# Laboratoire de recherche LéaV 5, avenue de Sceaux, 78000 Versailles T +33 (0)1 39 07 40 00 / https://versailles.archi.fr

# Call for papers

# Water, Humanities, Territories, Imaginary. Learning from the desert



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Faced with the global scarcity of water and the "aridification" of a growing number of regions around the world, this symposium aims to question the productivist and short-termist logics of our water management methods. To this end, we invite you to take an in-depth look at cases of territorial development in arid or semi-arid regions, not limiting ourselves to the technical question of development, but broadening our view to include all the research and dynamics underlying territorial organization in arid environments.

Deadline for abstracts: June 15th









# Argument

« Ponds, crevices, fissures, streams, aquifers, brooklets, wadis, watercourses, channels, canals, filets, gullies, puddles, wells, descents, springs, passages, lakes, dams, pipes, drains, cisterns, lagoons, marshes, waves, tides, living seas, dead seas, rain itself: here, water is everything ».

According to the United Nations World Water Development Report 2022<sup>2</sup>, since the beginning of the 20th century, the volume of water withdrawn for domestic, agricultural or industrial use has increased more than sixfold worldwide. Today, it is estimated that over two billion people face water shortages every year, particularly during periods of extreme heat, which are affecting more and more regions of the world.

According to an IDDRI report dating from December 2023, Spanish researchers Carlos Alfonso Sánchez, Fernando Prieto del Campo and Raúl Estévez Estévez³ pointed out that in 2019, around 38% of the European population was affected by water shortages and droughts costing between two and nine billion euros a year. These costs could reach 65 billion euros a year by the end of the century⁴. In Spain, the severity of summer heatwaves has reached record levels in 2022⁵, along with the gradual depletion of subterranean reservoirs in 2023⁶, particularly in the arid and semi-arid areas of the Mediterranean, where much of the population and tourist activity are concentrated. In July 2019, the Swiss Federal Institute of Technology (ETH) in Zurich published a prospective study on the climate of 520 major cities by 2050⁵, in which ETH researchers demonstrate a generalized aridification of territories, which would result in drastic changes for major cities such as Madrid or London, whose climates would more closely resemble those of Marrakech, and Barcelona respectively in around twenty years' time.

While rising global temperatures are one of the main causes of this widespread "desertification" of the world, research shows that the production-oriented logics that have dominated land-use planning projects for water management are actively contributing to its worsening. These logics are part of a broader paradigm, which has shaped most Western societies since the 19th century, according to which continued economic expansion and unlimited use of natural resources would pave the way for inevitable progress. In 1909, Karl Kraus, Austrian playwright, poet and essayist, wrote that progress is not a movement, but a state; one that consists in feeling ahead, whatever you do, without needing to move forward: "progress is a fixe point that looks like it is moving forward". In his work The Myth of Progress<sup>9</sup>, Georg Henrik von Wright (1916-2003), a Finnish philosopher influenced by the positivism of the Vienna Circle, develops a historical and philosophical examination on the degree of

<sup>1</sup> MCCANN, Colum, 2020. Apeirogon. Paris: Belfond. ISBN 978-2-7144-5008-1. "Apeirogon" is a geometric figure with an infinite number of sides.

<sup>2</sup> Groundwater, making the invisible visible, 2022. UNESCO World Water Assessment Program. Paris: United Nations Organization

<sup>3</sup> ALFONSO SANCHEZ, Carlos, PRIETO DEL CAMPO, Fernando and ESTEVEZ, Raul, 2023. Intelligent water management in Europe: lessons from Spain - Frugality, adaptation, mitigation and resilience. Digital publication. Independent Research Institute for multi-lateral Dialogue Policies and Platforms.

<sup>4</sup> European Commission Water Stress Report, 2021. European Union

<sup>5</sup> The AEMET recorded more than 41 days of extreme heat between June and September 2002

<sup>6</sup> After the summer of 2023, Spanish reservoirs were at 44% of capacity, 10 percentage points less than in 2021 and 20 percentage points less than 10 years ago.

<sup>7</sup> BASTIN, J-F, CLARK, E, VAN DEN HOOGEN, J and HORDIJK, I, 2019. Understanding climate change from a global analysis of city analogues. PLOS ONE [online]. 2019. Available at: https://doi.org/10.1371/journal.pone.0217592 8 KRAUS, Karl, 1909. Der Fortschritt (Progress). Die Fackel. 1909. N° 275-276.

