



SAPIENZA
UNIVERSITÀ DI ROMA

INTERNATIONAL WORKSHOP

Models of the Past Cities of the future

11-14.11.2024



Urban climate futures

Cultural and scientific background

Global warming, the effects of which are beginning to be felt in terms of heatwaves, summer droughts and winter floods, and their harmful consequences for living beings, is set to increase by a further +4° Celsius by 2100. Faced with rising temperatures, plant and animal species are seeing their original biotopes, which have become too hot, relocate ever further north. This shift of ecosystems towards colder latitudes is estimated at over 1 m per hour. Thus, the climate of our cities today will no longer be the same in 2100 when Paris will have a climate similar to that of Mexico, Japan, north Africa, Sicily or southern Spain. Human habitat is no exception to this climate shift, and most of the largest cities in Europe will have to cope with ever-higher temperatures, up to 50°c in summer. If the city is to remain inhabitable, if living things are to remain alive, if humans are to continue to live in the same region in 2100, architecture and the city must now be designed, adapted and built in a climate similar to that which currently exists further south.

Task

1. Vernacular studies, model of the past. A comparison between Italy and Korea.

The first step is a study of a vernacular building, infrastructure or urban feature, demonstrating how people have adapted to withstand extreme heat, rain, floods and drought before modern techniques. We are looking for cultural production and practical solutions of the planet's warmer regions before fossil fuels, i.e. before the use of air conditioning to cool and/or dehumidify homes, electric pumps to manage drinking water, rainwater, floods and droughts; solutions that will become increasingly important for colder regions as they both warm up and become less dependent on fossil fuels.

In this context, students will search and present vernacular architectural construction in their respective regions (Italy and Korea), or architecture that responds intelligently to the climate before fossil fuels, i.e. before the 19th century, and to explain in one graphic form, cross-section or plans, the practical solutions (by radiation, ventilation, convection, evaporation, inertia, etc.) Put in place to withstand the climate, the sun, the heat of the air, rain, drought or floods.

Format:

Vector pdf files only (.eps or .pdf format / no photoshop or pixelated images) in vertical or horizontal A3 format.

2. Future cities: envisioning Paris in 2100

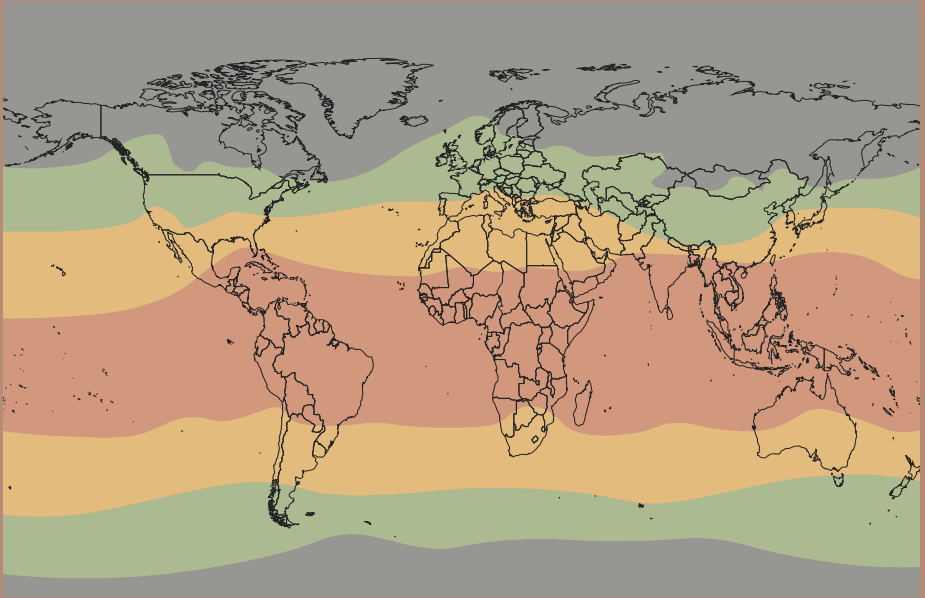
Development of design visions for Paris in 2100. In 2100 Paris and its architecture will be transformed to cope with this scorching climate adopting and reinterpreting vernacular buildings, infrastructure, or urban feature. The suggested topics for envisioning Paris in 2100 include:

- underground infrastructure;
- floating urban future;
- nature take over.

This work will be partly exhibited at the Troisième Biennale d'architecture et de Paysage d'Île-De-France from 6 May to 13 July 2025, within the project led by Philippe Rahm and Sana Frini 'Four degrees Celsius between you and me'.

