Amphibious Urban Morphology – Approaching a framework

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Abstract

Deltacities are contested spaces of a growing urban population and urban spaces and crucial regions of adaption, while climate change and ground-subsidence increase the potential damage and thereby the necessity to transform. Bangkok in the Chao Phraya Delta consists of thousands of kilometers of anthropogenic waterways. The waterways form a complementary entity to the terrestrial infrastructure. The spatial frame for understanding the social-ecological system of *khlong* (waterway) is the *waterscape*, consisting of the canal and the natural or planned flooded adjacent spaces.
The particular urban morphology of Bangkok can be understood with a combined perspective on scales: the parcel or lot as the smallest unit of spatial production, the row or the block on the second layer, the *soi* (finite lane system) as urban living space, the city, and the region. A transformation of Bangkok's urban structure to a more sustainable terrestrial-amphibious (TeAm) configuration would require not only a questioning of ongoing planning principles and methods but also profoundly different approaches to urban water cycles, building codes, and regulations..
This ongoing PhD-research combines urban morphology and spatial resilience. The combination is an approach to analyze the waterscape to understand the existing urban-rural fabric and its resilience towards waterscape urban design and wateruse-planning and to synthesize starting points for catalyzers and deliberate transformation.

Keywords: morphology; research framework; team-configuration; Bangkok; khlong; waterways; transformation; waterscape

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