<sup>9</sup> VON WRIGHT, Georg Henrik, 2000. The Myth of Progress. Paris: L'Arche.

relevance, and even the mythological character, of the very concept of "progress". He joins Kraus in writing that "continuous economic growth is a condition for solving the problems that intensified and rationalized industrial production itself creates"<sup>10</sup>. It seems that more growth is needed to solve the problems that growth creates, particularly in terms of environmental damage and worsening poverty in some parts of the world.

The environmental damage caused by this paradigm of progress is particularly visible in structurally arid regions such as Africa, the Middle East, North-West Latin America and West Asia. For over half a century, many of these regions have adopted a model of continuous growth and consumption, with no regard for the fragility of their water resources. These logics, which obey only the imperative of very short-term profit, lead to territorial developments that aggravate or even provoke the drying-up of the rare streams and rivers, the depletion of groundwater, disruptions to drinking water supplies, land subsidence, forced migrations, agricultural losses, damaged ecosystems, jeopardizing life possibilities in these regions.

However, while this production-oriented approach to land development has been the norm since the middle of the 20th century, even in these arid regions, this has not always been the case, and with good reason. Indeed, in regions originally hostile to life, land-use planning has for millennia been primarily concerned with preserving the water balance without which the establishment of human societies is impossible. This is how certain land development projects in arid regions have managed to bring water, shade, air and vegetation where none existed before. In such cases, architecture and urban planning become levers for preserving or even creating sustainable ecosystems in which human societies and all living beings can thrive.

The city of Yazd in the heart of the Iranian desert plateau is a remarkable example. This urban complex, unique in the world, was built thanks to the construction of underground galleries called "qanats", which transported the precious resource from the water tables at the foot of the Zagros Mountains to the center of the country. There are still over 33,000 functioning qanats in Iran today, which some specialists date back to over 2,500 years ago<sup>11</sup>. In the arid Indian state of Rajasthan, more contemporary structures known as "ponds" collect rainwater thanks to a networked system of canals and water bodies, that give time to water for it to penetrate the soil and recharge the water table. The recharged water tables in turn irrigate rivers and streams that were thought to be definitively dried up. Temperate ecosystems with thriving fauna and flora are then (re)created in regions previously counted among the driest in the country. In Chile's Atacama Desert, man's relationship with the precious oases that punctuate one of the world's most arid territories paves the way to a consistent territorial development in a region where the hydrogeology is particularly hostile to human life. In North Africa, in Marrakech, the study of the water network that structures the city's design, ensuring the conservation and efficient transport of this precious resource, highlights the sacred relationship with water that has spanned dynasties for ages.

In all these regions, it appears that the relationship with non-human elements in general, and with water in particular, is governed by spiritual, social, political and economic paradigms that differ profoundly from those that govern societies enslaved to the race for profit, speed and the short-term goals. These paradigms integrate knowledge of the specific functioning of each territory and of its constant evolution, that of all living things, long-term prosperity, and the adaptation of human consumption and activities to the quantity of available resources, which is meticulously and regularly measured.

<sup>10</sup> Ibid. 9

<sup>11</sup> AHMADI, Hassan, SAMANI, Aliakbar and MALEKIAN, Arash, 2010. The Qanat: A Living History in Iran. In: Water and Sustainability in Arid Regions. pp. 125-138. ISBN 978-90-481-2775-7.

Given on one hand, the fundamental differences between the complex cosmologies of our societies and those in arid regions, from which derives the imaginary that generates the forms of relation to water - and on the other hand, the urgency of the water crisis affecting more and more regions around the world, can water management methods in arid territories represent a credible source of learning for our Western societies, providing "conceptual springboards" for renewing our imaginations and questioning our forms of inhabitation?

This call for papers is addressed to all those involved in regional planning in the broadest sense of the term: hydrologists, geographers, urban planners, architects, sociologists, historians, anthropologists, etc. who could shed light on the question of "learning from" water management in arid regions.

