LESS IS MUST

EAAE ANNUAL CONFERENCE
Münster School of Architecture 2024

BOOK OF ABSTRACTS

Münster 28 - 31 August 2024

IMPRINT

European Association for Architectural Education
Association Européenne pour l'Enseignement de l'Architecture

EAAE Annual Conference 2024
LESS IS MUST
Book of Abstracts
28th — 31st August 2024

FH MÜNSTER
University of Applied Sciences

MSA FB Architektur
Münster School of Architecture

MSA | Münster School of Architecture
Leonardo Campus 5
D-48149 Münster, Germany

EDITORS and DESIGN

Joachim Schultz-Granberg
Mellina Blatt

PUBLISHER

EAAE Publisher
ISBN: 978-90-831271-4-9
ISBN/EAN: 9789083127149

CO-PUBLISHER

University of Applied Sciences Münster
ISBN: 978-3-947263-42-4
DOI: https://doi.org/10.25974/fhms-19304

SCIENTIFIC COMMITTEE MSA

Daniel Blum
Kazu Blumfeld Hanada
Verena Butt
Tim Elser
Jürgen Reichardt
Anja Rosen
Kirsten Schemel
Sielke Schwager
Joachim Schultz-Granberg
Kristina Sträter
Manuel Thesing
Neil Winstanley

SCIENTIFIC COMMITTEE EAAE

Michela Barosio, Politecnico di Torino
Alberto Bologna, Sapienza Università di Roma
Ivan Cabrera i Fausto, ETSA Valencia
Roberto Cavallo, TU Delft
Patrick Flynn, TU Dublin
Nicolás Mariné, Universidad Politécnica de Madrid
Rodrigo de la O, Universidad Politécnica de Madrid
Tenna Doktor Olsen Tvedebrink, Aalborg Universitet
Claus Peder Pedersen, Aarhus School of Architecture
Mia Roth, University of Zagreb
Luis Filipe dos Santos, Aarhus School of Architecture
Tim Seidel, FHNW University of Applied Sciences and Arts Northwestern Switzerland
Sally Stewart, Glasgow School of Art

CONFERENCE ORGANIZATION

LOCAL ORGANIZING COMMITTEE
Felix Müller
Jürgen Reichardt
Joachim Schultz-Granberg
Martin Weischer

MANAGEMENT
Amelie Austermann, Dana Reins

EAAE SECRETARIAT
Céline Monbailliu

PROOFREADING AND CONSULTANCY
Mark Kammerbauer, Nexialist Agency for Research and Communication

WEBSITE
https://eaaemuenster.eu
Felix Müller, Web Design
Luca Büning, Web Development

PUBLIC RELATION
Jens Peters
Chantal Keyvork
Team Public of the MSA

MEDIA PARTNER

BauNetz CAMPUS

REGIONAL SUPPORT
Special thanks goes to TECE SE.

We thank all speakers, respondents, moderators, student volunteers, colleagues and administrative staff from the MSA who provided the venue.

GENERAL SPONSOR

VELUX®

BOOK OF ABSTRACTS

Münster 28 - 31 August 2024

FH MÜNSTER
University of Applied Sciences

MSA FB Architektur
Münster School of Architecture

BOOK OF ABSTRACTS

Münster 28 - 31 August 2024

EAAE

https://www.eaae.be

The European Association for Architectural Education is an international, membership-based Association organizing architectural schools in Europe. Membership is not limited to countries that belong to the European Union, all European countries may participate. The EAAE is a non-profit, Belgian registered organization.

The purpose of the Association is to advance the quality of architectural education and also to promote the quality of architecture in Europe. The Association provides a forum for generating information on aspects of architectural education and architectural research.

The mission of the Association is to build a network of European schools of architecture, fostering discussions, exchanges and a common policy in Europe to advance the quality of architectural education. The EAAE promotes the interests of member schools as institutions and academic environments.

MSA

www.fh-muenster.de/fb5

The MSA I Münster School of Architecture was the first architecture department in Germany to be awarded the UIA/UNESCO certificate of quality in 2020 and is thus recognised worldwide. Teaching and research is represented by personalities from national and international professional practice. The MSA maintains diverse international relationships and university collaborations and is characterised by specific, innovative teaching formats, especially in the MA programme.

With its BA and MA degree programmes, the school focuses on an holistic approach with an explicit concept- and practice-oriented emphasis on design and construction, which is complemented by a wide range of academic subjects. The omnipresent discourse with the professional and academic world and the constant deliberation on the question of the requirements for a balanced curriculum reflect both the necessary substantial continuity and the change in our professional profile - caused by technological, social, economic, ecological and cultural transformations. - The school responds to this, for example, with the introduction of prototypical teaching fields such as “circular construction” and “data driven design”.

The MSA is located in the centre of Münster’s creative district, the Leonardo Campus, in the immediate vicinity of the Academy of Fine Arts and the MSD Münster School of Design. Special studio spaces, a comprehensive library and an outstanding materials library, well-equipped workshops, a digital laboratory and extensive computer pools provide the best conditions for creative study.


WELCOME
LESS
IS MUST
EAAE ANNUAL CONFERENCE
Münster 2024


ations
Pdations
overview
day 01

Content

PRESIDENT'S MESSAGE

Prof. Oya Atalay Franck
President of EAAE/AEEA

Embark on the journey towards a more graceful future today! Our dynamic ecosystem is in perpetual evolution. As architects and planners, we play a pivotal role in shaping it. In educating aspiring architects, planners and designers, as well as in conducting research on all facets of the built environment, there is a pressing need to prioritize sufficiency and embrace interdisciplinary approaches as never before. We eagerly anticipate a multitude of perspectives, bold collaborations and profound revelations as we convene for our annual gathering in Münster: Let us engage in open dialogue, sparking inspiration and mutual enrichment.

