

# WATER ARCHITECTURE CHAIR Philosophy and Scientific Project

Created at the Ecole d'architecture Paris-Malaquais-PSL in 2019, the Water Architecture Chair, City and Landscape develops teaching and research aimed at reinventing the integrating role of water in architectural and urban design.

The Chair is based on the conviction that integrating the hydraulic dimension into architecture, urban planning and landscape design is a powerful lever for supporting the transition of cities and regions. Too often regarded as a mere technical issue reserved for engineers, water must instead be placed at the heart of the debates and issues surrounding the architectural and ecological transition.

Building on the success of its first cycle, running from 2019 to 2024, the Chair now intends to open a second cycle to pursue and amplify its actions.

### Restoring water's central role in the training of tomorrow's architects.

In Europe, the unity between hydraulic architecture and urban planning has dissolved since the XVIII<sup>e</sup> century, causing water to lose its role as creator of space.

#### **OUR AMBITION**

- Stimulate ways of reinventing the unifying role of water in architectural and urban design.
- Propose sustainable architectural, technical and human solutions for spatial planning.

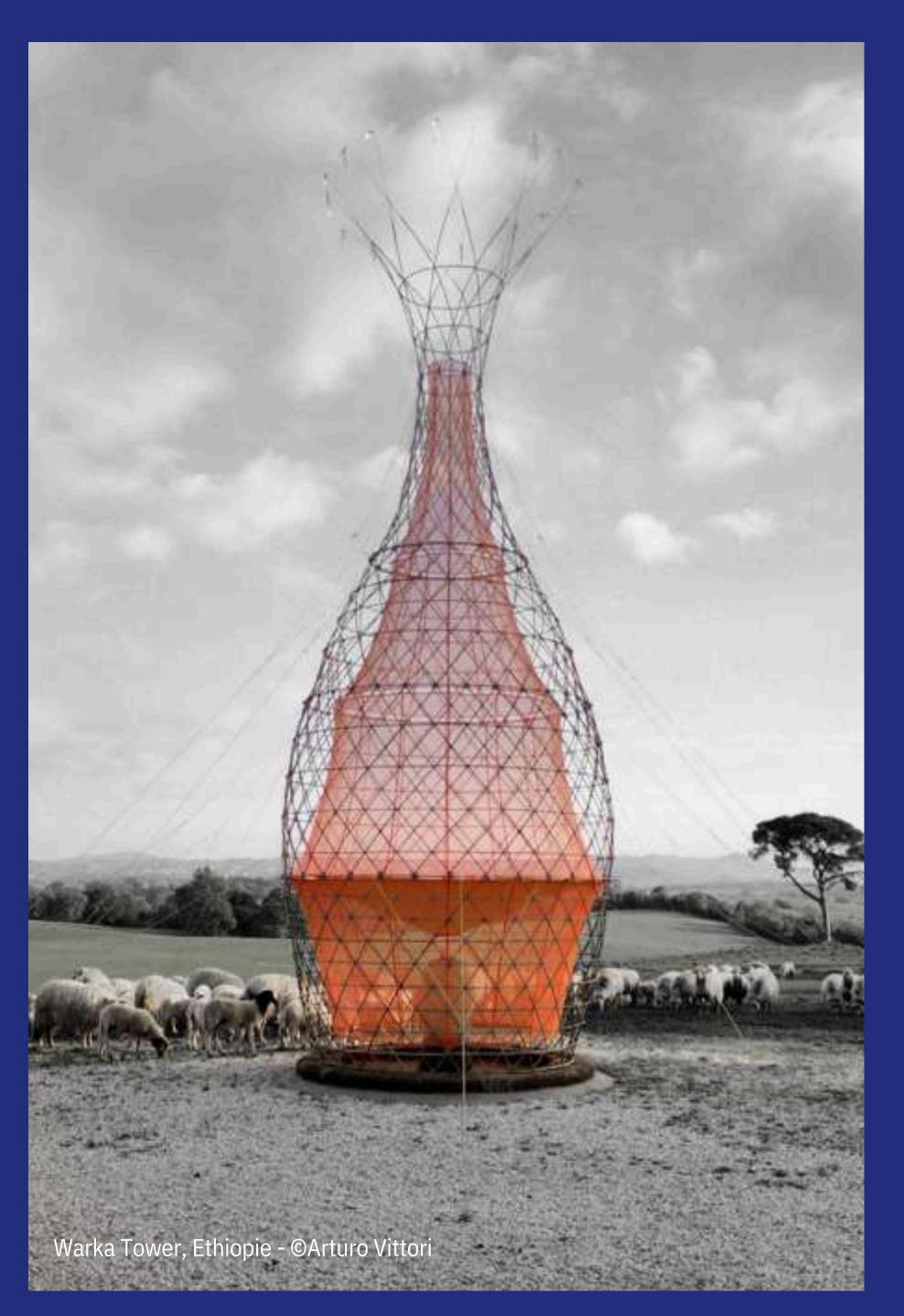
#### **OUR GOAL**

**Explore the scientific basis for a renewed integration of hydraulic systems** with the spatial planning of human and natural ecosystems in the XXI<sup>e</sup> century.

Develop a field of study dedicated to water architecture within academic activities and professional practices in architecture and urban planning, in order to contribute to the creation of more resilient cities and territories.

#### **OUR APPROACH**

- Support the interdisciplinarity required for the development of water spaces;