# Four lines of thought are proposed:

#### 1) Water, human and non-human

In the preface to Paul Hawken's latest book<sup>12</sup>, Jane Goodall, one of the world's leading chimpanzee specialists, recalls how, during her studies in the rainforest, she came to realize that all life forms in this ecosystem were intimately linked to one another: "every species of animal or plant has a role to play in the tapestry of life". She draws our attention to an often-forgotten fact: we human beings are also part of this tapestry of life. She wonders about this paradox, which many researchers are still struggling to answer: why is it that the only living species to have experienced an explosive expansion of its intellect is also the one destroying its one and only place to live? Has the difficulty of finding their role in the tapestry of life led human beings not only to forget that they are part of it, but also to turn a blind eye to their dependence on this tapestry for their own survival? It appears that our reflection on how to respond to the aridification of the world should begin with an awareness of our nature as living beings, and of the risk this aridification represents not only for all living things, but also for the survival of our own species. The socio-economic organizations that have established a conceptual boundary between a "human" world and the rest of the world that would be at the disposal of growing and infinite human consumption, seem to be reaching their limits in the face of resource depletion, particularly that without which no life is possible: water. The absolute necessity of this resource for the establishment of any human civilization is particularly integrated into societies that have historically settled in arid environments, and with good reason. Given the very limited availability of this vital resource, particular attention is paid to its harvesting, conservation and consumption. This attention has conditioned the design not only of hydraulic infrastructures as objects, but also of all human installations on the territory. In the light of these territorial conceptions, which are more aware of the absence of a systemic boundary between the human and non-human worlds when it comes to vital resources, what levers can we activate to encourage a fairer and more sustainable relationship with the hydrography of our territories?

#### 2) Water, acceleration and the paradigm of progress

The industrial and post-industrial paradigms that have held sway in Western societies and beyond for almost two centuries now seem to have come up against their main limitation: that of a world of finite resources, in which the rate of consumption of these resources is far greater than the rate required to regenerate them. While we maintain the illusion that a perpetually accelerating societal organization is synonymous with expansion and progress, natural disasters and the widespread aridification of

<sup>12</sup> HAWKEN, Paul, 2024. Regeneration, overcoming the climate crisis in a generation. French ed. (original English 2021). Arles: Actes Sud. Domaine du Possible. ISBN 978-2-330-18553-4.

our territories remind us that the rhythms of living organisms and ecosystem balances cannot be subjected to those of human activities. Rivers do not fill up more quickly to meet growing human water consumption, just as rain does not fall more frequently in regions where rising temperatures have dried out all crops. Trees are not growing faster in response to the massive deforestation underway in some parts of the world, just as continents are not rising above the rising sea and ocean levels. The temptation of a technological response to this disconnection between "human" time and that of the "non-human" world is great. But if the question asked is that of more efficient management of water resources to meet an ever-increasing demand, the answer will necessarily be confronted with Jevons' paradox<sup>13</sup>: an increase in efficiency encourages an increase in demand. This increase in demand will then call for new technology to respond to it, and the cycle goes on. It therefore appears that purely technological solutions are not enough and can even play an active part in creating new discrepancies between the rhythms of consumption and those of regeneration of the hydrosphere. This is the dynamic described by Georg Henrik von Wright (1916-2003) as the very structure of the race for progress, to which most human societies have subscribed. Are therefore "ever more" and "ever faster" patterns inevitable? Could human societies organize themselves on principles that would be more consistent with the rhythms of the territories in which they settle, in order to preserve and make sustainable use of the water resource on which their survival depends? What questions and lessons can the temporalities of societies in arid environments, where water is structurally available in very little quantities, bring to this reflection?

#### 3) Water and territories

In Western paradigms, the concept of "nature" often refers to a fertile environment, associated with the Judeo-Christian idea of the gardens of heaven, which should be protected from all human impact. In this approach, "nature" would designate all that is non-human as vast wooded territories full of life, structurally identical to one another, and which should be preserved from all human activity. However, the reality of the non-human world is far from this description, which, contrary to what some defenders of this perfect "nature" think, actually contributes to the worsening of the ecological crisis the world is faced with. As Timothy Morton explains in his book Ecology Without Nature<sup>14</sup>, this concept of "nature" is merely a symptom of our lack of understanding and interest in the non-human world and in our territories, which is at the root of the many inconsistencies in our management and planning methods. In reality, there is a multitude of terrestrial and aquatic biomes (or macroecosystems), which biogeography defines as sets of ecosystems characteristic of a biogeographical area, with identical or very similar ecological conditions, named based on the vegetation and animal species that predominate and are adapted to them. In Europe alone, there are six to eight major biomes, which take into account the geology, morphology, climate, soil, hydrology, fauna and flora of the areas studied. As a result, it seems that any hydraulic development that aims at being coherent and relevant with the hydrography of a region cannot do without a detailed knowledge of the territory in which it is deployed. The dynamics that link the large scale of the territory, that of the watershed, to that of the city and finally that of the architecture, are essential to grasp in order to preserve the continuity of the water cycle and the renewal of the resource. A number of examples from arid regions show that, far from the concept of an ever-devastating impact of humans on ecosystems, some territorial planning, rooted in a fine understanding of the territory's specific features, can in fact generate genuine ecosystems and new biomes. What case studies in arid environments can be mobilized to re-examine this specific relationship with the territory? To what extent does knowledge of the desert territory enable us to integrate several scales into the project, and to prevent possible

