

Learning from the Landscape

Toward Socially Responsible Architectural Education

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Abstract—This article presents education strategies and results of the research conducted at the University in Belgrade – Faculty of Architecture in the period between 2009th and 2012th by Master's degree students. The main scope of the research was on situating an architectural intervention in different landscapes. The power of learning from the nature changes the material and sensual possibilities of architecture by expanding the ways in which architectural interventions may be conceived. In this kind of architectural education architecture and landscape are allowed to intersect and intertwine with society, affecting the process of living, thus creating a new cultural landscape as a part of the sustainable society.

This article indicates that contemporary development of society requires a new architectural paradigm, in which landscape and architecture form a unique place-based system. In order to develop a new architectural paradigm it is necessary to start from the process of architectural education. It would contribute not only to new trends in architectural education as a part of the modern development of humanities and social science, but also to the awareness about the need for the socially responsible architect.

Keywords—architecture; nature; architectural education; social responsibility; sustainability; design studio

I. INTRODUCTION - LANDSCAPE AS A MENTOR

At the beginning of the 21st century, when most of the world's population lives in cities and when architecture is mainly associated with the built structure, it seems as if man has forgotten how to enjoy nature. Today's cities are in a sensitive phase of development, in which economic parameters

have permeated culture, significantly affecting the balance between socio-economic demands and cultural values of a place. In the circumstances when design is produced in the disappearing natural landscape within urban environment, seeking for a new architectural paradigm represents a particular challenge.

The question is in which way and by which means landscape as a starting premise affects the process of architectural creation? What are the ways in which architect can direct development of sustainable natural environment as an integral part of urban landscape? What lessons can be learned from observing the landscape and how these lessons as fundamental can lead to the conception of artifacts? How both, nature and architecture can be used to their full potential without being detrimental or destructive to each other?

The focus of this kind of architectural intention is not to incorporate landscape as a part of architectural creation, but to observe and translate landscape as an appropriate tool for thinking about architecture. The main principle behind this kind of approach is that architecture can be guided by people's experience of landscape. We can be guided by observing places that are dominantly formed and evidently caused and variable in relation to natural forces, such as sun, wind, rain and seasonal cycles; but also by vegetation and shapes that are the consequences of geological changes that were created by the changes during the long period. We can learn from landscape lessons about interconnectedness, growth, decay and stability, about continuous adaptability to climate change and of course about the subtle strength.

