Universität Innsbruck
Department of Experimental Architecture, Unit BC
Studio Colletti

Bachelor PJ Entwerfen 3 - Wintersemester 2024/25

Materia Chimera

Smudge and blend - A transcycling studio

Instructors: Prof. Marjan Colletti | Catalina Tripolt |Peter Massin | Oliver Hamedinger

"The most environmentally benign building is the one that need not be built because it already exists" (Grammenos and Russel, 1997)

"The greenest building… is the one that is already built." (Elefante, 2007)

Retrofitting, renovation, conversion, modification, alteration, reorganization, upgrading and enhancement of existing buildings are crucial strategies to achieve the UN's Sustainable Development Goals (SDGs) in architecture and building construction. However, there are also unconventional strategies to achieve these aims. The studio will investigate assembly strategies for relocatable building parts. These fragments should be taken from various abandoned or soon-destroyed buildings. Edifices inevitably change over time. After a few decades, they often reach the end of their life cycle and lose their purpose. This could be a considerable potential as a resource for new buildings. Transcycling will challenge the conventional approaches of recycling and upcycling, which are criticized for reducing the value of the materials (downcycling). We will try to identify conceptual strategies critically and also the tasks of the potential to work with medium-scale building fragments. Therefore, the students are asked to develop their notion of contemporary and sustainable assemblage strategy with the help of digital tools (CAAD, AI, simulation, procedural computing, MR, etc.) and fabrication methods (robotic fabrication, 3D Printing, CNC, etc.).

AIMS

The aim of the design studio is to design a mixed-use building which is structurally a reassembly of fragments of existing buildings. The design process involves analyzing the existing structure in terms of structure, potential spaces, transportability, etc. The performance of the design actively contributes to a positive ecological footprint by integrating the technological advances of our time. The design's spatial program addresses and provides access to the full spectrum of people, regardless of their backgrounds and opportunities.

TASK

The design studio will thematically focus on transforming and relocating fragments of existing buildings onto a given building site in Innsbruck. The aim is to design an eccentric townhouse. The resulting building will have mixed-used functions. The methodology will embrace contemporary digital design strategies and speculate on sustainable transcycling processes and CAM technology. The existing buildings will serve as building material resources or, more precisely, as resources of pre-formed fragments. The given structure should be spatially analyzed and remodelled. These load-bearing parts must be subsequently reassembled to accommodate a given architectural program. The structure also should be extended, veiled, clad, ornated, and decorated. The architectural project should acknowledge the tectonic complexity of pre-formed fragments and research and experiment with aesthetic transition strategies (smudge and blend).

METHODS

Students will develop individual projects.

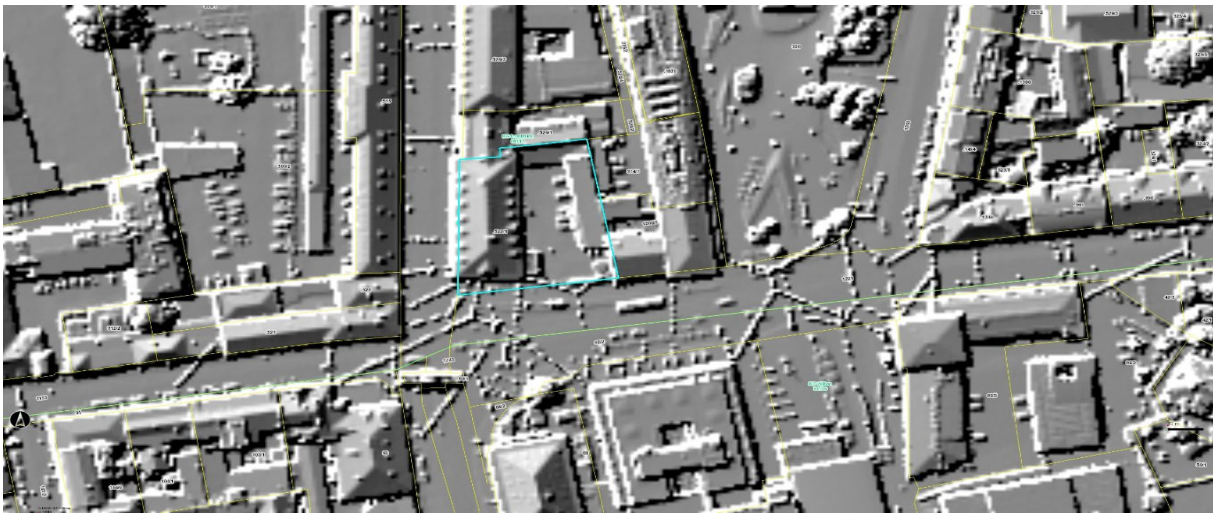
The studio will start with reviewing the work portfolio of the students and their œuvre. Together, we will discover their particular expertise, which students will deepen.

The students will search for, analyze, and remodel building fragments to build up a design part catalogue. The fragments of the existing building structures must be discovered, traced, spatially analyzed, disassembled, and redrawn based on footage, plans, Google Maps, or imagination. It is important that the existing structures are believable on a technical level.

The spatial program is provided, to allow students to focus their study capacity on the complexity of the overall task. The design process will be structured cumulatively, meaning that the design development will solve tasks step by step and regarding their scale. The specific selection of a drawing, a simulation, or a representation as a medium of excessive language will serve as a carrier for design development. The key strategy will be to delve into the incremental steps of architectural scale successively. A successful process will thus lead to partial results for the design being completed at the first meeting. A "final" design resulting from a selection from many final attempts should be avoided.

SITE

Innsbruck, Salurner Straße 20



ARCHITECTURAL PROGRAM

Mixed-use building. Will be presented during the semester.

LITERATURE

Benjamin, Andrew (2006): Surface effects. Borromini, Semper, Loos. In The Journal of Architecture 11 (1), pp. 1–36. DOI: 10.1080/13602360600636099.

CALABRESE, OMAR (2017): Neo-Baroque. A sign of the times. [S.l.]: Princeton University Press.

Colletti, Marjan (2010): DigitAlia. The Other Digital Practice. In Marjan Colletti (Ed.): Exuberance. New virtuosity in contemporary architecture, vol. 80. Chichester: Wiley (Architectural design, 80,2), pp. 16–23.

Colletti, Marjan (2016): The Awesome and Capricious Language of Past, Present and Future Digital Moods. In Matias del Campo (Ed.): Evoking through design. Contemporary moods in architecture, vol. 86. Oxford: John Wiley & Sons (Architectural design, vol. 86, 06 (November/December 2016)), pp. 118–125.

Colletti, Marjan (2017): Post-Digital-Neo-Baroque - Reinterpreting Baroque Reality and Beauty in Contemporary Architectural Design. In Walter Moser, Angela Ndalianis, Peter Krieger (Eds.): Neo-Baroques. From Latin America to the Hollywood Blockbuster. Leiden, Boston: Brill Rodopi (Postmodern studies, volume 55).

Lynn, Greg (1999): Animate form. New York: Princeton Architectural Press.

INSTRUCTOR CONTACT INFORMATION

Marjan Colletti marjan.colletti@uibk.ac.at

Peter Massin peter.massin@uibk.ac.at

Catalina Tripolt catalina.tripolt@uibk.ac.at

Oliver Hamedinger