

EXHIBITION

BIOCLIMATIC ACTIONS

Resilient construction methods for a changing climate

September 28 – January 19, 2025

Opening Sept 27, 2024, 7 pm at HDA, Mariahilferstraße 2, 8020 Graz **Partner programme steirischerherbst'24** "Bioclimatic Talk!", Sept 27, 2024, 11 am at HDA

Press Tour Sept 27, 11 am, HDA (Registration is requested!)



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Heatwaves, storms and floods are making the effects of climate change more tangible all over the world. In the spring of 2023 and 2024, the HDA invited young European architects to address the challenges posed by these extreme weather conditions. The aim was to come up with innovative ideas to make cities, regions and buildings more resilient to heavy rain, flooding and extreme heat. The exhibition "Bioclimatic Actions" showcases the results of two workshops with young European architects, which were part of the HDA research laboratory funded by the EU Creative Programme.

Climate change is one of the greatest challenges of our time. Cities and regions are exposed to heavy rainfall and overheating. Moisture intrusion, flooding and large temperature fluctuations put strain on the building fabric. Health risks, e.g. from heat, are increasing. So how can we respond to such extremes in terms of construction to make cities and buildings more resilient? The HDA - House of Architecture has organised two workshops on this topic with young European architects from the EUfunded LINA Fellowship Programme and students from the University of Stuttgart.

The aim of the project, conceived by Beate Engelhorn, was to find innovative, practical approaches and solutions by researching and combining traditional building forms with the latest findings from current research in the field of construction and materials - in other words, to bring together the 'best of all times'. The common basis is the use of materials that conserve resources and the possibilities for energy-saving handling in the production of buildings.



Workshop I (2023)

Collection of Bioclimatic Responses

The first workshop aimed to collect successful traditional typologies, construction methods and materials from different eras and cultural contexts In addition, innovative examples from the field of current research should be sought. These could include for example novel surfaces for solar energy generation, different forms of reinforcement that no longer rust, newly composed material compositions and 3D printed robust constructions to save material, and much more. Excursions and presentations by invited experts from Graz and the surrounding area completed the programme. A visit to the open-air museum in Stübing, where many of Austria's historic buildings are on a 1:1 scale, rounded off the inspiring tours in Graz.

Architects of the first workshop: PAN-PROJECTS: Ralph Nabil Nasrallah, London/Paris | self-office: Laura Solsona und Eduard Fernàndez, Barcelona | Zwahlen Krupičková: Kateřina Krupičková und Martin Zwahlen, Zurich/Prague | Róisín Cahill, Dublin.

Workshop II (2024)

The Future of Building - Vernacular + Visionary = Future

in cooperation with the Chair for Building Construction, Building Technology and Design (IBK2), Prof. Martin Ostermann, University of Stuttgart

Building on the research carried out by the LINA Fellows at the HDA in Graz in the spring of 2023, where traditional and new sustainable building typologies were collected and compiled, a design workshop followed. The aim was to develop new typologies for buildings in regions affected by severe weather/flooding or overheating/drought. The design location, Portoviro in the northern Italian region of Polesine, offers a concrete example of the challenges of climate-adapted construction in extreme weather regions. After severe flooding in spring 2022, followed by an extreme drought, the water level of the Po River has fallen to a record low. How does such an environment affect architecture? The fellows led a group of students who worked together to develop a new design in response to the climate challenges. This should be presented through plans, images and models.

Architects of the second workshop: continentale: Giulio Galasso und Natalia Voroshilova, Zurich/Milan | Jade Apack, Paris | Alberto Roncelli, Milan/Copenhagen | Helen McFadden, Dublin | Dérive: Kevin Westerveld, Brussels

In collaboration with students of the University of Stuttgart: Aala Abdolaziz, Hanna Capriglione, Marlene Faßnacht, Sonya Georgieva, Pia Jamie Krist, Kristina Lorenz, Kai Müller, Madrea Pauqué, Marisa Schmid, Dorian Zinder.

A catalogue will be published



PROGRAMME

OPENING

Sept 27, 2024, 7 pm, HDA, Mariahilferstraße 2, 8020 Graz

Welcome

Beate Engelhorn, Director HDA

Martin Osterman, Executive Director IBK, Stuttgart University

Matevž Čelik, Head of LINA, State Secretary Ministry of Culture Slovenia

Michael Foisel, Sales and marketing manager, Swisspearl Austria

The participating architects of the workshops will be present.

ACCOMPANYING PROGRAMME

Partner programme steirischerherbst'24 - Bioclimatic Talks!

Discussion with architects and experts from research and industry Sept 28, 2024, 11 am, HDA, Mariahilferstraße 2, 8020 Graz

ORF-Lange Nacht der Museen 2024 (Long Night of the Museums 2024)

Oct 5, 2024, 6 pm to midnight Guided tours through the exhibition, the HDA bar is open!

Free weekend tours

Free guided tours of the exhibition are offered at weekends Dates: Saturday at 3 pm and Sunday at 11 am

The Programme is part of the EU-funded programme LINA – Learning, Interacting and Networking in Architecture: https://lina.community/

Partner programme steirischerherbst'24: www.steirischerherbst.at

For further information, please visit the HDA website:

https://hda-graz.at/programm/bioclimatic-actions

Press images are available at:

https://hda-graz.at/pressebereich-hda/bioclimatic-actions

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