Winter 2-2017

UNIVERSITET I ARKITEKTURES

Rina Kadriu

Follow this and additional works at: https://knowledgecenter.ubt-uni.net/etd

Part of the Architecture Commons
Bartës Privat i Arsimit të Lartë
KOLEGJI UBT

Programi për Arkitekturë

UNIVERSITETI I ARKITEKTURES
Shkalla Bachelor

Rina Kadriu

Shkurt 2017
Prishtinë
Bartës Privat i Arsimit të Lartë
KOLEGJI UBT

Programi për Arkitekturë

Punim Diplome
Viti akademik 2013 - 2014

Rina Kadriu

UNIVERSITET I ARKITEKTURES

Mentori: Cand. PhD Arber Sadiki

Shkurt 2017

Ky punim është përpiluar dhe dorëzuar në përmushjen e kërkesave të pjeshhme për Shkallën Bachelor
Abstract

The aim of this thesis is to identify challenges and opportunities of designing a new Architecture University. This thesis provides a conceptual design for the new University of Architecture in the capital city of Kosovo, Prishtina.

The goal is three-fold. The first one is my commitment to green architecture. Making this building as efficient as possible by following the rule “Natural where possible, Mechanical where necessary”. Second, creating a clear relationship between architecture and the surrounding environment by integrating nature into architecture and using it as a major key to solving problems. And last but not least important, carefully giving the building defined functions which meet the requirements of a well-designed educational building.
Acknowledgements

First and foremost I offer my sincerest gratitude to my thesis advisor cand. PhD Arber Sadiki, who has supported me throughout my journey as an architecture student with his patience and knowledge whilst allowing me the room to work in my own way.

My deep and sincere gratitude to my family for always being on my side, for their help and support and for sharing my dreams.
Abstract 1
Acknowledgements 2

Contents 3

• Figures 5
  o Fig.1 Map of Kosovo 5
  o Fig.2 Map of Prishtina 5
  o Fig.3 Map of the proposed parcel – Scale 1:25000 5
  o Fig.4 Map of the proposed parcel – Scale 1:1000 5
  o Fig.5 Photo of the proposed parcel 5
  o Fig.6 Photo of the proposed parcel 5

• Introduction 6
• Designing methodology 7
  o Parcel 7
  o Façade 7
  o Function 7
  o Efficiency 8
  o Terrain 9

• Technical description 10
  o Site analysis 10
    ▪ Distance analysis 10
    ▪ Silhouette 11
    ▪ General analysis 12
    ▪ Nearby places 13
    ▪ Walkers circulation 14
    ▪ Track directions 15
    ▪ 3d analysis 16
    ▪ Bubble diagrams 17
  o 3d diagrams / concept evaluation 18
- Site plan 1:1000
- Ground floor / site plan 1:200
- First floor 1:250
- Second floor 1:250
- Third floor 1:250
- Fourth floor 1:250
- Sections 1:250 / Details 1:10
- Elevations 1:250
- 3d
- References
Figures

Fig. 1 Map of Kosovo

Fig. 2 Map of Prishtina

Fig. 3 Proposed parcel – Scale 1:25000

Fig. 4 Proposed parcel – Scale 1:1000

Fig. 5 Photo of the proposed parcel

Fig. 6 Photo of the proposed parcel
Introduction

In various cities throughout the country there is an ever mounting amount of commercial and retail growth, but so little is being done when it comes to educational buildings and offering good facilities for students across the country. There is a lack of University spaces which is a problem that should be seriously considered. Taking the initiative to work the conceptual design of this project is not that it has not been probably treated or dealt with but despite this fact I have tried to create a design by bringing new innovative ideas and by believing that this project would serve not only for me but for the architecture students of the future as well. The fact that the University campus lacks an adequate University for architecture students makes future architects study in facilities that do not meet the required criteria for studying, according to this I have found the suitable location where I have tried to offer new innovative ideas that would provide good commodities for the architects of the future by carefully giving the building defined functions like work, study or rest and recreation spaces.
Designing methodology

Parcel

The conceptual design for the new University of Architecture building is located in a lot in the capital city of Kosovo, Prishtina, in front of “Muharrem Fejza” street. Situated next to the Public Technical University, a new University building in this place creates a new identity of the whole neighborhood by identifying it as a place for Engineering and Architecture students. The proposed parcel for the new University of Architecture provides 25,000 square meters. It has a favorable position in rapport with the other main parts of the city. It is well connected to the surrounding program, city fabric, well accessible from all transport modes and walkers. The major keys of transforming this parcel are maximizing green areas, minimizing pollution and noise and creating spaces for recreation.

