

Delta Infrastructure and Environment Design/ Delta Futures Lab

soil | flood | urban transformation | environmental crisis | political ecology | interdisciplinary design | longue durée

Open to students from Master AUBS and faculties CEG & TPM

Soil is the new frontier in spatial design. Soil is earth, the literal base of our existence. Soil and water are a couple, they interact and their dynamiscs designs the landscape. Like inn the Dutch delta also Sweden, France and Japan are figuring out how to make soil and water the solid base of spatial descisions on building, urban and landscape scale.

This course is working in the realm of research projects of the Delta Urbanism research group: the EU Spatial Planning and Design with Soil (SPADES) and we work with 2 of 17 pilots, in Grenoble (France) and Gothenburg (Sweden). The research with the Blauwe Lijn around deltaic systems works with Nagoya (Japan).

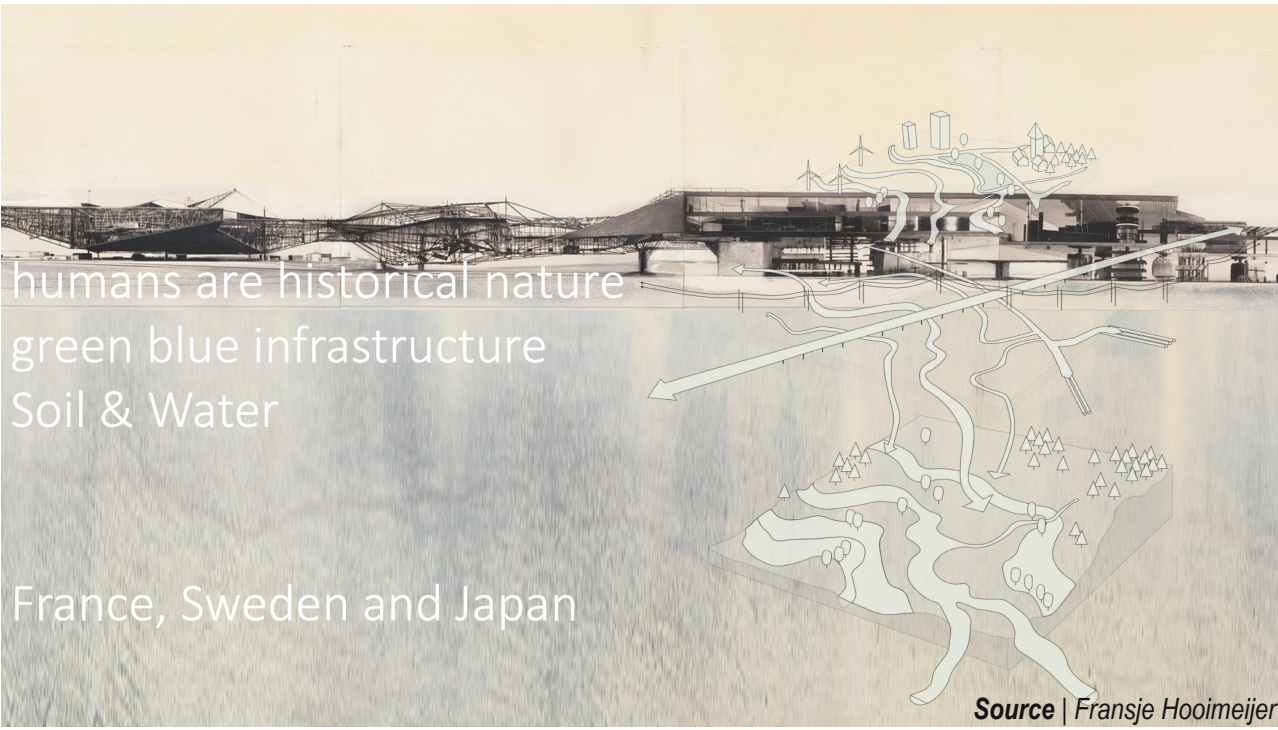
These deltaic territories, respectively riverine and coastal, are confronting the same underlying question: what happens when the landscapes we extracted from, built over, and polluted reach the limits of what they can absorb, and the infrastructure we built to manage the consequences starts working against the very systems it depends on? Flooding, subsidence, contamination, and ecological depletion are not separate crises: they are symptoms of a long history of spatial decisions that treated the living landscape as manipulable.

The delta is simultaneously a hydrological system, an ecological community, a cultural archive, and a political object: shaped by centuries of decisions about whose demands matter. In this course students from the faculties of architecture, civil engineering and TPM are welcome to explore together to address these complexities.

In Gothenburg, a contaminated post-industrial waterfront raises the question of how working with living processes to gradually detoxify and transform a site can manage flooding risks while rebuilding ecological capacity over time. In Grenoble, a city built on the alluvial flood plain where three Alpine rivers converge, the challenge is how to live with flooding rather than engineer it away.

In Nagoya, historical flood control infrastructures have significantly reduced flood risks and supported economic development, also led to increasingly rigid systems that disconnect water from landscape and society.

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in collaboration with	SPADES, De Blauwe Lijn and DCR project



Three weeks of fieldwork in which the different disciplines come together in an interdisciplininary design is the heart of the course. The first two weeks are dedicated to understanding the case area through shared analysis. Each discipline contributes its own analytical lens: an architect will read the territory differently from a water manager or a geoscientist. In the course, these readings are brought into dialogue: first through the collective development of a shared value system and design goals, then through an interdisciplinary group design that holds the contributions together spatially and conceptually, and finally (working the last 5 weeks) into individual projects with disciplinary depth and at the scale of your preference: an architectural project at building scale, a spatial plan, a landscape proposition, a hydrological model, a circular water strategy, depending on your expertise.

Throughout, designing is treated as a way of knowing: of making the relationships between soil, water, ecology, infrastructure, and human and more-than-human demand visible, testable, and debatable. Students leave with a design project rooted in complexity, and a sharpened sense of their own position within the kind of interdisciplinary work the world increasingly demands.

The students in each case work alongside PhD researchers on this real case to dive into open-ended questions in the discourse of delta urbanism.

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