- Promote dialogue between the academic and professional worlds;
- Relate history to contemporary issues, in order to generate innovative solutions;
- Encourage an international approach to water architecture and develop exchanges between different contexts on a global scale.



#### **OUR RESOURCES**

- Mobilize existing pedagogical and research tools;
- Develop teaching and educational projects;
- Meetings, workshops, study days and seminars between the academic, scientific and professional worlds;
- **Develop** research, research-action and research-innovation **projects**.





### GOVERNANCE

The Water Architecture Chair has a Steering Committee (decision-making role), headed by Jean-François Coulais and Alain Guez, as Chair holders and managers, and Ayda Alehashemi as Chair manager.

The Scientific Committee is also part of the Chair, representing the laboratory of experts involved in specific project decisions.

## STEERING COMMITTEE



#### Jean-François COULAIS

Researcher-professor and co-leader of the "Architecture and Environments" seminar - ENSA Paris-Malaquais - PSL



#### **Alain GUEZ**

Architect-Urbanist - Professor co-responsible for the Mondes en Mutations Department - ENSA Paris-Malaquais - PSL



#### **Ayda ALEHASHEMI**

Architect, landscape designer and associate researcher at IPRAUS

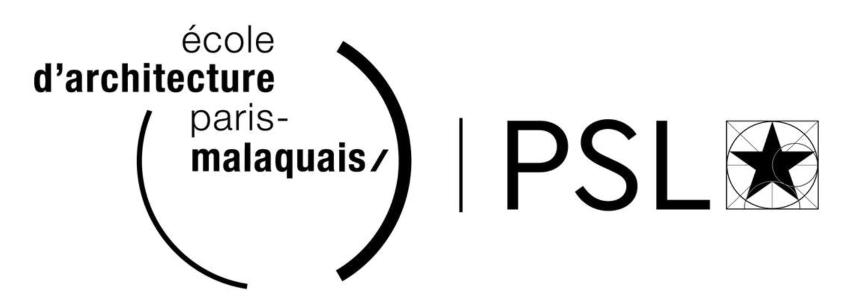
- Teacher-researcher at ENSA Paris-Malaquais - PSL

### SCIENTIFIC COMMITTEE

The Scientific Committee (SC) represents the Chair's scientific partners, and is responsible for its scientific management. In particular, it is responsible for setting the Chair's research and teaching guidelines, as well as selecting priority actions for the coming year. The Board meets once a year, or more frequently if necessary.