MISSION MSA

Prof. Martin Weischer
Dean of MSA untill August 2024

Prof. Kirsten Schemel
Dean of MSA

The EAAE Conference 2024 will take place in Münster at the FH Münster - University of Applied Sciences and the MSA | Münster School of Architecture. Architectural education today is in a state of upheaval. The great acceleration – the drastic increase in the measurable parameters of human activity – requires an examination of the enormous quantitative effects of spatial development, planning and architectural production.

This also applies to the qualitative aspects with which the corresponding professions are entrusted: topology and typology, identity and heritage, structure and sculpture, dimension and scale, materialization and sensual experience, light and shadow and many more, which are and remain formative for our built, physical living environment. These essential design parameters are also capable of addressing the issues of our time in a holistic, complex and meaningful manner, which requires more than purely quantitative approaches.

In addition, the relevance of architectural interventions comes into play and requires a serious examination of the responsibility of future architects.

For this reason, the MSA organising committee has chosen the theme LESS IS MUST for the 2024 EAAE annual conference in Münster. It is our intention that this important topic transforms into an attitude.

VICE PRESIDENT

Prof. Dr. rer. nat. Isabelle Franzen-Reuter

Vice-President for Teaching, Sustainability and University Planning

This conference offers room for a genuine reflection on the academic standards and innovative spirit that thrives here at Münster University of Applied Sciences. We are honored to host this event, and I would like to take this opportunity to thank Prof. Weischer and Prof. Schultz-Granberg and the entire team at the Münster School of Architecture for their extraordinary efforts in applying to host and especially for organizing this conference.

The topic of the conference, LESS is MUST, is particularly relevant in today's world. As we face the challenges of climate change, resource scarcity, and increasing urbanization, the principles of minimalism and efficiency in design are not just ideals to aspire to – they are imperatives that must guide our work and our teaching. The discussions to be held and ideas to be shared on this occasion will contribute to how we approach these challenges in architecture and urban planning. Such exchanges allow us to find new ways of designing spaces that are not only functional and beautiful but also sustainable and mindful of our environmental responsibilities. At the Münster University of Applied Sciences, we are committed to addressing these global challenges through our strategic focus on two key areas: internationalization and sustainability. These are not just buzzwords to us, they are an integral part of our mission and our vision as a leading higher education institute.

Internationalization is central to our academic strategy. We believe that by encouraging a global perspective, we enhance the educational experience of our students and better prepare them to navigate and contribute to a rapidly changing world. This conference communicates our commitment to international collaboration. The exchange of ideas, methods, and cultural perspectives is invaluable in architecture, where the local and the global are always in dialogue.

Sustainability is another pillar of our institutional strategy, and as a commitment, we take it very seriously. Our Academic Scorecard for sustainability provides a framework that guides how we integrate sustainability in our academic programs, research initiatives, and campus operations. The topics attendants address at this conference correspond well with our aims in promoting sustainable development in all areas of study and practice. As architects and educators, you have the potential to influence how future generations will live in and interact with their environments.

Finally, I would like to thank the European Association for Architectural Education for entrusting us with the responsibility of organizing this event. We are proud to be part of a community that values excellence in architectural education and research, and we look forward to contributing to progress in these fields through conferences such as LESS is MUST.

KEYNOTE

apl. Prof Dr. Niko Paech
Professor for Plural Economy and expert for degrowth strategies

All you need is less – An introduction to post-growth economics

››› 28-08-2024 at 4 p.m.

postwachstumsoekonomie.de

KEYNOTE

Learning within planetary boundaries

Prof. Andrea Klinge
Professor for Construction and Design at the KIT Karlsruhe Institute of Technology and director of ZRS Berlin

››› 28-08-2024 at 5 p.m.

www.zrs.berlin
https://kue.ieb.kit.edu

Prof. Eike Roswag
Professor for Constructive Design & Climate Adaptive Architecture at Natural Building Lab, TU Berlinand director of ZRS Berlin

www.zrs.berlin
www.nbl.berlin

2upertecture - 2nd-hand-Bau-Uni

KEYNOTE

Till Gröner

Founder of Supertecture

››› 29-08-2024 at 2 p.m.

www.supertecture.com

Context, conditions & form

KEYNOTE

Teresa Blasco

Dorte Mandrup A/S Copenhagen

››› 29-08-2024 at 3 p.m.

https://dortemandrup.dk

KEYNOTE

Werner Sobek
Werner Sobek AG, Stuttgart, DE

What went wrong?

››› 30-08-2024 at 6 p.m.

www.wernersobek.com

CALL FOR PAPERS

Rethinking positions in architectural education, research and practice

Call for papers and concepts for the 2024 EAAE Conference in Münster

„Oh my God! [...] There's the Earth coming up.

Wow, that's pretty."

Astronaut William Anders's spontaneous enthusiastic reaction on December 24, 1968 during the Apollo 8 mission led to one of the most influential photographs ever taken.[2] Showing the Earth as a beautiful, vulnerable and seemingly self-contained system from far beyond its boundaries inspired environmental movements around the globe.

While scientists and environmentalists raised the awareness of our planetary limitations, the Club of Rome report "Limits to Growth" being their most prominent statement, architectural practice and academia largely remained confined within the predominant image of architectural production of "less is more".

In the course of history, human activity has become a factor that decisively influences living conditions on earth. It impacts the climate, biodiversity, geology and our ecosystem to such an extent that in 2016 an international committee of geologists proposed the introduction of a new epoch: the Anthropocene.[3] Considering that building activities are factually responsible for the majority of global carbon emissions and waste production, we need to respond to these current urgencies in kind: LESS IS MUST.

As architects and educators, we ask the question: How can architectural education stimulate this premise? The 2024 EAAE conference in Münster is intended to offer room for the critical examination and discussion of architectural education, its routines, ideals, targets, comprehensiveness and scale. The conference themes encompass educational fields and aspirations, such as programming, architectural and urban design, construction and visions of the future.

