Designing nature as infrastructure – a question of technology?

**outline**
The symposium *Designing nature as infrastructure* proposes a platform on which researchers and practitioners working in landscape-related disciplines can engage in a discussion about a current main topic: *infrastructure*. The idea is to continue certain issues from the symposium *Infrastruktururbanismus*¹ organized by the Chair of Landscape Architecture and Public Space in February 2010 and to deepen aspects concerning ecological *engineering*. It asks participants to examine potentials of multidisciplinary approaches and interplays between *design* and *ecology* in current debates on *infrastructures* in urban and landscape restructuring.

**organizer**
Technische Universität München
TUM Graduate School
Graduate Center of Architecture

**scientific committee**
*Thomas Hauck*, scientific assistant,
Chair of Landscape Architecture and Public Space (LAO)
*Daniel Czechowski*, scientific assistant,
*Georg Hausladen*, lecturer *integration ecology*,
Department of Landscape Architecture and Regional Open Space (LAREG)
Technische Universität München, Faculty of Architecture

**timeline**
symposium: 29th – 30th November 2012
submission abstracts: 31st May 2012
invitation participants: 2nd July 2012
submission papers: 1st November 2012

**location**
Technische Universität München
Faculty of Architecture
Vorhoelzer Forum
Arcisstraße 21
80333 München
Germany

**conference languages**
English, German

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topic
The progressive discourse on Landscape Infrastructure, Infrastructural Landscapes, High Performance Landscapes, Landscape Machines or Green Infrastructure raises the question whether there is a new paradigm for the design of social relations to nature or if instead the “old” aesthetically and politically troubled notion of landscape returns, refurbished as infrastructure through a formal and scientific consideration in order to obtain new legitimation. Landscape in the current debate is seen as a physical object, which is no longer “scenic” or “romantic”, but “productive”, “powerful” and “well designed”.

When looking for the innovations, which justify Landscape as infrastructure as a new paradigm of the organization of human-natural systems, the result is sobering. It is discussed primarily in reference to river restoration projects, stormwater infiltration, green roofs, and green links – all well known. Before any action is set a big RE – restoration, recultivation, redesign of destroyed nature and environment. All without question important and urgent tasks, but they have little to do with the design of environmental innovations. It is rather the old landscape reappearing in a technomorphical dress.

This “old” concept of Landscape as infrastructure follows the tradition of morphological thinking of the 19th century, which sees nature as an entity, transported e.g. by means of Green Infrastructure in the rapidly growing industrial cities, in order to supply alienated urban citizen with nature. Parallel to the development of large-scale infrastructure to combat traditional sanitation problems, Green Infrastructure as greenways or park systems should resolve aesthetic deficits (perception of nature), hygiene deficits (fresh air and sunlight) and kinetic deficits (motion in nature).

In the current discourse on sustainability and how to deal with climate change and limited natural resources a controllable performance is attributed to nature and landscape. This capability to generate clean energy and healthy food, to clean water, to store rainwater, to protect against flooding, etc., is based on the idea of controlling processes in ecosystems so that landscape works as a stable system serving human needs. Green Infrastructure is the technology that not only provides ecosystem services, but also ensures their production. This is based on the “engineering science” ecology. Ecosystems have long been a natural part of technical planning (e.g. in water treatment) and their technological use will gain massive importance, as a form of “biotechnology” in a necessary conversion of urban and rural areas due to results of climate change.

Similar to “classic” infrastructure of the industrial era, a discrepancy between technological progress and the quality of their spatial organization is also emerging in the “new” Green Infrastructure. The “green” engineering structures are being developed in sectoral planning processes for optimization of technical aspects and were situated afterwards—design considerations play a secondary role. This lack of so-called architectural culture is not only reduced
to the creative indifference of engineers and ecologists who develop their “design” from the logic of the relevant technology or remain as design laity in conventional patterns. They hardly possess the instruments to include greater spatial relationships in the design. The necessary interdisciplinary approach has to be initiated by architects, urban planners and landscape architects. However, designers who are dealing with urban and landscape reconstruction show a remarkable ignorance about innovations in the field of the “engineering science” ecology. This attitude hampers the use of innovative ecological approaches as well as new ideas for the design of human-natural systems – and a “relabeling” of the old concepts as infrastructure won’t change this.

**call for papers**

*Designing nature as infrastructure* asks academics, practitioners, planners, designers, ecologists, engineers and others working in the field of the built environment to discuss about *Green Infrastructure*.

Papers are invited on any aspect of the conference theme. Topics may include but are not limited to:

1) What is *Green Infrastructure*? What is the relationship between “classical” and *green* infrastructure? Is *Green Infrastructure* just a synonym for “landscape”? Is it a new style of landscaping? What are the aesthetic, social and/or technological/environmental objectives to be achieved by a planning instrument *Green Infrastructure*?

2) How proceeds the collaboration between design and ecology? Are there approaches that do more than design platitudes or ecological “superficialities”? What role does ecology play in design processes?

3) What innovations arise from the interplay between ecology and design (architecture, landscape architecture, urban planning, etc.)? What are the aesthetics of technically formed landscapes? What spatial concepts use the products of the ecologists in urban and landscape restructuring?

**submissions**

Please send abstracts of 400-500 words in length to [daniel.czechowski@tum.de](mailto:daniel.czechowski@tum.de)

Make sure to include paper title, author’s name, email address, and details on academic or institutional background. Please add *DNAI* in the subject line. Proposals must be submitted electronically and should be presented either in MS Word or Adobe Acrobat format. Papers/lectures should be timed as being 20-30 minutes in length.

The deadline for submitting proposals is Thursday 31st May 2012.

Notification of accepted proposals will be emailed to those concerned by Monday 2nd July 2012. Selected speakers will then be expected to send their finalised paper by Thursday 1st November 2012.