Facade

The dramatic new façade compromised of concrete and glass finds bend with the existing Technical University by following the materials which have been used for it and in the same way distinguishing them as an identifiable place for the citizens.

Function

The design of the University was made by following the rule of the architecture and industrial design of the 20th century “Form follows function”. By this rule the principle is that the shape of a building or object should be primarily based upon its intended function or purpose.

The interior of this education building focuses in creating spaces for the needs of different users. The basement offers spaces for retail, rooms for printing service and toilets as well. Moreover, in the basement we can find the technical, economic and utility rooms that have a special entrance and that are separated from the rest of
the basement. These spaces can be accessed only from assigned employees. In the other hand, to make sure that professors can be easily reached when needed; the offices of the professors are left in the basement. Also, in the basement students and professors can use the waiting space where they can also see the exhibitions where the student’s projects are exposed. The stairs that reach the first floor are divided in two parts where one part can be used for walking and the other one can be used for seating so students could interact and socialize with each other. Students with disabilities can use the elevator to reach the floors above. Moreover, there are two underground floors that offer parking spaces for students and professors.

Staircases are attached around the atrium’s floors and guide students to the upper floors. In the first floor they can find the classrooms. The second floor contains classrooms and an auditorium. Meanwhile, the third and fourth floors are divided in two parts with different purposes. One half is used as a working space and the other half as a library. Gone are the days of the library so quiet you can hear a pin drop. And gone are the days where libraries are isolated from the rest of the building. The library of the University is surrounded with a transparent glass that leaves more possibility for natural light to enter. Anyway, both of the halves are connected with open-air areas. These open-air areas can be used by students who are working or studying so they don’t have to go to the first floor and then outside to get fresh air.

Efficiency

The atrium provides enough natural lighting for each floor. The glass of the atrium roof incorporates solar panels which make the building energy-efficient and provide shading as well. Natural ventilation is provided by making use of the flow of air. There are enough windows that can be manually opened for natural ventilation. Also, the high number of windows allows natural light to come in which leaves room for less artificial lighting to be used. Even though providing a high number of
windows would not be efficient because of the high amount of light that would go in during the hot weather, so attaching panels that create shadow to windows would reduce the amount of natural lighting that goes in. Moreover, some facilities of the interior like stairs, tables, chairs, shelves and so on, are made with recyclable wood.

**Terrain**

The terrain increases its height from the beginning (in the south) to the end (north) of the proposed parcel for about 6 meters. A good solution to integrate nature is to create a stairway that goes from the beginning of the parcel to the end. The stairway will be covered with grass so we can give back to nature the space upon which we have built. The stairway extends all the way from south to the northern part of the parcel. It is used to connect the existing technical University which is located in the upper north side of the proposed parcel with the new Architecture University. Because of the large area that is left under the stairway we can benefit from it by using the underneath of the stairs as a two storey building. The first floor offers a kitchen, dining hall, library, working space and recreation spaces as well and the second one offers an area that can be used as an exhibition space for different occasions. These two stories are arranged to connect with each other with escalators which leave possibility for access for all students. By this, we can infer that the University consists of two different buildings, each one of them with a different purpose – one for studying and the other one for recreation. Both of the buildings are connected to each other with a corridor that goes from the basement of one building to the other.

To conclude this I want to cite a famous architect who once put it this way “I don’t believe architecture has to speak too much. It should remain silent and let nature in the guise of sunlight and wind” – Tadao Ando.
Modern Schools: A century of Design for Education – R, Thomas Hille

Neufert – Architect’s data, Fourth edition – Ernst and Peter Neufert

Educational Facilities Planning – C. Kenneth Tanner, Jeffrey A Lackney

“Form follows function” – Wikipedia

https://en.wikipedia.org/wiki/Form_follows_function