<sup>13</sup> JEVONS, W. Stanley, 1865. The Coal Question: An inquiry concerning the progress of the nation, and the probable exhaustion of our coal mines. London: Macmillan & Co. ISBN 978-0-678-00107-3.

<sup>14</sup> MORTON, Timothy, 2009. Ecology without nature, Rethinking Environmental Aesthetics. Cambridge: Harvard University Press. ISBN 978-0-674-03485-3.

#### 4) Water, imaginary and form

When we set out to reinterrogate production-oriented and consumerist logics, we are part of a paradigm shift, a true "Copernican revolution" that overturns not only the material achievements of our civilization, but also our ethical orders, social structures and values. We're moving from Resource to Source, and this also means questioning the imaginaries that animate and nourish forms and functions. It's a consideration that stems from the interscalarity of the ecological problematic proposed by F. Guattari in his Three Ecologies<sup>15</sup> (environmental, social, mental and respectively inherent to: macrocosm, collectivity and individuality). Architecture and engineering are phenomena embedded in complex cultural systems and are therefore manifestations of a much larger cosmological "feeling". Architecture is a material codification of a way of living and a way of situating oneself in the world. The Khaju Bridge in Iran is illustrative: it expresses a desire for social structuring literally on and around the water; the forms of its architecture appear to fulfill practical functions, but also to trigger unique forms of sociability. People thus learn to weave their daily lives around an element and begin to appropriate it through language, customs, art, etc., developing profound relationships of empathy and care, which include deeper horizons of understanding and broader implications on the part of individuals. Perhaps it's not just functional devices that the ecological transition needs to arm itself with, but also new forms of habitability that depend on our ability to establish relationships of quality (and not just quantity) with a habitat and its components. It's these imaginaries, these platforms with high cognitive potential, that we need to make the effort to translate into form, so that the operational plan and its manifestations are imbued with these connotations of collective poetics. It is in this sense that the imaginative power of the poetry of lived experience takes on a concrete, operational value, reflecting the ancient etymology of this term: poiesis, or "to make" (or "to make places, to fabricate places"). How can we rethink our imaginations and reconstitute a deeper cultural bond with water?

# What is expected

Colloquium participants are invited to write a short abstract (5000 signs, English or French language, including spaces, excluding bibliography) problematizing one or more of the four axes presented above and to send it to the following address:

#### befire June 15th, midnight: aida.tavakoli@versailles.archi.fr

To complement the theoretical contributions of the colloquium, there are two possibilities for participation: paper proposal and poster proposal (drawings, videos, or other support allowing the contribution to be completed with a medium other than the written word).

The question of how human societies relate to water in their territories is part of an examination that goes far beyond the boundaries of urban planning and architecture. It appears that planners committed to a more conscious and virtuous relationship with territories are led to nourish their practice with a plurality of disciplines, ranging from sociology, to geography, history, philosophy or even anthropology. The considerations emerging from all the disciplines that constitute the Humanities in the broadest sense and dealing with human societies in their territories are in this sense eagerly awaited for this colloquium.

# Organising committee

TAVAKOLI Aida: Architect, PhD candidate at LéaV Laboratory of ÉNSA Versailles (EUR HCP doctoral contract with CY university)

AZIMI Bita: Senior Lecturer at ÉNSA Paris-Belleville, member of the Scientific Advisory Board of the Cité de l'Architecture et du Partimoine of Paris

LIVRAGHI Alessandro: Architect, teacher, PhD. Candidate at LéaV laboratory of ÉNSA Versailles (EUR HCP doctoral contract with CY university)

