

## Chapter 67

# Transdisciplinary Methodology of an Architectural and Urban Discourse in Higher Education

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### ABSTRACT

*The chapter includes identification of the need for reconceptualization of architectural and urbanistic discourse in higher education and the definition of the transdisciplinary methodology for a sustainable development of the living environment. Architecture and urbanism as complex disciplines that start from the existential social needs and reach to the most complex challenges and aspirations involve complex approaches and complex relations. Professional educational environment from architecture and urbanism aspect is integral. It includes the study of forms and models of urban space planning to architectural structures, details, materials, environmental challenges, as well as new paradigms of shaping life and work in the community. This requires the involvement of various disciplines and forms of knowledge for forming a competent and productive response to modern challenges of the real world. With the development and adoption of transdisciplinary methodology in environmental higher education, a platform can be developed for sustainable urban development in a sustainable social community. Technological aspect has a central role in that process.*

### INTRODUCTION

Research in this paper is essentially motivated by a tendency to understand the complexity of an urban system, with an emphasis on architecture and urbanism, that is the built environment as a primarily product of activities of these fields. This paper examines the challenges posed by the

diversity of opinions and attitudes in a monodisciplinary action and also the articulation of the challenges of the integrated knowledge from different perspectives. A comprehensive response to the sustainability of the solution cannot be provided by none of the standard, linear theories. This leads to the replacement of opinions with an integrated knowledge that promotes the sustainable develop-

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ment of the urban environment. In this context, the reconceptualization of educational methodology in higher education is essential.

Urban expansion policies, intensive urbanization and technical and technological possibilities have led to cities developing into power centers, which are adopting a global city character. On the other hand, questions of urban poverty, urban health, urban decay, brownfield sites, urban regeneration etc. are coming into focus, demanding a higher level of insight in the development and shaping of urban areas. Global approach to research and urban question-solving is an important part of sustainable development, where universities take central place in the process. In that context, collaborative educational architectural and urbanistic discourses with a high level of collaboration can develop an adequate platform for answers to complex questions of 21<sup>st</sup> century urbanism. Production of professionals with developed conscience for a comprehensive overview of problems and with transdisciplinary collaborative knowledge can strongly contribute to sustainable upgrading, controlling and managing of urban areas.

The aim of education is the production of competent professional intellectual elite for the specific requirements of space and time. This aim is attainable only if we are committed to continuous and integrated model of studying, for layered understanding of the urban environment and the humane and healthy view of social values. These are also the basis for the development of environment of permanent cultural paradigms.

Cultural environment is the most precious asset of the human society, the culture of spatial management has become an important measure of the cultural level of a society in the 21<sup>st</sup> Century, which can play a decisive role for the future of civilization (Kurtović-Folić & Perović, 2012). Cities are explicit indicators of knowledge, architectural and cultural strength and overall social

development. Knowledge and skills are the pillars of development. United engaging discourse and practice and different professional competencies articulates productive management of the urban system, its control and improvement.

Architecture and urbanism as broad areas of action include the complexity of the educational system. Complexity involves multiple dimensions and contents of the study program, many layers and cooperation between all factors and levels of the educational process. Complexity of architecture and urbanism as disciplines, suggests and obliges their layered studying that is customized to dynamic social changes and modern conditions of life and work. An important direction in the professional educational environment is to promote the new forms of urban culture and society development, to promote the development of new forms of urban culture and society, through integral engagement, which has been embedded in strategic methodological framework oriented toward research line. Thereby, the educational process is not only the companion of social change, but its driver, and this is possible to achieve only by healthy thinking and acting.

The 21<sup>st</sup> Century involves flexibility and globalization of knowledge. The complexity of the urban system and the complexification of the needs of users of space, requires a complex analysis of various factors and influences that shape the developed environment and facilitate the process of design of architectural and urbanistic programs.

The aim of this paper is to define a new model-general transdisciplinary methodology of architectural and urbanistic discourse in higher education, which will enable the development of a platform for complex analysis of urban problems in purpose of sustainable development of the physical structure of cities. This methodology could be generally applied in other study programs of higher education.

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