The Münster School of Architecture invites thinkers and makers from European universities, experts, practitioners and visionaries to present their perspectives. We are interested in how architectural education can foster the capability to create meaningful and relevant contributions to the future of the (built) environment.

Perhaps we are about to witness a new Earthrise moment that can inspire an abundance of ideas and concepts for architectural education, at this turning point in human history? What more can LESS offer?

1 „Earthrise" image on the right: www.nasa.gov/image-article/earthrise-3/, downloaded on 31/01/2024, Image: NASA

2 Jennifer Levasseur, space history curator at the National Air and Space Museum in Washington DC https://www.newscientist.com/artic- le/0-how-the-stunning-earthrise-became-the-worlds-most-famous-photograph/ (download on 31/01/2024)

3 https://www.science.org/doi/10.1126/science.aad2622 (downloaded on 31/01/2024)

Earthrise 1968 [1]

WHAT IS LESS ?

To reintegrate human life in our ecosystems, three guiding strategies of sustainability exist, usually referred to in this order: efficiency, consistency and sufficiency. The technological promise of efficiency strategies (e.g. energy-saving regulations) has shaped the debate on sustainability for quite some time. The concept of consistency offers a greater degree of integration and points towards a renewed relationship between humans and nature (closed cycles instead of externalization).

However, neither of these strategies for the integration of our lifestyles in the system of planet earth seems sufficient to achieve the goals we are necessitated to reach. Rebound effects demonstrate that pure (technological) optimization does not reduce the consumption of resources in the overall balance. The concept of sufficiency allows us to discuss the notion of LESS, of reduction as well as enrichment. The title of the 2024 EAAE conference proposes a productive succession of above mentioned three key strategies:

First, sufficiency is considered the point of departure for any kind of project that can address questions on actual needs. Subsequently, consistency has the potential to embed a project within its context of available resources. And finally, efficiency addresses the relationship between effort and result.

Mies van der Rohe is inseparably associated with the phrase “less is more”. At the beginning of the 20th century, the phrase aimed at minimalism in architecture and the removal of elements that were determined to be unnecessary in order to achieve a sense of elegance and clarity in design. Less was understood differently at the time in the sense of the liberation from ornamentation and became a paradigm for architectural design encompassing a pure and reduced aesthetic design vocabulary.

Especially in the field of architectural education, it became an axiomatic recipe for a period of pedagogic practice that prevails to this day – ignorant of the inclusive potential of architecture regarding the climate as a context, the availability of resources or integrated thermal comfort.[4] This modernist notion of „less“ needs to be redefined in the light of current challenges.

4 cf. Reyner Banham. Architecture of the Well-Tempered Environment. Univ. of Chicago Press, 1969

The EAAE 2024 call LESS IS MUST

In 2021 at the 1st deans’ summit of the European Association for Architectural Education (EAAE),“The Oslo Pledge” was proposed, determining the climate crisis as the by far most crucial framing of academic responsibility in the fields of architecture and planning. Furthermore, the Pledge expands the scope beyond spatial parameters by including ethical values, such as diversity and equality.

The call for LESS IS MUST is also the main premise for the innovation of architectural education today. It addresses the inherent capability of architectural de-

sign and design thinking to pave the way by considering integrated parameters and multiple strategies. Architectural methods such as mapping, drawing or model building are not only means to develop a beautiful design, but also powerful tools for understanding sites, societies and systems. Architectural thinking and practice are able to manifest visions and imagine futures for (currently unknown) protagonists. It means conceiving and acting, finding and founding and a manner of exploring, instead of exploiting resources without reflection.

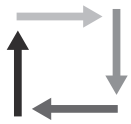
The call is an encouragement for experimenting, for a change of mind and heart, as well as getting involved with a profession and its changing face, in order to cope with major endeavours of transformation. This can afford architectural education the ability to incorporate transformative literacy, critical understanding and political awareness in order to create not only spaces, but also environments and patterns of life for our future.

LESS IS MUST aims at a holistic understanding of reduction and concentration. By focusing on essential elements and building components, architects can create designs that demonstrate consciousness towards climate and resources, sensitivity towards materials and circularity, cost effectiveness without neglecting grace, elegance and beauty. LESS IS MUST encourages architectural students and educators to carefully consider every element and detail, ensuring that each contributes meaningfully to the overall design, while critically deliberating on what may detract from its quality. Integrated approaches can enhance the sensitivity of building with and not against nature, and discuss changes in the procedural implementation of planning concepts. By contouring urgent questions before uttering wrong answers, we recall successful methods from the medical world, such as healing with anamnesis, diagnosis and therapy. With an adapted logical workflow in future architectural education, by raising awareness of the responsibility of architectural creation and its effects on the global scale of the earth, we can gain an understanding that allows us to care for the beauty of the Earthrise and its relevance to our natural assets and livelihoods.

7 PANELS

Challenges affecting the future of architectural education

The panels deal with questions on specific topics as well as their relevance to education. These topics are roughly related to departmental expertise and scales of architectural teaching. Education as the central cross-sectional subject of the conference is an important focus of all panels.

