AR-201(ag)

Studio BA3 (Fröhlich M. & A.)

Fröhlich Martin

Cursus	Sem.	Type
Architecture	BA3	Obl.

Language of teaching	English
Credits	10
Session	Winter
Semester	Fall
Exam	During the semester
Workload	300h
Weeks	14
Hours	**6 weekly**
Courses	2 weekly
Project	4 weekly
Number of positions	

Remark

Inscription faite par la section

Summary

The Studio explores types and typologies to understand how buildings respond to social, environmental, and technological conditions. The first semester focuses on historical drying and storage buildings; the second on transforming tobacco-drying houses in Fribourg into collective housing.

Content

DRYING HOUSES

TYPES IN ARCHITECTURE

The concepts of type and typology are not specific to architecture. Rather, they represent an interdisciplinary approach to organising knowledge and gaining insight. In architecture, the study of types and typologies offers a didactic perspective through which we can understand the complex interplay between theory and practice as an inseparable material and social construct. While the ways in which knowledge is structured in architecture have changed over time, the study of past experiences continues to provide a basis from which they can be expanded and renewed.

As an analytical tool, the study of types and typologies helps us understand the context, programme, climate, and formal and spatial qualities of architectural examples. As a conceptual instrument, it informs the design process. In "On Typology" (1978), Rafael Moneo describes an inherent contradiction in the architectural object: its uniqueness and its repeatability. The latter refers to the typification of architecture as the classification of groups of objects characterised by a shared formal structure. Here, type serves as an organising principle through which a series of elements exhibiting certain relationships acquire a specific structure. A significant change to these relationships or to the elements themselves can transform an existing type or give rise to a new one, even within the same typological series. Accordingly, the type is both stable and transformative. It responds to social change and new technologies, thereby emphasising both the inventiveness and the generality of architecture as a discipline.

TYPES OF DOMESTICATION

When humans first began to build, dwellings were not designed solely to provide a protective shell for them. They also incorporated resources necessary for life, such as food and animals. At that time, the house was more of a symbiosis of multiple functions. Today, many of these functions have been outsourced, while food preparation remains one of the few that continues to be an integral part of the domestic sphere. Processes such as preserving and storing food, keeping animals, and producing and exchanging heat have, for the most part, disappeared from the contemporary home.

We outsourced these functions and developed specialised building types that responded to the requirements and specific characteristics of food storage and processing. In our efforts to utilise natural food resources and develop new dietary strategies, we created buildings that established specific microclimatic conditions through architectural means, such as greenhouses, drying houses, and ice cellars. We also constructed hybrid machine houses for processing these resources, including windmills, watermills, and smokehouses. What these buildings had in common was a careful observation of local conditions and environmental parameters. Both their modes of operation and their architectural forms emerged from this observation.

What can we learn from these different architectural forms, and which phenomena can be studied and investigated through them? How are the choice of materials, construction, and form interrelated? How did builders shape or make use of environmental conditions through architectural means? How can these principles be translated into contemporary architectural practise?
Studio EAST will explore these questions over the coming years. As a first step, we will work together to build an archive, in the form of an atlas, documenting the architectural and technical knowledge embodied in building types that are, for the most part, no longer in use. The atlas will grow collectively from semester to semester, allowing individual case studies to become part of a broader body of architectural knowledge. In a second stage, we will explore the potential for repurposing these building types by making use of their specific qualities.
This year focuses on building types used for drying. Distributed across different climate zones, these structures were used to dry products such as grain, tobacco, fish, and chestnuts. Protection from water and the provision of air circulation were among their defining features. Their façades reveal different requirements for sunlight, shade, and ventilation, depending on the needs of the foodstuffs or herbs being dried. The structures are generally simple, while the spaces they create are diverse.
The academic year is divided into two parts.
In the winter semester, we study different types of drying and storage buildings for various foodstuffs. We analyse their indoor climatic qualities in relation to the respective environmental conditions and translate their spatial, climatic, and structural principles into our own architectural designs. In the summer semester, we continue our exploration of drying houses by focusing on tobacco-drying buildings in the canton of Fribourg. We investigate their rban and structural qualities and explore possibilities for their conversion into collective residential buildings. The knowledge developed during the winter semester forms the basis for this second phase, in which existing typological qualities are tested through transformation and new forms of inhabitation.

Keywords

Tradition and Modernity - Large Scale and Small Scale; Structural Elements - Typology and Adaptation; Indoor climate and Ventilation- Location and Context - Material and Atmosphere - Object and Ensemble - Use and Reuse - Image and Reference

Learning Prerequisites

Recommended courses

Collective housing: buildings, rooms, components AR-265

Learning Outcomes

By the end of the course, the student must be able to:

- Analyze a building type
- Assess / Evaluate their context
- Sketch to understand the current structure and environment
- Compare and apply different adequate typologies.
- Apply and integrate housing programs in existing structures
- Synthesize the design concept and its theoretical framework
- Present a project in an adequate and clear manner using various means of presentation
- Develop own position on rual architecture and knowledge

Teaching methods

Independent single work or teamwork of 2 for the phase of research, 2 students group work during the phase of design, lectures to contextualize the focuses, studio work, teaching model work and different graphic formats of representation, round table discussions, intermediate review and final review with guest critiques, 5-day study trip during the spring semester

Assessment methods

30% Reserach Phase Models and Drawings / 20% Presentation Skills and Theoretical Context / 30% Design Phase Concept, Draing, Models / 20% Presentation Skills and Theoretical Context
Working in groups of 2

Supervision

Office hours	Yes
Assistant.e.s	Yes
Others	Course and Studio Language: English Supervision Atelier hours: Monday 8:30 â 19:30 Tuesday 8:30 â 13:00 Office hours: Tuesday 13:00 â 14:00 TEAM Luciano Antonietti Anja Fröhlich Martin Fröhlich Leon Hidalgo Angélique Künzle Leonore Lamour

Resources

Virtual desktop infrastructure (VDI)

No

Websites

- http://east.epfl.ch
- https://www.instagram.com/east.laboratory/

Moodle Link

- https://moodle.epfl.ch/course/view.php?idnumber=AR-201(ag)