PANELIST INTERVIEWS AND PRESENTATIONS

[ASP] When addressing the broad issues of Regenerative Cities nowadays, what are cities regenerating after and towards?

[PD] A key goal of regenerative cities is to improve people's health. It is projected that 9.4 billion people will be 60 years or older in the world in 2070, which will be 28% of the global population. But this number was 7.8 billion, which counted for 13% of the population in 2020. Economically, for example in the United States, healthcare costs counted toward about 18% of GDP in 2020, but it is projected to be 44% in 2070. We are battling against climate change, resource depletion, social injustice, pandemic, etc., but it is also important to make cities help their citizens live longer and live healthier. So one of the key missions of Regenerative Cities is to bring safe and healthy life to people.

[ASP] Which are the specific climate-related and social challenges you are most concerned and enthusiastic about? Please elaborate on why.

[PD] I am mostly concerned about the ever-increasing severity of devastating climatic events, such as hurricanes, earthquakes, tsunamis, flooding, wildfire, etc. We started hearing more and more "1000-year events" from the news, which were supposed to happen every one thousand years statistically. These events are happening more frequently at a greater scale, and present a clear risk to many of the world's biggest cities. Therefore, we must confront the environmental realities threatening the long-term existence of a city, and find truly resilient strategies when cities are evolving.



Prof. Du discussed a traditional collaborative way of designing cities that is limited by the number of design options generated during the process.

PENG DU

Interview conducted by Alejandro Saldaña Perales, February 2023.



[ASP] The future challenges to the urban landscape demand powerful and coordinated strategies capable of adapting social systems to meet indeterminate scenarios. Considering these challenges, which are the roles and responsibilities architects must take in kick-starting and developing the regenerative processes of the contemporary urban landscapes?

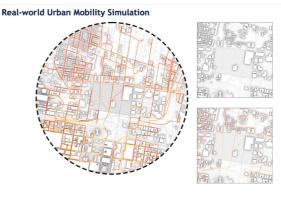
[PD] One key process of generative cities is the integration of nature, and this process requires multidisciplinary collaborations, meaning that experts not just in landscape architecture, but also in biology, agriculture, engineering, and social science, will collaborate. Architects are expected to play a leading role in this process, and implement design strategies to integrate nature into cities at various scales, from building to landscape, and from infrastructure to ecosystem. Bringing nature back to our cities will not only address environmental challenges such as pollution reduction, water management, and climate resiliency, but will also offer health benefits, such as stress reduction, and places for social interaction.

Dr. Peng Du is an Assistant Professor and Director of both the Master of Urban Design (MUD) - Future Cities Program and Master of Science in Geospatial Technology for Geodesign in the College of Architecture & the Built Environment at Thomas Jefferson University in Philadelphia. He has also served in several important roles for the Council on Tall Buildings and Urban Habitat (CTBUH), including Director and Board Member of the Asia Headquarters, and as Co-Chair of the Council's Academic & Teaching Committee. Dr. Du's research focuses on net-zero buildings and cities, computational urban design, urban energy modeling, and urban data analytics, incorporating interdisciplinary approaches. His research has received broad media coverage by outlets such as Curbed, CityLab, and Smart Cities World. Dr. Du's current research centers on using data-driven and simulation-based tools to examine the relationships between urban form and environmental and social performance parameters in the context of high-density cities, such as building energy-use intensity, daylight availability, outdoor thermal comfort, visual interest, green space, and solar energy potential.

Dr. Du has published several books and numerous peer-reviewed articles, and he is currently co-editing a book titled Sustainable High-Rise Buildings: Design, Technology, and Innovation, expected to be published by the Institution of Engineering and Technology (IET) in 2022. Prior to joining Thomas Jefferson University, Dr. Du taught at Texas Tech University and Illinois Institute of Technology. In addition, he has taught studio modules and organized international workshops at Tongji University in Shanghai periodically. Dr. Du is a LEED-Accredited Professional and WELL-Accredited Professional, He holds a PhD in Architecture from Illinois Institute of Technology, and an M.Arch from Tongji University.



Prof. Du explained the approach of generative process and evaluation of cities for multiple performance factors.



During the presentation, Prof. Du presented a project that tackled the issue of urban mobility in downtown Philadelphia.

VEDRAN MIMICA

Interview conducted by Alejandro Saldaña Perales, February 2023.

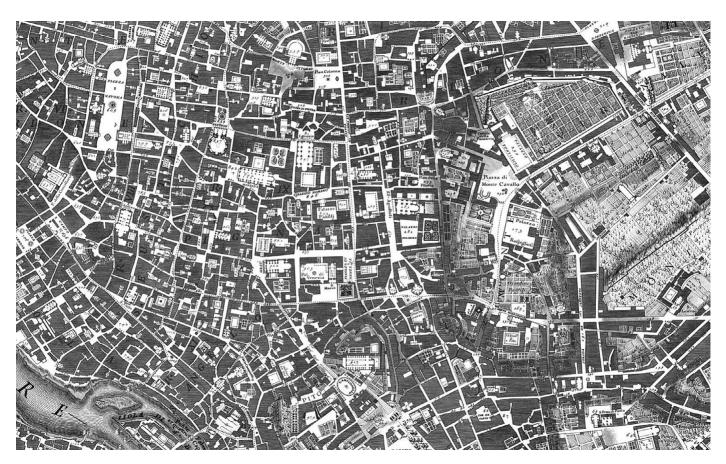


[ASP] When addressing the broad issues of Regenerative Cities nowadays, what are cities regenerating after and towards?