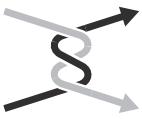


01 **PROGRAMMING**
LESS form, more performance
Holistic programming of climate responsive architecture

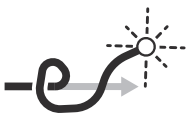
02 **DESIGN**
LESS new, more preservation
Ideational and typological rethinking of existing buildings

03 **STRUCTURE and CONSTRUCTION**
LESS in structure
Holistic programming of climate responsive architecture

04 **RESSOURCES and CIRCULARITY**
LESS waste
Circularity and urban mining



05 **URBAN DESIGN**
LESS is happiness
Sufficiency and good life in urban design



06 **EDUCATION CONCEPTS**
LESS routine, breaking new ground
New concepts in architectural education

07 **VISIONS**
LESS utopia
Architectural visions and future demands (student workshop)


adidas

LESS form, more performance

Holistic programming of climate responsive architecture

Prof. Jürgen Reichardt
MSA

Holistic design and engineering approaches offer the potential to realize strategies aimed at "form follows performance". Such strategies serve to integrate multiple component parameters, especially those oriented on climate responsibility. As a result, the focus widens, from individual requirements of a single building or structure to agglomerations of building structures, influenced by specific local climate and site factors. The basis for such strategies are synergetic programming approaches that encompass the resulting project life cycle in its entirety. The underlying programming "grammar" includes aspects of site, climate, design, construction, execution, operation, maintenance, renovation, reuse and others. We strongly suggest that the balancing of parameters (geography, ecology, technology, volume, energy, envelope, floor plan / section, material and ventilation) must be distinctively programmed, creatively designed, efficiently engineered and generally optimized. This systematically spans the very beginning of a project and the entire planning, building and life cycle process. The holistic aim is to achieve a comprehensively optimized solution that is practical, climate responsive and sustainable. Finally, the underlying programming grammar of the project should minimize the amount of disturbances to the existing ecology and the carbon footprint, based on a rigorous, yet responsive checklist.[1]

The call for papers was intended to motivate research in terms of better "balancing" these aspects of a programming grammar in architectural education. This includes, but isn't limited to questions as follows:

- Are holistic programming approaches already included in international architectural and planning curricula and what related teaching concepts and tools find use?
- What cognitive skills do students need to demonstrate in order to acquire network skills and teamwork ability?
- Does the aim of balancing art, beauty, programming and performance lead to confusion or even conflict?
- Which (digital) tools do students need to propose performance-based design and engineering solutions?
- Should we develop more „app-type" teaching methods for an increasingly integrated architectural and engineering education?

1 - Bhattacharya, I., Rajapakhsa, U., Reichardt, J.: Novel Concept of Technologies of Sustainable Building Design, Part of the Implementing the UN Sustainable Development Goals, Regional Perspectives book series, first online 30 August 2023

Transforming architectural education – Focus on the preliminary design phase exploring architectural creativity: 3 workshops experience

Ewa Stachura
Cracow University of Technology, Cracow, Poland

Amos Bar-Eli
Holon Institute of Technology, Holon, Israel

This paper advances innovations for the preliminary design phase, which is the core of an architecture student's creativity and self-development toward professional responsibility. Hence, an experimental didactic module consisting of three workshops running separately or as a series is proposed for a course curriculum.

"From Form to Form" delves into creativity as a foundational element in the design process, cultivating inspiration and honing essential skills in model-building, discourse analysis, and photography. The "Listen to the City" workshop serves as the guiding principle, which fosters a deep understanding of urban environments and the intricate web of social, cultural, and historical factors that shape them. Through these immersive city exploration and self-discovery exercises, students develop a mindset attuned to the complexities of urban intervention by mediating competing interests and narratives to create sustainable environments. Finally, the "VirtuSquare" student design workshop transcends the boundaries of reality, juxtaposing the familiar (known) with the remote (unknown). Participants use contemporary tools of observation and representation, navigating the blurred lines between the tangible and the virtual to anticipate bold and imaginative design solutions.

The workshops facilitate a holistic approach to architectural creation, equipping participants with practical skills, creative insight, attuned mindset and technological fluency.

After seeing the word LOVE and photo, I started to wonder how many emotions and thoughts love can evoke. First thoughts after seeing the person you fall in love with, confusion, sometimes even hate. We can often feel as if we are locked in our own head, just like my character in a jar. Others may guess what we feel, but only we really experience it.

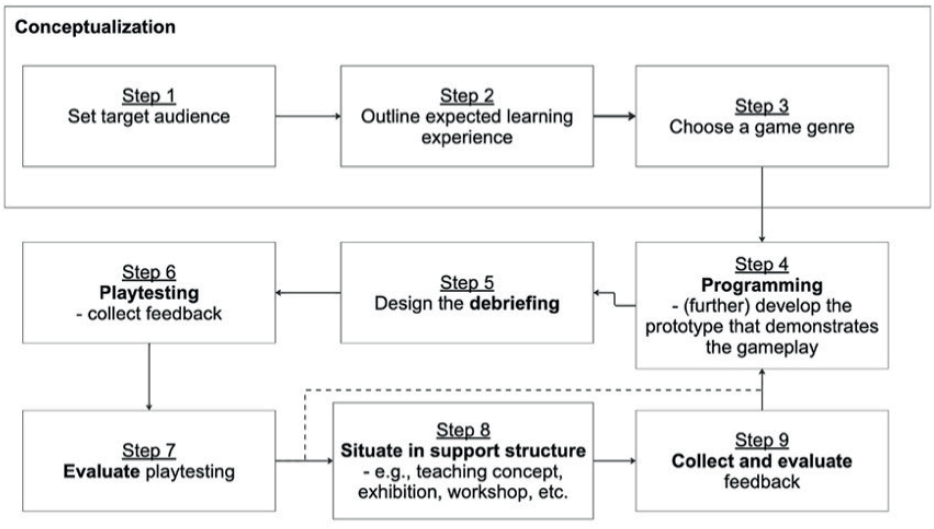
"Avantgarde or uncool?" . Lessons learned from developing a prototype serious game on long-term building perspectives

