

ÖAW

AUSTRIAN
ACADEMY OF
SCIENCES

CLIMATE-ARCH SYMPOSIUM 2
17TH – 20TH NOVEMBER 2026
AUSTRIAN ACADEMY OF SCIENCES
GEORG-COCH-PLATZ 2, 1010 WIEN

VERNACULAR BUILDINGS IN THE ANTHROPOCENE

Comfort, sustainability, adaptability



Photo by: Hubert Feiglstorfer, 2025

This project has received funding from the European Research Council, titled „Climate and Contemporary Transformations of Vernacular Architecture – Interaction, Effects and Perspectives (CLIMATE-Arch)“, Consolidator grant 101088693.



European Research Council
Established by the European Commission





OUTLINE

SYMPOSIUM 2: VERNACULAR BUILDINGS IN THE ANTHROPOCENE

Comfort, sustainability, adaptability

This symposium asks what comfort, sustainability and adaptability mean for locally specific and culturally embedded forms of architecture as climate change pushes our planet into a period of major transformation. This first session will explore various ways of defining, understanding, measuring, modelling and influencing thermal comfort in vernacular architectural contexts. It will include analyses of heating, cooling and ventilation methods across various ecological, social, temporal and spatial locations, as well as discussing the adaptation of vernacular buildings in response to climate change. The second part of the symposium will examine concepts of ecological sustainability and innovation in relation to contemporary vernacular architecture. This will include discussion of ecologically oriented approaches and smart construction techniques, as well as innovative material and structural adaptations taking place in response to climate change. Questions of access, regulation and sustainability in relation to natural construction materials will also be addressed, as will issues relating to maintenance, adaptive reuse, life cycle analysis and the use of hi-tech research methods such as thermal simulation and 3D modelling.

Bringing experts from natural science, social science and technical backgrounds together to reflect on these topics allows for situated, discipline-specific analyses while also opening space for the generation of interdisciplinary and comparative insights into the status and prospects of vernacular architecture in the Anthropocene. The event will focus primarily on the Alps and the Himalayas, but research from other mountainous regions and different bioclimatic zones will provide vital comparative scope. Similarly, while the temporal focus looks from the present day towards the future, historical perspectives are also welcome.

DWELLING IN COMFORT

Social, economic and technical dimensions of thermal regulation

A1 | Thermal comfort zone.

This panel will examine various ways in which thermal comfort is perceived, assessed, measured and influenced across different vernacular architectural contexts. It invites reflection on the environmental and sociocultural factors shaping conceptions of comfort, as well as how people use buildings and clothing in various ways to improve comfort levels.

A2 | Thermal regulation and adaptation.

. This panel builds on the assumption that people's continuous search for better living conditions drives the ongoing adaptation of vernacular buildings. It will examine the structural, material, social and technical processes involved in the climate-related adaptation of vernacular buildings in the past and present, as well as looking to the future. Contributions may explore the relationship between the outer shells of vernacular buildings and interior conditions, the changing use of insulation materials, or examine in detail specific cases of climate related adaptation.

A3 | Household heating and cooling across time and space.

This panel focuses tightly on heating and cooling systems in vernacular buildings, asking why and how they have changed over time. Contributions may include focused case studies on cooking, heating and cooling in specific contexts, the role of passive and active solar, or emerging trends in heating and cooling methods. Attention will also be paid to hi-tech methodologies for assessing air flow, heat and smoke dispersal or the health risks associated with fire, as well as to policies, funding schemes and marketing efforts relating to new heating/cooling technologies.



SESSION B

SUSTAINABILITY, CIRCULARITY, HYBRIDITY AND INNOVATION

B1 | Smarter construction? Innovation, hybridity and sustainability.

This panel will examine innovative material and structural adaptations to vernacular buildings aimed at mitigating the effects of climate change and extreme weather events, and/or improving ecological sustainability. Contributors are invited to reflect on the benefits or costs of innovation in vernacular contexts, on the emergence of hybrid built forms that combine “traditional” and “modern” elements, as well as on advantages and problems relating to the application of “smart construction” methods in such settings.

B2 | Life cycle assessment and circularity: Maintenance, demolition, reuse and disposal.

Methods such as life cycle assessment, life cycle energy analysis and circular construction continue to gain prominence in mainstream architectural practice, yet their application in vernacular contexts remains patchy. This panel will examine maintenance, demolition, reuse and disposal in vernacular contexts and consider them in relation to mainstream methods for assessing ecological impact and sustainability.

B3 | Natural building materials in the 21st century.

A key feature of vernacular architecture is its reliance on natural building materials, yet many factors are affecting access to these materials in the present day, including climate change, biodiversity regulations, and rising demand in the mainstream construction industry. Bringing together experts from various academic and applied disciplines, this panel aims to assemble a detailed picture of the use of natural materials in vernacular contexts and to establish what current patterns may portend for the future.

B4 | New technologies in the study of vernacular architecture.

Various hi-tech research techniques are now being used to measure, simulate, assess and describe the properties of vernacular buildings. This panel will explore the application of building physics, thermal simulation, digitalisation, 3D modelling, AI and other tools in such contexts. How can these techniques help to generate clearer understandings of vernacular architecture and its relationship to changing climatic conditions? What advantages and challenges accompany such efforts? How to build bridges between grounded local understandings of the properties of vernacular buildings and those produced through scientific research?

FURTHER DETAILS AND NEXT STEPS

The above structure remains tentative and the program will evolve according to the responses and propositions received. If you are interested in participating or presenting a paper at Symposium 2, please visit our project website <https://climate-arch.eu> for further information and online registration.

Further details of Symposium 3 will follow over the coming months. You are welcome to attend all three events, but if this is not feasible, please select the one that resonates most with your research interests. Note also that publication projects are linked to all three symposia.

Contact:

hubert.feiglstorfer@oeaw.ac.at

calum.blaikie@oeaw.ac.at

Dates:

Symposium 1 | 10th – 13th February 2026

Symposium 2 | 17th – 20th November 2026

Symposium 3 | February 2027 (dates t.b.d.)

Venue: Austrian Academy of Sciences, Vienna (Austria)