- Mr Mohsen Abbasi Harofteh, architect, Director UNESCO World Heritage Center, Yazd University
- Ms Ayda Alehashemi, architect and landscape designer, ENSA Paris Malaquais PSL, IPRAUS
- Mr Patrick Berger, architect, honorary professor EPF Lausanne
- Ms Sabine Barles, Professor, Université Paris 1 Panthéon-Sorbonne
- Mr Pierre Clément, architect, Professor Emeritus, President Arte Charpentier
- Mr Jean-François Coulais, geographer, Professor, ENSA Paris Malaquais PSL, ACS
- Mr Frantz Grenet, archaeologist and historian, Professor at the Collège de France
- Mr Gilles Hubert, engineer, professor at Université Paris-Est, co-director of Lab' Urba
- Mr Prin Jhearmaneechotechai, architect, professor at Chulalongkorn University
- Ms Nathalie Lancret, architect, CNRS research director, ENSA Paris Belleville
- Ms Cristiana Mazzoni, architect, professor, co-director of IPRAUS, ENSA Paris Belleville
- Ms Nathalie Roseau, engineer and architect, professor, director of LATTS, École des Ponts
- Mr Frédéric Rossano, landscape architect, director of the AMUP laboratory, ENSA Strasbourg
- Mr Ali Asghar Semsar Yazdi, hydraulic engineer, scientific director UNESCO-ICQHS
- Ms Mernoush Soroush, architect and archaeologist, Harvard University
- Mr Pietro Todaro, geologist, professor emeritus University of Palermo





Located in the heart of Paris, on the historic site of architectural education in France, the École d'architecture Paris-Malaquais - PSL has developed, since its creation, a distinctive educational approach where experimentation and research, driven by its three laboratories, play a central role.

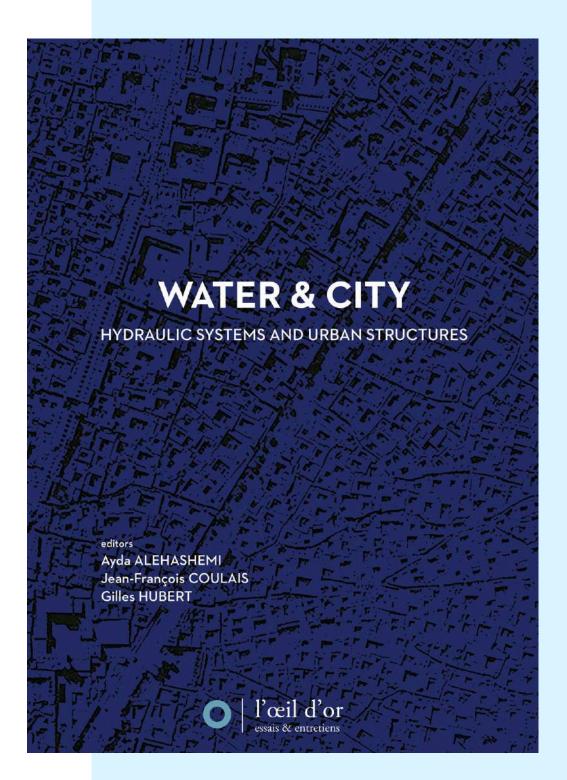
A public institution of higher education under the aegis of the French Ministry of Culture, it brings together nearly 1,000 students with a single ambition: to train the architects who will be essential in making and keeping tomorrow's world habitable.