Fabian Kastner
ETH Zürich, Switzerland

Orkun Kasap
ETH Zürich, Switzerland

Stéphane Magnenant
ETH Zürich, Switzerland

In Switzerland, despite policy efforts to transition to a high-quality built environment, current practices can be characterized as unsustainable. Regarding the potential of engaging tools that enable informed dialogue about revaluing existing buildings, compelling digital approaches targeting the next generation of built environment professionals are thus far lacking. This paper showcases empirical research on the iterative development of a serious game prototype to meet outreach targets. The prototype's learning objective is to enable players to experiment with long-term perspectives of existing buildings. In essence, this paper emphasizes the role of a transdisciplinary approach to game development and the relevance of situating gaming experiences. Feedback from playtesting sessions with a specified younger target audience is utilized to improve the interface of a previously developed prototype. Three interface requirements for game-based digital building simulation models were identified and implemented. Future research could use the adapted prototype to explore a creation-based gaming approach that focuses on learning while creating games. Thus, the prototype offers a two-way didactic potential (gaming and game creation). Finally, the integration of a set of building values in a playful way is reflected in using the example of the alleged conflict between building preservation and "sustainable" refurbishment (depicted as deep renovation). The prototype deployment within an exhibition set up at the Museum für Gestaltung in Zurich (Switzerland) in 2023 allows us to validate a workflow to design serious games for didactic purposes. This workflow can be used in further game development projects or studies.



Neighborhood-oriented and regenerative programming in teaching

Carsten Schade
Technical University of Munich

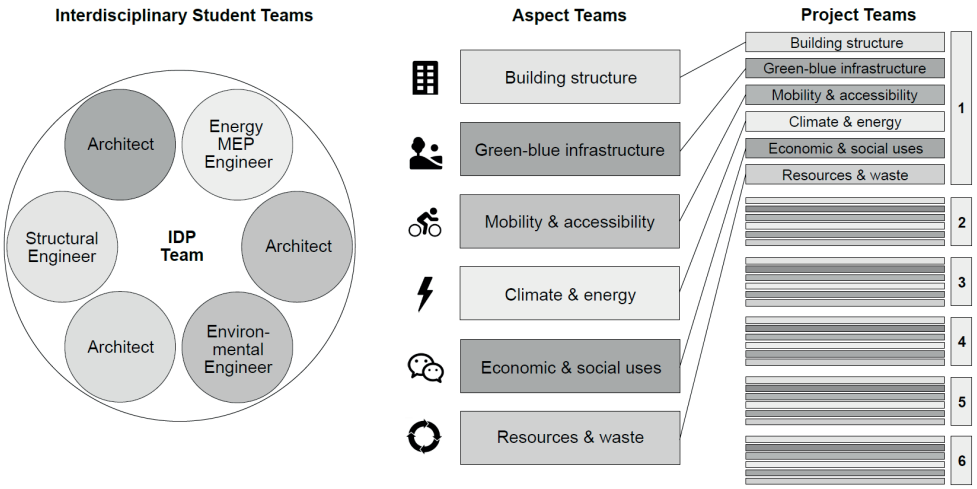
Johannes Staudt
Technical University of Munich

Arno Denk
Technical University of Munich

Werner Lang
Technical University of Munich

The Interdisciplinary Project (IDP) is a central teaching format of the master's degree program "Resource-efficient and Sustainable Building" at the Technical University of Munich. The paper presents the IDP design studio as a case study for a transformative approach to sustainable building design. It introduces the "neighborhood-oriented and regenerative programming" approach: First, students analyze sustainability aspects at the neighborhood level and develop an urban vision. Then, they combine it with the building analysis of an existing building to develop a building transformation concept. This forms the basis for creating mixed-use, resilient building designs with added value for the neighborhood.

The paper demonstrates the pivotal role of programming in the design process, linking urban-scale issues to building design. This way, collaborative programming can incorporate considerations of human well-being and planetary boundaries to address global challenges. A systemic approach supports dealing with high complexity. To recognize interdependencies for building concepts and design, skills of interdisciplinary collaboration such as communication and conflict management are crucial.



LESS new, more preservation

Ideational and typological rethinking of existing buildings

Prof. Kazu Blumfeld Hanada
Prof. Kirsten Schemel
Prof. Manuel Thesing
MSA

In the future, the essential and most significant part of architectural work will be the preservation and maintenance, the adaptation and reuse, and the further development or continued transformation of existing spaces. Experts largely agree on this. If we intend to meet the climate targets we have set ourselves, we will only be able to create new spaces to a very limited extent. Even a high recycling rate and a radical shift to renewable and circular building materials cannot change this.

To date, very few building regulations and standards in European countries adequately reflect the specific and complex requirements of this field. Likewise, only a few architecture faculties address this crucial future design task in their curricula with the necessary depth and complexity.

In architecture — and especially in architectural education — the dialogical examination, alteration, or improvement of an existing building requires more differentiated analysis and, in some cases, alternative design approaches. It also necessitates posing a new set of questions.

This EAAE panel therefore addressed the following key topics and presented new methods and examples of best practice:

- How can design approaches convey the necessary know-how regarding the different forms of historical and ideational relevance — from banal functional buildings to listed contemporary heritage — and foster sensitivity to the identity and specificity of an existing building?
- How can specific design and technical expertise in dealing with physical assets — especially in terms of preservation, repair, and further development — be taught and integrated in the design process with regard to feasibility?
- Is there a need for additional specialists, or for specific technical knowledge, tools, or methods?
- Which intelligent and poetic strategies and specific methods can we apply in our design approach to existing buildings, and how can we, as designers, engage in a dialogue with them?

bauHOF NGS: A design-build laboratory for sustainable constructions and collective actions

Tim Simon-Meyer
Bauhaus-Universität Weimar

Luise Leon Elbern
Bauhaus-Universität Weimar

Julius Tischler
Bauhaus-Universität Weimar

Sebastian Schröter
Bauhaus-Universität Weimar

In response to the pressing demand for sustainable spatial practices and for systematic change, we propose an experimental effort that challenges traditional approaches in architectural education and research, fostering sustainability, inclusivity and collaborative decision-making. Situated in the rural area of Niedergrunstedt, our project "bauhHof NGS" revitalizes a historic farm, transforming it into a design-build laboratory for minimal and mobile constructions and multidisciplinary exchange.