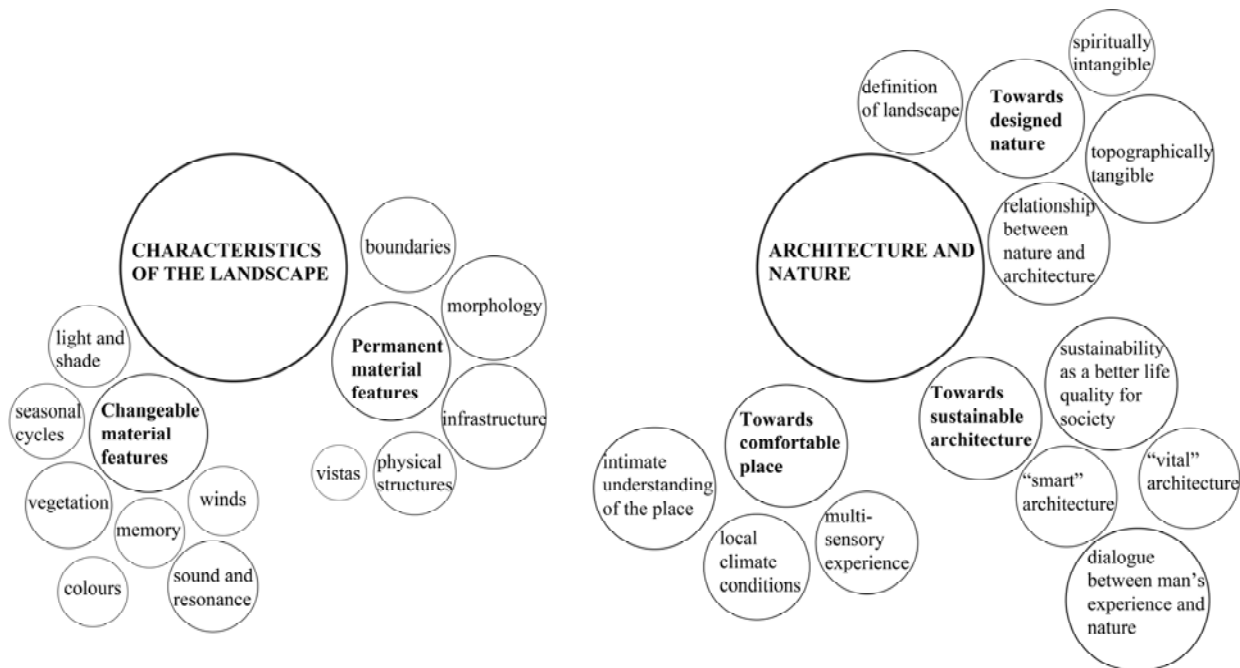


FIGURE 1. RESEARCH METHODOLOGY

II. BETWEEN LANDSCAPE AND ARCHITECTURE

By wondering what sustainability means in the architectural arena, F.J. Soria Lopez [1] in *Architecture and nature at the end of the 20th century: towards a dialogical approach for sustainable design in architecture* argues that really sustainable and simply good must satisfy simultaneously all architectural dimensions: logical (scientific, technical, functional), ethical (security, low impact, protection, good use) and aesthetic (beauty, meaning, emotion) dimensions. In that way sustainability becomes a way, a means to achieve a better life quality for society as a whole, not a goal in itself, just for architecture or nature. This study also helped us in understanding the place through dialogue between man and nature, where natural settings can be registered through the interpretation and valuation of the experience and perception that the inhabitants have through the use of an architectural space.

As Sustainable was too technological in its definition, we used Smart and Vital architecture as A. van Hal [2] in his article. The keyword is quality not ecology notes that most architects do not want their work to be associated with green terminology such as “sustainable or eco-architecture”, rather accepting terms like “smart architecture” [3] or “vital architecture” [4]. As van Hal [2] suggests “Be smart” should be the message instead of “be green”. Being smart means thinking ahead, building an environment that adapts cleverly and works interdisciplinary, stressing out the quality of it, not ecology in itself. She explains that Vital architecture is a strategy intended to inject new élan into thinking about sustainable building, through various concepts from which the most important for us was that the care for the environment is regarded as an inherent

architectural quality, where architecture must not only be environmentally sound, but resilient, dynamic and flexible in its relation between form, function and construction, at all scales and through time. Moreover she argues that a vital design is more than the sum of its parts; it challenges the architect to selectively integrate and compose all the elements while respecting the constraints of a sustainable context [2].

In short, the role of the architect is to incorporate this dialogue into the project by listening-understanding-responding to the “voices of the natural and cultural context” and interlock it with the experience of the users of the real place. Architects should incorporate the natural in a fundamental manner into their project in order to affect mind and body as a way to improve and intensify our relationship with nature, through architecture - an experience that might increase society’s awareness and responsibility of the urgency to preserve and respect nature.

III. CASE STUDIES - UNIVERSITY IN BELGRADE – FACULTY OF ARCHITECTURE

In the previous few years within the Master's study program at the University in Belgrade - Faculty of Architecture Professor Vladan Djokic and Assistant Professor Ana Nikezic together with their associates through different courses, ranging from design studio through elective course to workshop and field trip have been considering potential of this topic. Through various discussions about the topics given in the theoretical basis (course reader) the aim was to develop new strategies in architectural education with the focus on social responsibility. Various topics were discussed at various locations which have been carefully selected on the territory of Serbia and Montenegro, comprising of sea (water system), mountain, and

urban natural areas. Topics and locations that were discussed are:

- Design studio 2007/08: Lake Skadar (Montenegro): Protection and Development □ One Concept? [5];
- Design studio 2008/09: Slovenska beach: The Mediterranean Trace [5];
- Design studio 2010/11, 2011/12: Košutnjak (Park Forest, Belgrade): Performing Landscape_ Kosutnjak_ Principles of Architectural Design in the context of Climate Change [6];
- Design studio 2012/13: The mountain resort - Durmitor National Park in Montenegro;
- Elective course 2011/12: Belgrade: RE_Birth: New life of abandoned spaces (<http://rebirthbelgrade.blogspot.com> [7], <http://www.eme3.org/?p=1645>) [8];
- Workshop 2012/13: Belgrade: Garden to go (http://ecoweekconference.org/ecoweek.rs/files/2012/files/workshops_ppt/W2.pdf) [9]; etc.