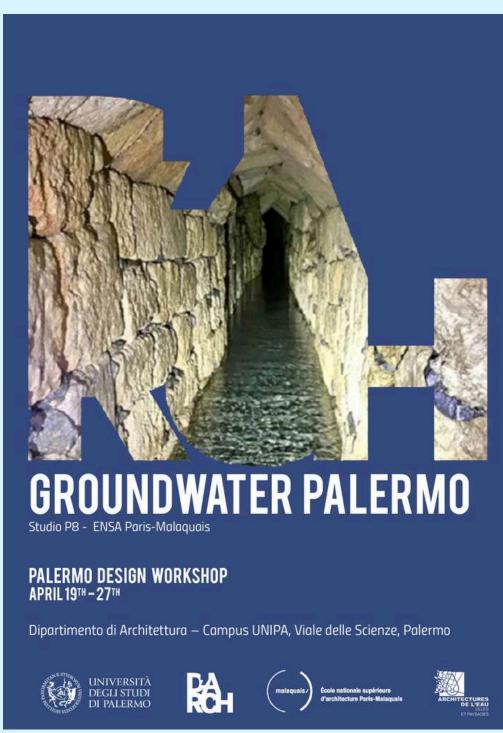


#### **TRAINING & DEVELOPMENT**

Since its inception, the Water Architecture Chair has implemented a number of research, research action and research-innovation projects, in conjunction with its courses and in partnership with public, academic and private players.

It has also organized a number of seminars, symposia, exhibitions and study days devoted to water-related issues in architecture and urban planning. In particular, she is committed to training architecture students in water considerations.





#### **Publication:**

#### Water & City; Hydraulic Systems and Urban Structures (2020)

In partnership with UMR-Ausser, IPRAUS, University of Yazd, United Nations - UNESCO- International Center on Qanats and Historic Hydraulic Structures (Yazd, Iran)

#### **Water architecture in practical education:**

• World History of Water Architecture (2020-2021)

In partnership with MIT and Mellon Foundation (USA)

• Groundwater Architecture (2020-2023)

In partnership with University of Palermo (Palermo, Italy), United Nations - UNESCO-International Center on Qanats and Historic Hydraulic Structures (Yazd, Iran)

• Paris Ville Hydraulique (2020-2028)

In partnership with Eau de Paris and APUR

#### **Colloquium:**

#### Water in the Iranian World (2021-2025)

In partnership with Laboratoire IREMAM, Université d'Aix-Marseille (Aix-en-Provence, France)

#### **Action-research project:**

Sharing Water in the Clunisois Region (2023-2025)
How can we anticipate water crises in a spirit of solidarity?

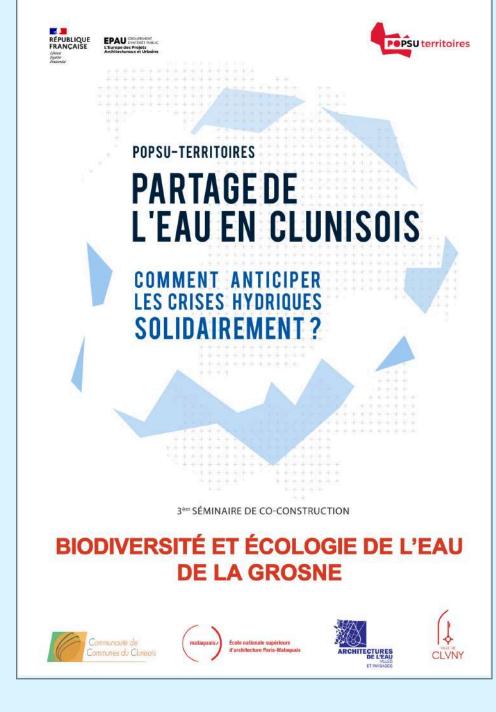
In partnership with GIP EPAU, POPSU-Territoires, Communauté de Communes du Clunisois, Ville de Cluny