Emphasizing transparent negotiation and the importance of local resources, including material, physical and social knowledge, "bauhHof NGS" seeks to establish a platform that encourages interaction among students, the local community, and various urban and rural realities.

Through a series of workshops, expert inputs and community events, we test diverse and interdisciplinary approaches and methods for co-creation. The students learn how to approach, communicate and deal with different needs and ideas within their group and how to integrate and negotiate different visions by partnering with various stakeholders, including neighbors, technical experts and policymakers.

We never see anything clearly: On the aesthetic qualities of an unfinished whole

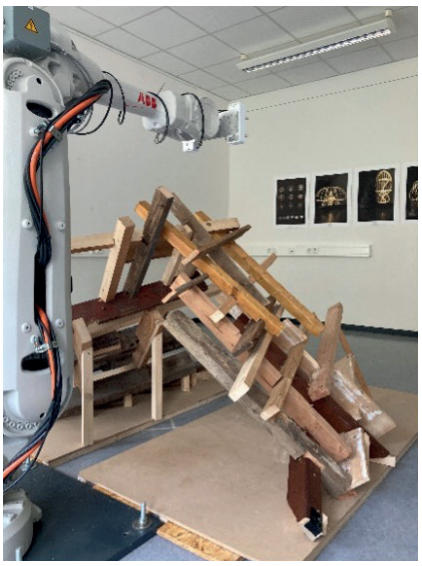
Heiner Verhaeg
Bergische Universität Wuppertal

Holger Hoffmann
Bergische Universität Wuppertal

We propose this paper as a response to the conference panel topic Design. LESS revolves around the concept of the "non-finito" and effects of unfinishedness as an important aesthetic condition for contemporary architectural projects.

It briefly formulates a theoretical background for a conceptual relation of unfinishedness, refinement and wholeness in order to then outline an architectural strategy, which in turn is based on the combination of disciplinary knowledge and computational methods.

The processes and results described point to an architecture that continues a long tradition of both appreciation of found conditions and elaborate methods for iterative refinement. We propose a design approach based on the increasing scarcity, or 'less-ness', of materials that favors the aesthetic richness of traces, imperfection and unfinishedness over the modernist concept of the pristine, perfect and novel.



above: "Stack a Mess", robotic deposition, DME 2021

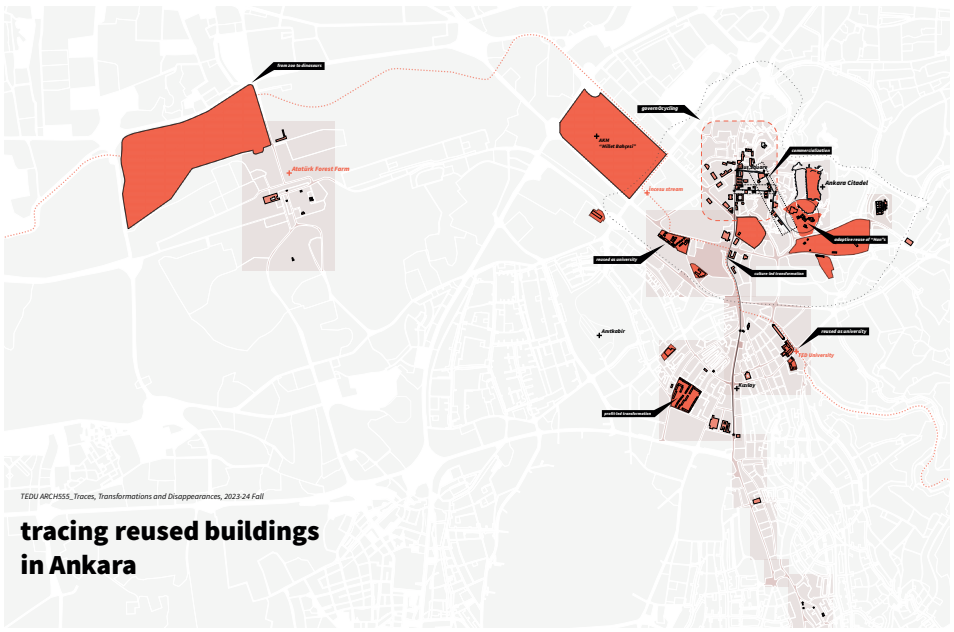
left: "Stack a Mess", algorithmic deposition, DME 2020/21

Tracing adaptive reuse in the city for a situated know-how: A research study on Ankara as an archive of reused buildings

Seray Türkay Coşkun
TED University, Ankara

Handbooks and atlases of adaptive reuse predominantly discuss and illustrate architectural examples in a case study format with a practice-focused approach. However, examining reused buildings collectively rather than individually prompts critical attention to what is already in the urban fabric and cultivates a care-based approach to built heritage in response to the changing face of an architectural practice focused more and more on transformation. Operating with a research-based approach, the course on traces, transformations and disappearances suggests digging into the city of Ankara as an experimental archive of adaptive reuse.

Students are engaged in acts of tracing, mapping and indexing in order to form a collective archive of reused buildings by navigating through sites, archives, design practices, memories and ephemera. This research study situated in the very city that the students live in opens the possibility of experiencing existing buildings in their post-reuse periods. It thus expands the understanding of adaptive reuse not as a design intervention but as a process by fostering a comprehensive assessment of sustainability.



tracing reused buildings in Ankara

The transmission of intangible values in vernacular architecture: The case of the Valencian barraca

Marcel·lí Rosaleny-Gamon
Escola Tècnica Superior d'Arquiterctura- Universitat Politècnica de València

Josep Eixerés-Ros
Escola Tècnica Superior d'Arquiterctura- Universitat Politècnica de València

In recent years, the study of vernacular architecture has gained relevance among some professionals in the field of architecture. These professionals have understood the importance of the lessons in environmental, sociocultural and economic responsibility that this type of architecture offers. They believe that recovering past ways of life and construction techniques could be key to addressing the challenges that future generations will face.