The results vary in a wide range from inspired associations to creative dialogues, from designs that complement to those that contrast the environment. Diverse concepts have produced a series of diametrically different solutions and show all the charm dealing with architecture by learning from the nature. Solutions vary in terms of their disposition, size, program and scope, but are united in terms of complementing material and sensual character of the place through relating new structure and natural environment. In researching spatial needs as well as possible desires, students realize that both program and space primarily relate to the character of place and are dependent of its constant change.

In summarizing results of the research together with students we have come to several general conclusions which

were pertaining to the possible ways of establishing the connection between nature and architecture as a new architectural paradigm. First of all, the roles of the elements of design are being changed in relation to elements of nature, where architecture becomes a tool for enforcing nature. Second, the power of learning from nature changes material and sensual possibilities of architecture, broadening the ways in which architectural intervention is conceptualized. And finally, recovering landscape is seen through the scope of culture, shaping the cultural landscape through optimizing both architecture's intervention and our spatial imagination.

The research helped us to adopt a more comprehensive and socially responsible approach to architecture. It showed students' ability to think about landscape in a holistic way and suggest key issues in the process of redefining natural and cultural layers on the one hand and spatial and semantic framework of the landscape on the other.

IV. FOR THE CONCLUSION - OR LOOKING FOR SOCIALLY RESPONSIBLE ARCHITECT

The research helped us to understand landscape in more sustainable and comprehensive way, to respect and nurture nature, to love it carefully and above all to maintain it. Working on Master studio program showed students' maturity to think about the legacy in multidimensional way, by creating a unique experience of cultured nature, imaginativeness, dedication, intuition and attention with which students access design concepts has to do with the resolution of the complexity in redefining layers of natural and cultural contents on one side and spatial and semantic framework in a complex formal program on the other. We can conclude that there is a need to open up further professional study of the possibilities for learning from the landscape in the aim of educating socially responsible architect.

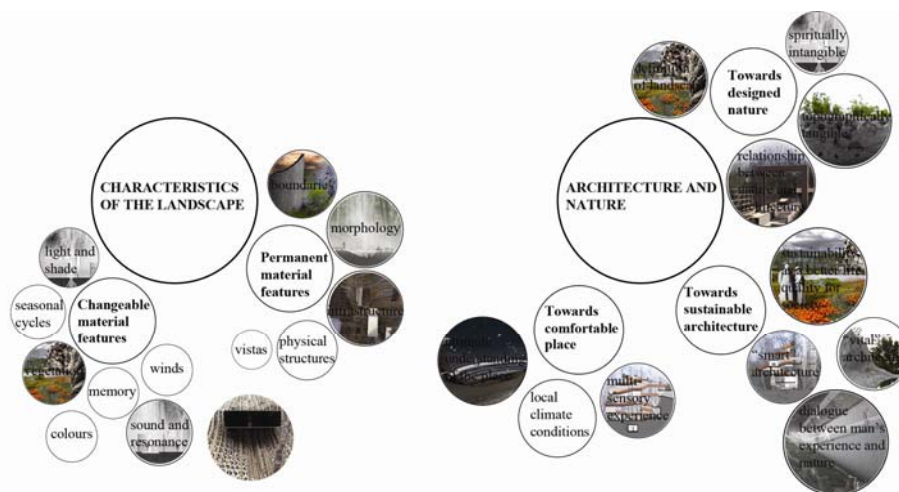


FIGURE II. EXAMPLES OF STUDENTS' PROJECTS

We think that it is possible to balance landscape and architecture through responsibility, as a way of thinking as a part of the architectural concept. Through incorporating the new architectural paradigms as an integral approach toward vital and smart architecture it is possible to form a socially responsible place.

New paradigms include sustainability as a resource, where nature together with architecture makes a unique place-based system in which it is not the context or background, but its structural component. Its cyclic nature makes space flexible and adaptable while architecture gives a platform for including man into its everyday life; the life of nature. Those results showed that the design in the natural environment, with the right approach, guided by the synergy between nature and architecture brings a new and better architecture, which also emphasizes the quality of that from which it drew inspiration from and was created for – a living landscape.

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