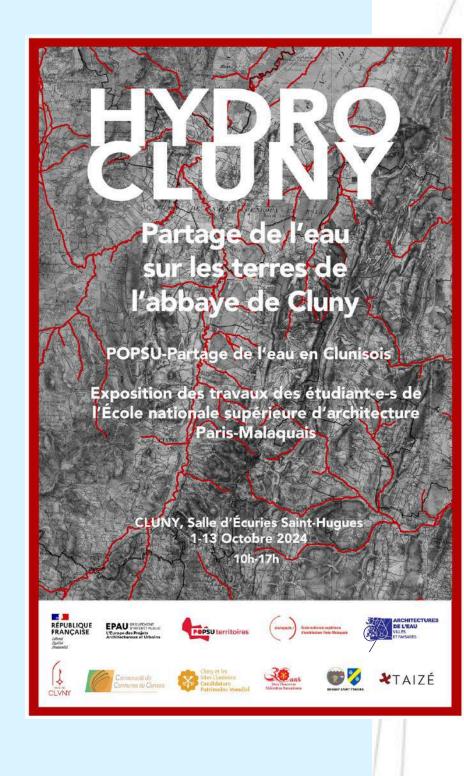
#### **Exhibition:**

HydroCluny- Sharing Water on the Grounds of Cluny Abbey (2023-2024)

Cluny, December 12-22, 2023 and October 1-13, 2024
In partnership with Ville de Cluny and Fédération
Européenne des Sites Clunisiens









The Chair's projects will be deployed in two complementary directions: Research & Training and Valorization.

## 1 STUDY AND ATLAS OF WATER ARCHITECTURES IN EXTREME SITUATIONS

Project initiated with the support of the Mellon Foundation as part of a collaboration with MIT, to be enriched by studies carried out in regions representative of extreme hydraulic and climatic situations (scarcity, water stress, flooding, etc.) on a global scale.

Ongoing research and doctoral studies will contribute to enriching the work of research and representation on the devices of water architecture and the role of water in architectural thought, aiming to constitute an international reference on this theme.

#### **ACTIONS:**

- **Field study scholarships** for dissertations and final year projects
- Organization of summer or winter schools
- Post-doctoral research
- Master's internship on representations of water architectures

#### **DELIVERABLES:**

- One or more **exhibitions**
- Bilingual **publications** (French/English)

# 2 TEMPORALITIES AND CHRONOTOPIA\* OF WATER ARCHITECTURE

Develop a scientific basis on a fundamental subject, as yet little studied in the literature of water architecture.

#### **ACTIONS:**

- Supervision of doctoral students and support for theses on this theme
- Organization of an international symposium

#### **DELIVERABLES:**

- Scientific publications in a collective work

#### 3 WATER AND WATER ARCHITECTURE IN PARIS

The project was initiated in partnership with Eau de Paris and APUR, to provide food for thought on the role of water architecture in meeting the challenges of climate change in Paris.

#### **ACTIONS:**

- Organization of a series of seminar sessions on this theme
- Master's course to synthesize results and prepare an exhibition
- Promotion of dissertation and final-year project topics

#### **DELIVERABLES:**

- Exhibition on water architecture
- **Publications** of research and teaching results

<sup>\*</sup>Chronotopy is an approach that considers spatial and temporal dimensions at different scales, from daily to seasonal, over different time horizons, from retro-innovation to foresight, and over different durations. Water flows and stocks, both spontaneous and regulated, are at the heart of the challenges of climate change and disruption, between mitigation and adaptation.



# Cycle II -Training and Development

## PROMOTING THE THEME OF WATER ARCHITECTURE IN TEACHING AND PRACTICE

Highlight the role of architects in the development and enhancement of water flows, both in urban and rural areas. Train architecture students to take water into consideration.

#### **ACTIONS:**

- Conference on teaching water architecture
- Interdisciplinary and inter-institutional seminars on the integration of the architect's role in water development policies.
- Creation and organization of a national or European Water Architecture Prize (for architecture school students PFE or dissertation).

#### **DELIVERABLES:**

- Award booklet
- **Publication of articles** in academic or professional journals







# INSTITUTIONAL PARTNERS OF THE CHAIR







































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