These lessons are generally based on basic survival principles and, above all, on the rational exploitation of available resources in a specific region. Additionally, there is a desire, or even a need, for the communities inhabiting these territories to be self-sufficient and autonomous. This is due to the limitations imposed by ways of life with lower technological development, which unintentionally lead to a more responsible and sustainable community.

These attitudes, which result in certain ways of building, are fundamentally based on the intangible values of these vernacular communities. Thus, in a discipline with such a close relationship to the material, the recovery of these intangible values could be essential when it comes to developing new ways of building or living in a certain region and thereby addressing the global changes we already face every day.

LESS in structure

Efficiencies in construction, technology and economy

Prof. Tim Elser
MSA

In general, the term "efficiency" describes the relationship between the means used and the results achieved. In structural engineering and construction, efficiency criteria are often used for purposes of optimization, for example, to build at a minimum of financial investment or as quickly as possible.

Due to the fact that the construction industry causes 40 % of global CO_2 emissions, the CO_2 efficiency of buildings and especially their structure is of particular importance. Engineering constructions with adequate materials, budgets or space efficiency is not necessarily in line with global CO_2 emission targets aimed at limiting global warming to 1.5 degrees. Thus, efficiency in structural terms requires a new definition in the context of climate change in order to play a central role for holistic approaches to architectural education.

The category "efficiency" welcomed papers that present new insights and approaches in line with this new concept of CO_2 efficiency in planning processes aimed at the optimization of structures and the construction of buildings.

Related and new approaches address the following questions:

- How can low-tech materials, related engineering skills and traditional craftsmanship contribute to building with regional materials and construction methods?
- How can structural capacities and quality requirements be achieved in the reuse of materials and building elements?
- How can we balance "heavyweight" and "lightweight" structures and, thus, the advantages and disadvantages of hybrid construction types?
- Which approaches are suitable to compare criteria of "high-tech" and "low-tech" building technologies?
- Which tools are suitable to compare and optimize the CO_2 footprint of buildings, their structures and their material characteristics?
- Which design criteria related to CO_2 (such as kg CO_2 e/m^2 or EUR/kg CO_2 e) are appropriate for new building projects?
- Is building nothing a better option than building something?

Approaching structures through studies of natural geometries and optimization technologies

Irmgard Lochner Aldinger
Biberach University of Applied Sciences

Reintegrating architecture and structural engineering through new design tools offers a way to embrace a 'less is best' philosophy in response to resource constraints. It proposes teaching architects and engineers to design more with less, inspired by nature's optimization processes.

The concept of biomimetics is pivotal in using modern design methodologies to replicate natural processes. Through topology optimization, structures can be designed efficiently, minimizing material use. This method, common in the transportation industry for economic reasons, is also encouraged in building design to reduce material usage.

Several studies are presented: vertical cantilevers modeled after cacti, shell structures known for their material efficiency, and insect nests that exhibit varied functional and climate-responsive designs. These examples demonstrate nature-inspired efficient structural geometries.

Teaching architecture and engineering with shared tools such as topology optimization fosters collaboration. It combines the visualization of optimized material distribution and the assessment of structural efficiency, bridging the gap between aesthetic and functional design.

The paper stipulates that such interdisciplinary approaches can merge the disciplines of architecture and engineering, leveraging the aesthetics of efficient design to create sustainable structures.

Architectural tactics for visualizing embodied carbon

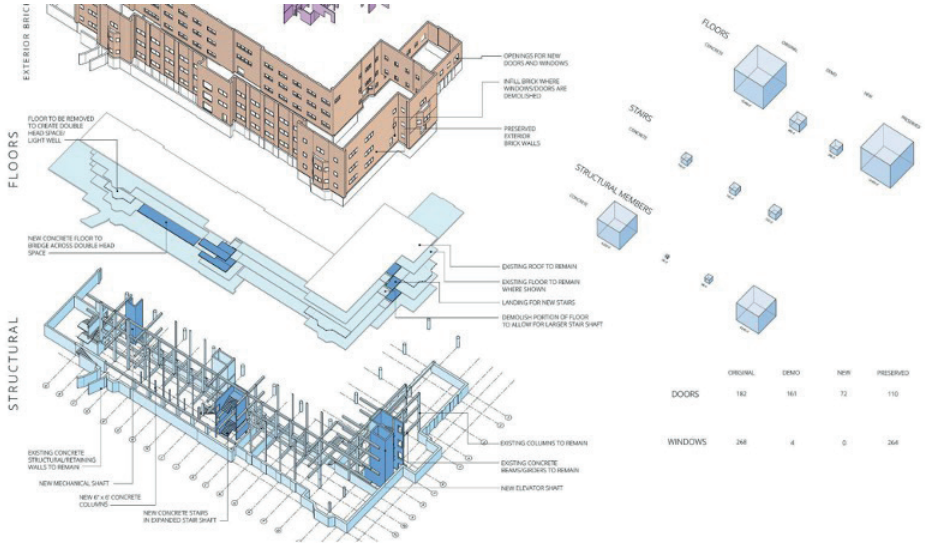
Malini Srivastava
University of Minnesota

Mike Christenson
University of Minnesota

New presentation methods offer a way to address resource scarcity and embodied carbon in building design. They emphasize that understanding embodied carbon requires not just quantitative metrics but also representational tools that link the conceptual design, building materials, construction methods and carbon footprint of architectural projects. The authors investigate various representational options —general, discipline-specific, and project-specific— highlighting how they facilitate understanding and engagement with embodied carbon.

This paper examines how representational tools help architects understand how conceptual design choices impact the carbon footprint of their designs.

We propose incorporating 3D methods to visualize the impact of embodied carbon of individual building components. The paper explores this approach in a graduate-level architecture class, where students develop design variations for a 1938 building by showing the carbon footprint. This educational approach underscores the importance of this new aspect in building design and the new skills required in practice, in order to make climate and resource conscious decisions in architectural projects.