[VM] That's, as you said, a comprehensive question. Urban resilience responds to converging global megatrends or mega issues. One is undoubtedly climate change. Another one is urbanization. And another one is a process of neoliberal globalization. So, when it comes to resilience, we understand that as a capacity of the city systems and businesses and institutions, communities as well as individuals, which need to survive and adapt and thrive. We need to understand what kind of chronic stresses and acute shocks cities are experiencing. This is how we could answer or open the understanding of resilience as a central aspect of Regenerative Cities.

[ASP] Which are the specific climate-related and social challenges you are most concerned and enthusiastic about? Please elaborate on why.

[VM] That's a critical question, of course. When we talk about the Anthropocene, the Anthropocene is, according to many scientists, a new global geological era where we do conclude that the human impact on climate is irreversible. So in that sense, we need to think about what kind of actions, what kind of knowledge, and what kind of understanding of this irreversibility we will need to consider and act upon it. And when we talk about social challenges clearly, climate change is creating endless numbers of refugees, war situations, and real social challenges in many countries worldwide. These movements of the people, and at the moment, there are almost 60 million people on the move; this represents a significant social challenge in relation to climate change.



Prof. Mimica talked about the 1748 Map of Rome, documented by Giambattista Nolli as an example of a 15-minute city.

Junya Ishigami + Associates Blending Environment Ambiente miscelante

The city has neither centre nor periphery, neither beginning nor end; there is no distinction between what is infrastructure and what is not, nor any boundary between artificial and natural. It is an environment with a variety of forms and relationships that far exceeds the scale of existing cities, accepts all things, allows all things to flow, and freely blends together. No longer able to call this a 'city' (a place that is solely planned for people to live in), we can only refer to it as an 'environment' (an expansion that is both for and not for people).

Prof. Mimica discussed the idea of a city as an environment as proposed by architect Junya Ishigami during the Venice Biennale's Belgium Pavilion.

[ASP] They are considering these challenges; what roles and responsibilities must architects take in kick-starting and developing the regenerative processes of contemporary urban landscapes?

[VM] If we talk about now, which is February 2023, we are experiencing two significant catastrophes. One is the war in Ukraine, where entire cities, villages, and territories were destroyed, and more than six million people were made refugees. The other one, just even more recent, is the horrible earthquake that hit southeastern Turkey and Syria. There are 25 million people affected by the earthquake. So, yes, these are significant catastrophes. But these large catastrophes need a sort of architectural response. Even when you know war is still going on and when rubble is still being cleared on cities in Turkey and Syria. These responses are necessary on all sorts of levels, but mainly on an urban reconstruction level of the cities.

[ASP] Which are the future endeavors architects must embrace and commit to in the face of a challenging future panorama for urban landscapes?

[VM] In the future, we certainly agree that if we continue as we do in terms of fossil fuels, in terms of energy, in terms of neoliberal capitalism, around 2070, with the rise of the ocean levels, many territories and many cities in the world will be unsustainable anymore for human habitation. So, this is a scientific truth or fact. In that case, it is critical to how we could look at cities more holistically—especially looking at their capacities so that they can deal with these sorts of situations which are inevitably happening. How to imagine different urban landscapes, where some of the impacts are based on all of these changes, might be accommodated? This is a complicated question. The country where I spent most of my professional life, the Netherlands, in the year 2070, will be almost completely flooded. Many territories in the Netherlands are already under the water. So, in the future, we may be called to take the implementation of Ecological Urbanism seriously, as framed by Moshen Mostafavi 10 years ago at Harvard. It will be a significant practice or the primary framework in which we will understand and conceptualize urban ecology during radical climate change.

[ASP] Finally, why does architecture as a discipline, therefore architects as professionals, need to approach such an impressive array of challenges framed through scale — i.e., physical scale — and the size of their impact on the urban landscape and human life?

[VM] I like this question because we still do understand architecture, urban design, and planning in terms of scale. [Mies van der Rohe] said that historically, here at IIT, under his concept of curriculum, students should only be able to arrange three buildings together in the final year of their studies. So, students today should understand the city's urbanity and urban design from the very first year of their studies. Urban design and urban planning are the critical scales we should deal with today. The scale of the neighborhood, which is hugely programmatically hybrid, is a significant task or the central line of investigation for our discipline in the future.

Vedran Mimica is a Croatian-born Dutch architect and educator currently working as a Professor at IIT College of Architecture in Chicago. Mimica graduated from the University of Zagreb with honors as an architect-engineer in 1979 and continued his postgraduate education and research at the Technical University in Delft, with Herman Hertzberger. He joined the Berlage Institute Amsterdam in 1991, where he assumed the position of Course Director in 1995. From 2007 to its closure in 2012, he was directing the Institute, responsible for educational and curriculum programs in addition to guiding research activities.

Mimica's reach has extended over the past 30 years across multiple pedagogical, cultural, and intellectual realms, including the publication of several books and numerous articles, as a juror at architectural competitions around the world, and as a head of the curatorial team for the 3rd International Architecture Biennale Rotterdam in 2007. His latest book The Berlage Affair was published by ACTAR in 2018