Education, Design and Practice – Understanding skills in a Complex World

- Paper / Proposal Title:

“The Teaching of Urban Design in the Era of Rapid Urbanization. The experience of the Designing Resilience in Asia (DRiA) International Research Programme, a method to teach and build environmental awareness through design.”

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- Abstract:

Cities worldwide are growing at challenging and unprecedented speeds and in the last decades they have witnessed climate disasters and extreme weather events at greater frequency. This scenario requests the need for new ways of teaching the next generations of urban design professionals to tackle the challenges affecting cities and the built environment such as the effects of climate change, the changes in the living and working patterns, aging populations, new mobility trends, changes in the forms of industrial production and consumption, urban informality or population growth and migration. These and other critical issues are further proof that the teaching and practice of the urban design discipline has acquired a much higher level of complexity since it was instated in 1956 by J.I.L. Sert. In other words, these issues are affecting our urban and physical spaces, and therefore it is necessary to create awareness and expose the future professionals in urban design to think critically, and to design cities in
unpredictable and uncertain scenarios in light of the environmental vulnerability and the exponential consequences of rapid urbanization and climate change.

In 2014 the Designing Resilience in Asia International Programme (DRiA) was initiated as part of the curriculum of the School of Design and Environment (SDE), Department of Architecture of the National University of Singapore, assuming an active responsibility and implication with the most urgent and critical issues of our time. The program has four main targets: explore creative and engaging ways of teaching urban design to the next generations adapted to fast changing, uncertain and unpredictable environments; create awareness of the consequences of urbanization and climate change; bridge the gap between teaching, research, practice and implementation; and generate a platform for knowledge exchange and network collaboration.

Since it started five years ago, the DRiA has become a flagship initiative of the School of Design and Environment. Formed by more than 20 universities and 300 researchers from all over the world, it has become a Regional pedagogical and teaching practice reference on how to merge education, professional practice and industry.

The presentation builds up on the DRiA experience and method, and will explain how the involvement of multidisciplinary teams of experts, industries, professionals, public agencies, community groups, universities and researchers from all over the world, ranging from disciplines that engage with politics, social dynamics, planning or design, has allowed to deal with the complex task of integrating and bridging the gap between teaching, research, practice and implementation, while exploring creative and innovative ways to teach through design studios partnerships, networks and collaborative practices.

• **Author Biography:**

Oscar Carracedo is an Architect, Urbanist, Educator and currently Assistant Professor at the Department of Architecture of the National University of Singapore. He is the director of the Master of Urban Design Programme, and director of the DRiA-Designing Resilience in Asia International Research Programme, where he develops his research on contemporary issues related to urbanization and the city design such as Resilient/Resistant Cities: urban resilience (resilience by design/designing resilience), urban sustainability and the environmental impacts of climate change; Arrival/Transitional Cities: informal urbanism and low-income housing practices and processes; and Hybrid Cities: integrated, dense and livable urban design.

He is the author of numerous books and articles, and drawn on his research he has recently published ‘Designing Resilience in Asia. Thinking the Unpredictable, Designing with Uncertainty’; ‘Silicon Singapore’ and ‘Indushoods. From industries to Neighbourhoods’ about urban regeneration in post-industrial regions; or 'Ibid. In the same place', about on-site resilient revitalization strategies for low-income
neighborhoods. His research has been presented worldwide at many institutions and universities such as Pratt Institute (USA), University of Ljubljana (Slovenia), Istituto Universitario di Architettura di Venezia-IUAV (Italy), King Mongkut’s University of Technology Thonburi (Thailand), Kyushu University (Japan), National Cheng Kung University (Taiwan) or at the Pontificia Universidad Católica del Ecuador, among others.

Oscar is also CEO, co-founder and director of CSArchitects, an urban planning, urban design and architecture firm based in Barcelona. As a professional he has won two national urban design and planning awards, more than forty national and international competition prizes, and his work and research has been published nationally and internationally.