

doc. NEJC FLORJANC

Challenges in translating strategic commitments and standards for urban greening into planning and implementation

Climate change and other developmental challenges have rapidly increased the importance of green and planted areas in settlements. Strategically, this importance is expressed through various directives, recommendations, commitments, and standards at the European, national, regional, and local levels. Translating these strategic frameworks into planning and implementation measures presents numerous challenges, which often result in inadequate spatial solutions. The problem in planning practice is not always insufficient consideration of strategies; frequently, it is the opposite — their literal translation and uncritical implementation without accounting for the complexity and multilayered functions of urban green spaces. These challenges call for a reconsideration of planning concepts and a critical reflection on how strategic guidelines are transferred into planning and implementation.



About the lecturer:

Nejc Florjanc graduated in 2010 from the Department of Landscape Architecture at the Biotechnical Faculty of the University of Ljubljana, where he started to work in 2012 as an assistant in landscape design after acquiring training in several design offices. He participates in design-related courses at the undergraduate and master's levels of landscape architecture study and was co-mentoring several student exhibitions and internationally recognized student projects. In recent years, he has been part of several design teams awarded in competitions organized by the Chamber of Architecture and Spatial Planning of Slovenia. He is also the co-founder of the landscape architecture studio Kolektiv Tektonika, established in 2019.

URŠKA DIDOVIČ

Using ENVI-met Simulations to Assess the Impact of Vegetation Types on Urban Microclimate



Changes in climate and expanding urban development manifest in cities as the urban heat island effect, creating new challenges for contemporary spatial planning. Urban heat islands negatively affect human health, environmental quality, and energy demand. High-quality green spaces, trees, and other vegetation types play a key role in mitigating these effects through shading, evapotranspiration, and altering airflow. Microclimate simulations are an effective tool for quantitative and visual analysis of the impacts of vegetation types and urban structures on the local microclimate. Simulation results can strongly support the

development of climate-resilient spatial planning. The lecture will present simulation models and selected greening examples that can help justify the renovation and placement of permeable paved surfaces and diverse vegetation forms in urban areas.

About the lecturer:

Urška Didovič is a landscape architect working at IPoP—Institute for Spatial Policies, where since 2020 she has been involved in projects related to green space management, public participation, and promoting active mobility. Her master's thesis explored possibilities for mitigating the urban heat island effect in the city of Novo mesto. She completed part of her studies at the Technical University of Munich. During her studies, she participated in professional and student organizations and in the European student network ELASA. In 2021, she received the Vurnik Award from the Center of Architecture Slovenia.

dr. KRISTINE HAMILTON

**Naturalistic Urban Greening Solutions
Using Regional and Near-Natural
Perennials**



Addressing biodiversity loss and the impacts of climate change requires innovative approaches to urban greening and planting design. Among these are contemporary naturalistic planting schemes, typically composed of local meadow species. Ensuring sufficient quantities of seed mixtures is a substantial challenge due to the difficult propagation of some plants. In addition, the implementation and maintenance of naturalistic plantings differ significantly from conventional methods, as these plant communities are highly dynamic. Designers also face divided opinions on aesthetics and acceptance by the public and local communities.

In her lecture, Dr. Hamilton will present implemented examples of naturalistic plantings from her practice and discuss potential pitfalls of such approaches. Drawing on extensive experience with the Austrian association of ornamental plant producers, she will demonstrate seed-collecting techniques and propagation methods for selected species. She will present regional mixtures of grasses and perennials for roadside slopes, green roofs, rain gardens, and dry retention basins, with a focus on plant species positively received by the public. As affordability is an important factor in decision-making, she will also address general costs, funding, and potential savings resulting from reduced flooding and heatwave impacts.

About the lecturer:

After many years in ecological research in the UK and Germany, focusing on species abundance and biodiversity in natural and human-shaped environments, Dr. Kristine Hamilton is now working in southern Austria, where she heads a bureau that plans and researches biodiversity-supporting landscaping and restoration projects. She is also leading a project growing regional perennials for use in urban greening and for seed production. Kristine is a member of the board of REWISA, Austria's professional association for growers, seed-producers, planners and gardeners that are using regional, climate-robust plants and local materials. She promotes, writes and talks about ecological approaches in planting design and urban greening.

ONDŘEJ FOUS

Prague and Brno: Cases of Green Space Evolution



In the Czech Republic, the renovation of public green spaces has in the last decade followed trends seen in major European cities. Efforts focus particularly on selecting permeable materials and plant species capable of withstanding upcoming climate challenges. In Čelakovského sady and the surroundings of the National Museum, the renovation of public squares placed strong emphasis on improving growing conditions for both existing and newly planted vegetation, while also respecting the historical context of nearby buildings and park areas. Technical solutions and plant selection were therefore creatively adapted to meet heritage conservation requirements while incorporating native plant use.

Changing soil water capacity, improving root-zone aeration, and enhancing plant drought tolerance are among the primary tasks addressed in planning practice. Using completed case studies, Ondřej Fous will present concrete solutions to these challenges: rainwater retention and reuse, installation of suitable substrates, root growth control, and—critically—the role of maintenance during plant establishment. In the first years, careful monitoring and rapid response to plant stress are essential, as long-term success depends on it.

About the lecturer:

A gardener, horticultural engineer, writer, and garden designer, Ondřej Fous has contributed to the restoration of the Měly Castle park and led the renovation of the Ctěnice Castle nursery. In 2018 he participated in the Čelakovského sady and National Museum surroundings project in Prague, and in 2022 in the Moravské náměstí project in Brno. His other work focuses on restoring interwar gardens, designing private gardens, and various public spaces. He is head of the Ctěnice Castle nursery, where he tests new perennial cultivars, organizes perennial exhibitions, and collaborates with numerous botanical gardens, arboreta, and other expert institutions.