## Sustainable and Resilient Urban Form

## **Second National Urban Design Seminar**

Co-hosted by the School of the Built Environment, University of Pretoria and School of Architecture & Planning, University of the Witwatersrand.

## 2 August 2013

Urban resilience is seen as the ability of the city to continue providing key functions in the face of both disasters (pulse disturbances) and slow pressures arising from social, economic and/or environmental conditions (press disturbances). This ability depends on more than the mere existence of conditions that enable survival and recovery, but require a synergy between the adaptive capacity of the various systems that constitute the city as well as transformative urban design and development processes. In order to improve the sustainability of cities and neighbourhoods over a longer period of time, it becomes necessary to obtain a better understanding of how to manage, cope with, and adapt to change to ensure an optimally functioning socioecological urban system.

It has been argued that the form (morphology), influenced by the structure of neighbourhoods and cities can have a critical impact on the sustainability and urban resilience of that area. This is related to the opportunities created within the spatial system to accommodate and facilitate access to other socio-economic and recreational opportunities and accommodate the optimal functioning of these systems in such a way as to allow people to perform their daily activities in a relatively easy way. This relationship also relates to the level of complexity present within the form and structure of these areas and hence its ability to adapt to change if and when required. Modernism, among other influences, has however, changed the way in which cities and neighbourhoods have been structured and hence had a significant influence on urban morphology, which in turn affected levels of complexity. Finally, the relationship between urban morphology and resilience also relates to the way in which the urban form can respond to various disturbances (social or natural) in the urban system. These issues raise a number of questions about the relationship between urban morphology and resilience in South African cities and to what extent the current or planned form will be able to adapt to new requirements.

At an Urban Resilience Colloquium held in Pretoria in May 2012, it was argued that urban resilience should be promoted as a proactive future-vision — as a paradigm shift based on awareness of the city as a complex, adaptive social-ecological system, not as a response to a sudden shock. Urban resilience should also be used as a way of transforming the urban system to a better place, moving it from negative to positive impacts. But this should be done with the awareness that resilience by itself is a neutral concept and that systems can also exhibit per-verse resilience. The focus should therefore be on enhancing the transformative capacity of urban systems, and not the persistence. South Africa and the broader African context have seen increased urban design responses to sociospatial challenges in fast growing African cities. As a result, the question about a sustainable and resilient urban form for Africa and South Africa is highly relevant.

This seminar is aimed at investigating these issues and will specifically focus on three questions:

- What is the relationship between urban morphology and resilience?
- How can this be described in theory and in practice?

• How can this be accommodated or planned for through appropriate urban design interventions or how can urban design enhance the transformative capacity of urban systems?

The University of Pretoria will be hosting Prof Serge Salat, a leading French architect and economist and founder of the Urban Morphology Laboratory in Paris. Prof Salat has done extensive work on sustainable and resilient urbanism. He will be one of the two keynote speakers. At the same time, the University of the Witwatersrand will also be hosting Prof. Rahul Mehrotra, who will be the other keynote speaker for the seminar. Prof Methrotra is from the Graduate School of Design of Harvard University.

As part of their visits, a one-day seminar is organised on August 2, 2013 for all interested stake-holders to explore these issues and questions. We would like to invite interested academics and practitioners to submit a short abstract to indicate their intention to participate.

The abstracts should be between 200 and 300 words and address one of the questions above. Final abstracts should be sent to Prof. Paul Kotze (e-mail: <a href="mailto:paul.kotze@wits.ac.za">paul.kotze@wits.ac.za</a>) at the SCHOOL OF ARCHITECTURE & PLANNING, UNIVERSITY OF THE WITWATERSRAND by 21 June 2013. These abstracts will be reviewed by a panel of four independent reviewers.

Speakers will be notified early in July on whether their abstracts have been accepted and the programme will be made available soon afterwards.

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