

# **ETH-EPFL Summer School** 16–21 August 2021 Villa Cassel, Riederalp

## Alps, Water, and Infrastructure

Water is a finite resource that has increasingly become a major geopolitical issue. In the European context, the Alps hold a strategic position as the 'water tower of Europe'. Industrialization and urbanization apply significant pressure onto the water ecosystems of alpine valleys. Modifications to the flow of rivers can significantly impact downstream regions, across very extensive areas. Thus, a systemic design approach is essential, as it can serve to build knowledge about natural and anthropogenic water-ecosystems across different territorial scales, to effectively address the impact of climate change.



## The Valley Transect

The conceptual starting point for this summer school is Patrick Geddes' Valley section from hills to the sea (1923), a transect that follows changes in resource availability and use across a continuous landscape. The transect is a way of recording occurrences and relations along a set path, revealing larger territorial logics. We propose to re-engage with the spatial aspects of water infrastructure by walking such a transect along the Massa river, from the Aletsch glacier to the Rhone valley floor. This case study presents archetypal water management issues and opportunities.

## From Glacier to Valley Floor

The program explores the shaping of the Massa River by human and non-human forces, with a specific focus for each day-trip: water & climate change (the Glacier); water & agriculture (the Bisse); water & energy (the Dam); water & drainage systems (the Urban Valley). The practice of critical walking forms the basis of expeditions into the field. On site, students will employ field research methodsandevaluatetheperformanceofanalytical tools along the transect. Field research will be supplemented by expert input, keynote speakers, methodological workshops, group discussion, and a final critique.

#### Supporting Professors

Prof. Dr. Tom Avermaete, ETH Zurich Chair of the History and Theory of Urban Design Institute of Landscape and Urban Studies (LUS) & Institute for the History and Theory of Architecture (gta)

Prof. Dr. Paola Vigano, EPFL Laboratory of Urbanism (LAB-U) Institute of Architecture (IA)

**LUS** Institute of Landscape and Urban Studies Institut für Landschaft und Urbane Studien **ETH** zürich



#### Members of the Organizing Committee

Rune Frandsen, Doctoral student, LUS, ETH Zurich Nicole de Lalouvière, Doctoral fellow, LUS, ETH Zurich Sarem Sunderland, Doctoral student, LUS, ETH Zurich Sylvie Tram Nguyen, Doctoral student, LAB-U, EPFL

Website

https://lus.arch.ethz.ch/transects-alpine-water-landscapes/

LAB-U Laboratory of Urbanism EPFL