

GRADUATION PLAN

Personal information

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Studio

Name Explore Lab - Graduation Studio
Teachers Alper Alkan, Mieke Vink, Jan van de Voort
Argumentation Multidisciplinary approach and strong
studio choice fascination with urban water ecology

Graduation project

Title of the project Tiber Waterscapes

Goal

Location River Tiber, Rome, Italy
The posed problem In our effort to control it, water in our cities has progressively been confined between lines, canalised or culverted underground, resulting in its gradual isolation and erasure from our sight and collective imagination. As freshwater availability and water-related hazards are brought to the forefront of sustainable development goals, the long neglected role of urban rivers and their watershed needs to be addressed. A section of the River Tiber is chosen as a study area for its outstanding and untapped potential.

Research questions

The research intends to critically look at common water management practices through the perspective of water as a living and dynamic system, a “ubiquitous wetness”¹. This encompasses the full hydrological cycle, rather than focusing on one isolated moment in which water and land are identified and thus separated. Can the lines separating water from land be challenged through understanding and depicting

urban rivers as part of a “ubiquitous wetness”?
How does a city’s water culture shape its urban landscape?

How are river lines identified and commodified in ways that lead to their abundance or erasure? Ultimately, what is the city of Rome as a rain-terrain?

Design assignment

How can the presence of water within the city and our collective imagination be treasured and enhanced to become a living system? How can the untapped potential of the “Gazometro Ostiense”, at the intersection between River Tiber and River Almone, act as a catalyst for ecological water practices in the city of Rome? Bringing together architecture, landscape and infrastructure, the project intends to provide a place for encounter, research and regeneration of water within the city. Given the close correlation between the ways in which water is understood and perceived within the city and the ways in which it is engineered and constructed through infrastructure, scientists and the public can fruitfully benefit from a place of collective discovery.

Process Methods

The methods of the research bring together aspects of water (hydro-geology), place (topography) and artefact (typology), which have been separately addressed by previous scholarship. Given that “landscape is composed not only of what lies before our eyes but what lies within our heads”², the research is first and foremost a quest for a new mode of seeing, of thinking through water. Scientific reports only constitute the starting point of a research and a design project that intend to move away from water as mere chemical substance in its liquid and contained state, calibrated to certain flows, in favour of rain-fed, soaking, percolating, evaporating living water, or from other scholarship “complete water”³. This is operatively achieved through fieldwork, filming and drawing as methods of enquiry and design speculation. The project looks below the ground and up to the clouds, through the creeks and ponds, to trace (and treasure) any presence of water around, below, above, before or after the moment and place we call river.

1 Mathur, A., Cunha, D., Meeks, R. and Wiener, M. 2014. Design in the terrain of water [S. l.]: Applied research + design Publishing 2D.W. Meinig, The beholding Eye.

3 Gowers, Emily 1995. The Anatomy of Rome from Capitol to Cloaca. The Journl of Roman Studies, Vol. 85

Literature

Urban river theory

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Cunha, D., 2018. The invention of Rivers

Water and waste

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Lofrano, G., & Brown, J. 2010. Wastewater management through the ages

Riverine Architecture

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Water in Rome

Comitato per il Parco della Caffarella e Associazione Culturale Humus_onlus, “Il Sacro Almon da fiume a discarica. Mito, storia, scienza e impegno civile per ridare vita al fiume del parco dell’Appia Antica”. 2013

Deming, D. (2019). The Aqueducts and Water Supply of Ancient Rome. *Groundwater*, 58(1), 152-161. doi:10.1111/gwat.12958

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Matera, J. J. (1977). Ancient Rome’s Water Supply. *The Military Engineer*, 69(450), 252–255. <http://www.jstor.org/stable/44558595>

Purcell, N. (1996). Rome and the management of water: environment, culture and power. In *Human Landscapes in Classical Antiquity*.

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Architectural references

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Agua Carioca Pilot at Sitio Roberto Burle Marx, Ooze Architecture, 2016, Rio de Janeiro

Between the Waters, Ooze Architecture, 2010, Germany

Duisburg Nord Landscape Park, Latz + Partner, 1990-2002, Germany

Danish Pavilion, Lundgaard & Tranberg Architects, 2021, Venice Biennale, Italy

Qunli Stormwater Wetland Park, Tuerenscape, 2010, Haerbin, China

Sense of Self Bathhouse, Setsquare Studio + Chamberlain Architects + Hearth Studio, 2021, Collingwood, Australia

Steam of Life Pavilion, JKMM Architects, 2019, Helsinki, Finland

Suspended Pavilion, TJAD Original Design Studio, 2020, Shenzhen, China

The WaterFabriek, Plan Architecten Haarlem, 2002, Emmen, Netherlands

Reflection

Water is part of our daily lives, and our own bodies are deeply embedded in its cycles. Yet, it is often regarded as an enemy. Its source, flow and destination are conveniently hidden away from our sight and collective imagination, with the exception of discrete moments of commodification; drinking a glass of water, filling a bath tub, flushing the toilet, draining rain from a gutter. Where does all this water come from and where does it eventually go? What roles do rivers play in this cycle? These are some of the questions that the research and the design seek to bring the attention to, with the underlining premise that all water belongs to a continuous “ubiquitous wetness”, as opposed to isolated moments of commodification. The design project envisions a place to research, encounter and harvest water, acting as a catalyst and a pilot project for urban regeneration and design in the terrain of uncertainty. It seeks to deepen insight into ecological water sanitation and simultaneously shift public perception towards the way we see, appropriate and often disregard water.



Time planning

Week 2.10 (P2)	P2
Week 2.11	Inter Semester Break - P2 feedback and reflection
Week 3.1 February	Design Feedback implementation
Week 3.2	Design Development (General Arrangement)
Week 3.3	DesignDevelopment GA 1:200
Week 3.4 March	Presentation Set up - Model Making
Week 3.5 (P3)	Research Paper Submission, P3 Presentation
Week 3.6	Reflection
Week 3.7	Fire design
Week 3.8 April	Building Physics (Ventilation, Acoustics, Heating..)
Week 3.9	Facade Design and Materialisation
Week 3.10	Planting Strategy
Week 4.1	3D modelling
Week 4.2	3D modelling
Week 4.3 May	Detailed Design 1:20 - 1:5
Week 4.4	Plans, Sections, Elevations 1:100
Week 4.5	3D adjustments for visuals - textures
Week 4.6	Visuals
Week 4.7 June	Visuals
Week 4.8 (P4)	P4 reflection
Week 4.9	Finishing touches - Presentation set up
Week 4.10	Model Making
Week 5.1 July	Model making
Week 5.2 (P5)	Final Presentation and Graduation Ceremony