion

Process of application for residential permit by current construction law has a final phase that is Certificate on use. Based on analyses presented above it is clear that there are a lot of benefits that all residential Building go through process to get certification on use. Besides legal requirements, there are as well increase of quality of life and make safe and secure environment at the residential house. It is identified that responsible for not having permit on use in Prishtina and at other municipalities are central and Local Authority and as well Owner (investor). Those two components are responsible for not implementing law and procedures that they obligated to do (local and central authority) and not being enough in favor of getting final certificate because of lack of awareness, financial impact and not being forced to complete all permit procedures by local government (owner-investor)

Recommendation

implement current law in force for construction that have clear procedures on Certification on use. Get more awareness campaign for owners-invertors for benefits of getting Certificate on use by supporting this process with effective support and less procedures.

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