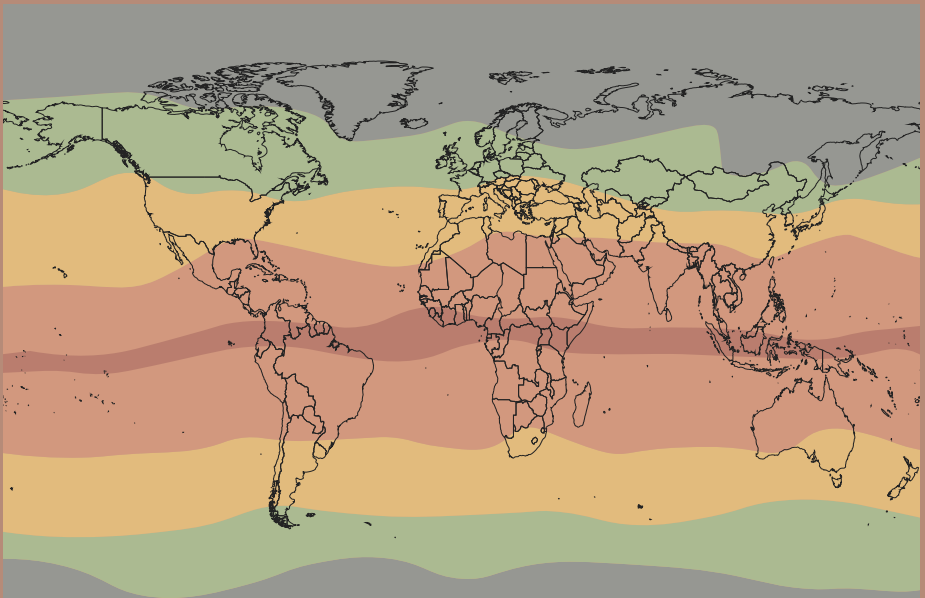
Format

The final image for each working group will be a representative image of this new city seen through the lens of the reinterpretation of the vernacular buildings, infrastructure, or urban feature, analysed in phase 1. The image will be displayed in the form of a horizontal A1 board.



Geography of climates, 2024

Source: Troisième Biennale D'Architecture et de Paysage D'Île-de-France



Geography of climates, 2020

Source: Troisième Biennale D'Architecture et de Paysage D'Île-de-France

Programme

11.11.2024

9:30 - 10:30 Presentation of the Workshop **Models of the past. Cities of the future.** in Via Flaminia 72, 00196 Roma RM (room: Aula Master)

Opening by **Alessandra Battisti**, Full Professor at the Faculty of Architecture of Sapienza University of Rome.

Introduction to the workshop by **Angelo Figliola**, post-doctoral researcher at the Faculty of Architecture of Sapienza University of Rome

10:30 - 12:00 Introduction to the Korean students' Talk and show by **Joomin Kim**, post-doctoral researcher at the Faculty of Architecture of Sapienza University of Rome

Talk and show "Vernacular architecture through the lens of thermodynamics": Korean students

12:00 - 13:00 Lunch break

13:00 - 14:30 Introduction to the Italian students' Talk and show by **Livia Calcagni**, post-doctoral researcher at the Faculty of Architecture of Sapienza University of Rome

Talk and show "Vernacular architecture through the lens of thermodynamics": Italian students

14:30 - 15:30 Workshop topics Presentation
UNDERGROUND ARCHITECTURE, by Adriano Ruggiero (LEADER)
FLOATING ARCHITECTURE, by Livia Calcagni (LEADER)
NATURE TAKE-OVER, by Andrea Canducci (LEADER)

15:30 - 16:00 Group division

16:00 - 19:00 Workshop: Envisioning Paris in 2100

12.11.2024

- 9:00 - 13:00 Workshop: Envisioning Paris in 2100
Faculty of Architecture Sapienza University of Rome
in Via Flaminia 72, 00196 Roma RM (room: Aula Master)
- 13:00 - 14:00 Lunch break
- 14:00 - 17:00 Workshop: Envisioning Paris in 2100
- 17:00 - 19:00 Lecture by **Arturo Del Razo Montiel**

13.11.2024

- 9:00 - 13:00 Workshop: Envisioning Paris in 2100
Faculty of Architecture Sapienza University of Rome
in Via Flaminia 72, 00196 Roma RM (room: Aula Master)
- 13:00 - 14:00 Lunch break
- 14:00 - 19:00 Workshop: Envisioning Paris in 2100

14.11.2024

- 9:00 - 13:00 Workshop: Presentation preparation
- 13:00 - 14:00 Lunch break
- 14:00 - 17:30 **Talk and show:** Final presentations
- 17:30 - 18:00 Closing session by **Alessandra Battisti**

Scientific coordinator

Prof. Arch. Alessandra Battisti

Practicing architect, Alessandra Battisti is full Professor of Environmental Design and Technology of Architecture at the School of Architecture of Sapienza University of Rome, where she oversees the Master's programs in "Landscape Architecture" (2016-'19) and "Architecture-Urban Regeneration" (2019) and is Director of the II level Master's program in "Valorization and Enhancement of Small Historical Centers" (since 2013). She is on the Faculty Board and teaching staff of the Ph.D. in Environmental Design and Planning (since 2013). Expert consultant for the European Community; expert consultant of the Italian Ministry of Universities and Research, and of the Italian Ministry of Culture. She has published more than 200 scientific publications and 14 books. Winner of more than 30 international architectural competitions.

Workshop tutors

PhD. Arch. Livia Calcagni
Arch. Alberto Calenzo
Arch. Angela Calvano
Arch. Andrea Canducci
Magali Deschamps

PhD. Arch Angelo Figliola
Prof. Arch Joomin Kim
Arch. Adriano Ruggiero
Arch. Eva Vergara

Participants

Sapienza University of Rome,
Italy

Cherry Aala
Rosa Bianco
Denisa Dulaj
Flavia Leone
Mattia Morgia
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Daniele Scalia
Giusy Solis

Catholic Kwandong University,
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Sangmin Kang
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Seoyeon Park
Jaebin Sim
Jongung Yun
Seongung Lee
Taegyoom Lee
Sunwoo Choi

Scientific coordinator | Prof. Ph.D. Arch. Alessandra Battisti

Scientific committee | Prof. Ph.D. Arch. Alessandra Battisti, Ph.D. Arch. Livia Calcagni, Arch. Alberto Calenzo, Ph.D. Arch. Arturo Del Razo Montiel, Magali Deschamps, Ph.D. Arch. Angelo Figliola, Prof. Arch. Joomin Kim, Prof. Prof. Ph.D. Arch. Fabrizio Tucci

Organizing committee | Ph.D. Arch. Livia Calcagni, Arch. Alberto Calenzo, Arch. Angela Calvano, Arch. Andrea Canducci, Ph.D. Arch. Angelo Figliola, Arch. Adriano Ruggiero, Arch. Eva Vergara