Smart and Sustainable Built Environment Seminars

International Council for Research and Innovation in Building and Construction

SASBE SEMINAR SERIES: 2024/2025

Title: **Enabling regenerative design thinking in our cities and spaces: Moving from theory to practice.**
Date: **28 January**
Time: **16:30-18:30 (SAST)**
Registration Link: https://events.teams.microsoft.com/event/31255306-fc63-4415-a647-10fd71a85d20@ddfa59c8-38d0-49a3-822e-1d3bcb5bf85b

Theme

As we transition towards becoming a global urban population, our cities present to us new opportunities to create living environments that transcend from purely sustainable places to survive within, to regenerative places and societies that present hope to future generations. Although much has been written on this topic, implementing regenerative thinking strategies in our cities requires intentional and alternative modes of practice. This seminar aims to consider regenerative thinking on different scales moving from regional to neighbourhood scales to ultimately considering its implementation in public spaces. This seminar aims to elaborate and explore the different practices and processes of regenerative design thinking that we note on various scales and how these ultimately improve our cities.

Programme

Time	Topic	By
16:30 – 16:40	Introduction	Prof Jeremy Gibberd
16:40 – 17:00	Nature-driven regenerative regions: designing from the landscape.	Prof Rob Roggema (Tecnologico de Monterrey)
17:00 – 17:20	Cultivating Urban Regions through design.	Prof Steffen Nijhuis (TUDelft)
17:20 – 17:40	Regenerative public spaces: from healing to thriving	Prof Karina Landman (UP)
17:40 – 18:15	Panel Discussion & Questions	Prof Jeremy Gibberd

This seminar series is organised by the Smart and Sustainable Built Environment Working Group (W116) of the CIB. The seminar introduces research and the practical implementation of testing facilities and living labs from diverse regions globally.

Seminars consist of short presentations, panel discussions and questions. They are hosted by the CIB who publicise the seminars and issue invitations. W116 schedules the seminars and presenters. If you have questions or would like to suggest a seminar, please contact: Dr Jeremy Gibberd: jgibberd@csir.co.za

Detailed descriptions of the topics and an introduction to the presenters to be shared before the event.

NATURE-DRIVEN REGENERATIVE REGIONS: DESIGNING FROM THE LANDSCAPE

Abstract

In many urban regions the impact of urbanization on the daily living environment is high. Human activities put pressure on the soil, water and ecological qualities and lead to health problems, pollution and climate change impacts. In this presentation an approach is proposed to use the landscape as the basis for a regional spatial strategy, in which these impacts (the pain) are healed and people can embrace their environments (the love). This approach is exemplified by using examples from the Netherlands and highlights the plan for a Green Metropolis of Monterrey, Mexico. The latter vision connects regional strategies for the water and ecological system with hyperlocal tangible experiments and projects for forestry and food.

Presenter

Rob Roggema (PhD).

Prof. Dr. Rob Roggema is Faculty of Excellence Professor of Regenerative Culture at Tecnológico de Monterrey, Monterrey, Mexico, and director/founder of Cittaideale, office for adaptive design and planning. He is one of the lead-authors of the Architecture, Urban Design and Planning chapter of the third assessment report of the UCCRN (Urban Climate Change Research Network).

He is a Landscape Architect and an internationally renowned design-expert on sustainable urbanism, climate adaptation, nature-driven design, and urban agriculture. He held several professorship positions in Mexico, the Netherlands and Australia, as well as visiting professorships in Northern Ireland, Australia and Japan, and has written multiple books on nature- and landscape-driven planning and design of landscapes and cities and is series editor of ‘Contemporary Urban Design Thinking’ (Springer).

CULTIVATING URBAN REGIONS THROUGH DESIGN

Abstract

To ensure both humans and nature thrive, a regional perspective is essential for guiding sustainable urban development. This contribution focusses on landscape-based regional design, a transdisciplinary design approach that uses understanding of the landscape system and its social and ecological processes – landscape logic – as the basis for sustainable urban development. Landscape-based regional design takes the processes and functioning of natural systems as the basis for spatial planning and design. Abiotic factors such as climate, altitude, soil, and water determine the opportunities for urban development, and the restoration, conservation, and rehabilitation of ecosystems are used as formative forces. By considering the region rather than just cities, resources like fresh water, food, and biodiversity are safeguarded. Landscape-based regional design provides a long-term strategy, determining the most suitable locations, functions, and relationships for sustainable development. It emphasizes creating coherent, living landscapes that balance biodiversity, cultural heritage, and multifunctionality. Comparable to gardening at a regional scale, this method cultivates environments where nature flourishes, and people live healthily and safely in attractive settings, ensuring harmony between urbanization and ecological systems.

Presenter

Steffen Nijhuis (PhD).
Prof. Dr. Steffen Nijhuis is Full Professor of Landscape-based Urbanism and Head of the Section Landscape Architecture at Delft University of Technology at the Faculty of Architecture and The Built Environment (The Netherlands) www.steffennijhuis.nl

He is an internationally experienced academic, designer, project leader, and author of award-winning publications. By training, he is a landscape architect and a gardener. His work focuses on landscape-based urbanism, utilizing the understanding of the landscape system and its social, cultural and ecological processes ~ landscape logic ~ as the basis for sustainable urban planning and design. The core of the approach consists of designing with nature, people and history.

REGENERATIVE PUBLIC SPACES: FROM HEALING TO THRIVING

Abstract

There is growing evidence of many conflicts and intolerance at both macro and micro levels in the world. These trends question the future of public space as a peaceful and inclusive commons. Yet, public spaces are the glue in any city and have the potential to contribute to vibrant, inclusive and resilience cities. The presentation will focus on regenerative public space in South Africa and its potential to contribute to thriving communities. By exploring the paradigm, process, and product, the discussion will share critical challenges facing public space development in the Global South while offering pathways for regenerative development and design applicable in many contexts. The paper argues that regenerative public space has the potential to contribute to the regeneration of people and places and thus contribute to healthy and thriving communities in global South and North cities.

Presenter

Karina Landman (PhD).

Dr. Karina Landman is a Professor in Urban Planning, with a background in Urban Design and Architecture. Her research focusses on spatial transformation, including research on gated communities and safer and sustainable neighbourhoods, regenerative and resilient cities and public space. The work on public space revolves around issues of inclusivity, regeneration, resilience and decolonisation. Her research on sustainable development focusses on urban resilience and regenerative development and design. She has published a book, “Evolving Public Space in South Africa” (2019) and is currently the principle investigator of a National Research Foundation (NRF) Project on Regenerative Public Space in South Africa. She is also co-editing a book entitled "The Decolonization of the Built Environment" (Routledge, forthcoming). Karina has edited and co-edited four special editions of Urban Design International (x2), Urban Planning and Built Environment. She has published widely on issues related to crime prevention through environmental design, gated communities, sustainable housing and neighbourhoods, public space and urban resilience.