# Scientific Committee

- AZIMI Bita: Senior Lecturer at ÉNSA Paris-Belleville, member of the Scientific Advisory Board of the Cité de l'Architecture et du Partimoine of Paris
- STACHER Susanne: Research Professor at ÉNSA-Paris Versailles, LéaV laboratory member
- DELALEX Gilles: Research Professor at ÉNSA Paris Malaquais co-director of the LIAT Laboratory
- LANE Shahinda: Architect, urban planner, associate lecturer at the Conservatoire National des Arts et Métiers
- ARYA Meghal: Principal architect and co-founder of Arya Architects, Professor at Faculty of Architecture, CEPT University (India)
- GIANNINI Alessandra: PhD in Earth and Environmental Sciences, CERES Ecole Normale Supérieure de Paris
- MAZZONI Christiana: Research Professor, Director of the "Métropoles et Architecture des Grands Évènements" (MAGE-Paris 2024) chair at the IPRAUS laboratory of ENSA-Paris Belleville, Director of UMR AUSser
- ABEDI Sina: Architect, PhD. In Architecture, President of the Gondishapour Association
- OLIVA Jean-Claude: Chairman of the Board of Directors of Régie Publique de l'Eau et de l'Assainissement d'Est Ensemble, Eau publique par Est ensemble.

# Calendar

- Call for contributions: April 28, 2025
- Deadline for abstracts 5000 signs: June 15, 2025, midnight
- Announcement of abstracts' selection: July 30, 2025
- Conference: December 4th and 5th 2025
- Call for scientific articles: January 2026 (to be defined)

# Place

Cité de l'Architecture et du Patrimoine (1 Pl. du Trocadéro et du 11 Novembre, 75116 Paris).

# Editorial standards

To facilitate the evaluation of your proposal by the scientific committee, as well as editorial

management, please follow the instructions below and deliver the proposal(s) in pdf format.

#### 1) Communication proposal

# **Formatting**

- Times New Roman font
- Title size 14
- Text size 12
- RSi footnotes size 9
- Single-spaced 1, no spacing before and after text

# Page layout

- A4 format, (default margins: 2.5 cm top, bottom, right, left)
- pdf file
- Justified text
- Left-aligned titles

#### **Structure**

- Last name, first name and e-mail
- Proposal title
- Positioning in one of the thematic areas: 1, 2, 3, 4
- Proposal: 5000 signs (including spaces), French language
- Limit footnotes (see model in appendix)
- 5 key words
- Bibliography: 5 references. ISO-690 : 2010 standard (see model in appendix)
- Author's presentation: 1000 signs (including spaces)

Thesis title

Thesis management

Doctoral School

Host team, home establishment

Cotutelle in other countries

Date of first registration

Registration discipline

Indicate financing, if applicable

#### 2) Poster proposal

#### **Formatting**

- Times New Roman font
- Title size 48
- Text size 20
- Legend illustration size 12
- Single line spacing 1
- 300 dpi captioned illustrations

#### Page layout

- A0 vertical format
- pdf file
- Justified text
- Title top left

#### **Structure**

- Last name, first name and e-mail
- Thesis title
- Thesis direction
- Doctoral school
- Host team, home establishment
- Cotutelle from other countries
- Date of first registration
- Registration discipline
- Indicate financing, if applicable

If the proposal is accompanied by an object (model, installation, prototype, other...), please attach a photo and dimensioning. For digital formats, please attach a link to the poster to view its content.

Standards for bibliography

ISO-690: 2010 standard

#### - Book

First and last names of authors, year of publication. Book title. Edition no. City of publication: Name of publisher.

#### - Book chapter

Chapter and book with the same author:

NAME, First name of authors, year of publication. Book title. Edition no. City of publication: Name of publisher. Chapter number and title, chapter pages.

- Chapter and book with different author (contribution)

Last name, first name of chapter author, year of publication. Chapter title. In: Last name, first name of book author. Book title. Edition no. Publisher's name, chapter pages.

### - Magazine article

NAME, First name of authors, year of publication. Title of article. Name of journal. Volume, number, pages. DOI if article is online.

#### - Dissertation, thesis, academic work

Last name, first name of author, year of defense. Title. Type of work (thesis, dissertation, report). Discipline. City: University or school.

### - Congress, symposium, conference

AUTHOR or ORGANIZER, year of publication. Conference title, date and venue. City of publication: Name of publisher, pages.

In the case of a paper, proceed as for a book chapter.

# - Legal text

AUTHOR, year of publication. Title. Reference of text, paragraph or article (optional).



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