Matrix analysis of modular systems for vertical expansion

Maria Piqueras Blasco
Universitat Politècnica de València

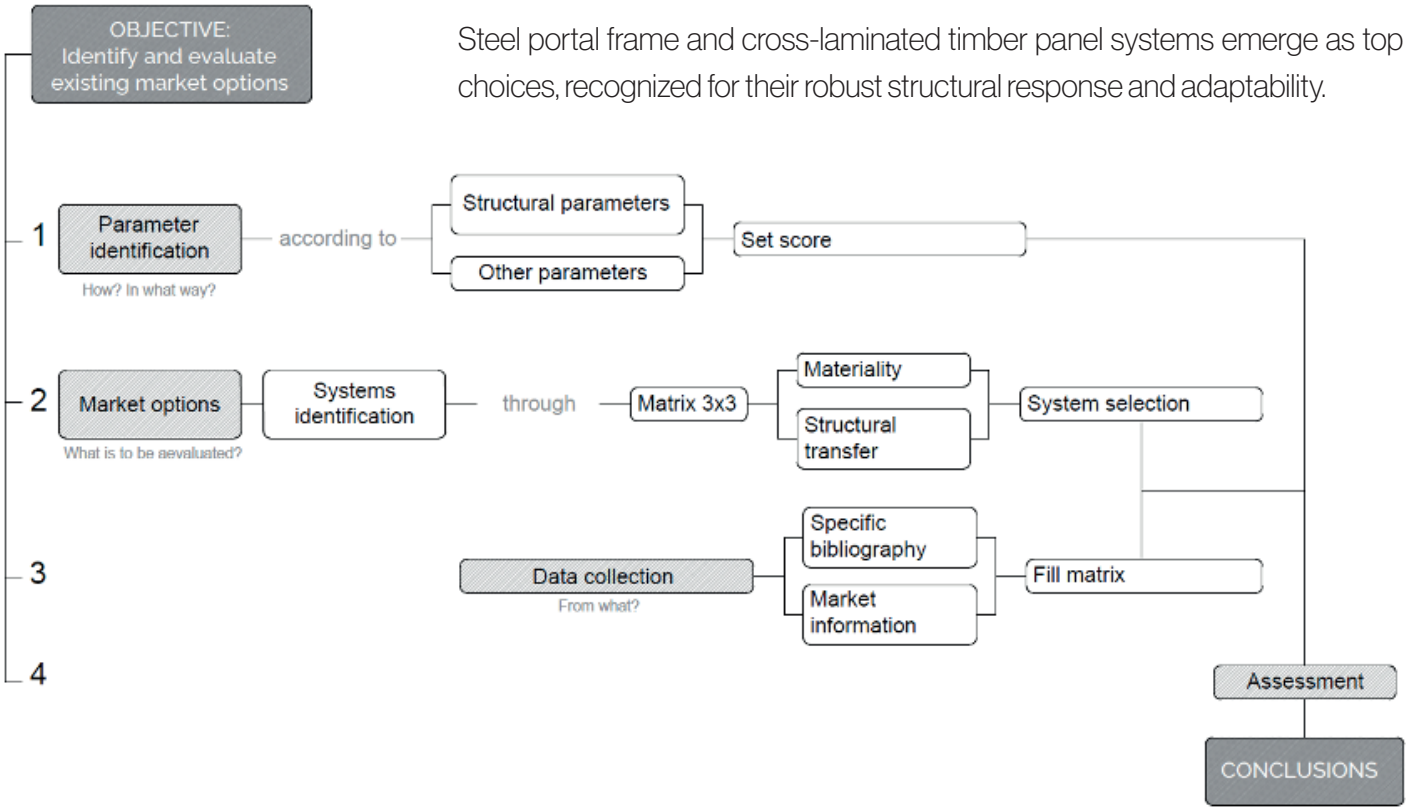
Ivan Cabrera i Fausto
Universitat Politècnica de València

Increasing the efficiency of the footprint of existing buildings instead of constructing new ones involves adding rooftop extensions to residential structures in urban areas, optimizing existing architecture. Given the constraints of some buildings due to their age, the approach relies on prefabricated, lightweight modular systems. These systems are eco-friendly, they optimize energy and material use, and they offer social benefits by creating new housing in an inner city environment.

The paper specifically focuses on volumetric modular units, a type of prefabricated construction, where components are produced in controlled environments and then assembled on-site. This contrasts with traditional building methods of on-site construction, offering benefits in terms of efficiency and quality.

The paper establishes criteria to assess the suitability of different modular systems for vertical expansion, considering factors such as material use, structural systems, efficiency, flexibility, time, costs and sustainability. A 3x3 matrix supports scoring these systems, ultimately identifying the best options for increasing building height.

Steel portal frame and cross-laminated timber panel systems emerge as top choices, recognized for their robust structural response and adaptability.



LESS waste

Circularity and urban mining

Visiting Prof. Neil Winstanley
Prof. Dr. Anja Rosen
MSA

By consuming enormous amounts of resources, humankind has created a gigantic anthropogenic stockpile of raw materials. Around 15 billion tons of mineral raw materials, metals, wood, plastics and other materials are embedded in German buildings alone. The strategy of urban mining makes use of these materials to continue building with them. However, this can be difficult. Buildings, especially those erected after World War II, weren't planned to become "urban mines". Traditional craftsmanship commonly reused items and, for the most part, natural materials. Since the beginning of industrialization, the building sector has followed the linear system of "take - make - waste". Achieving a circular economy is a key strategy for sustainable development in the Earth's circular system. Circular construction must, therefore, be an integral part of the training of architects. It must also underpin a new basic understanding in every approach to sustainable design and construction.

For the EAAE conference, we invited contributions and discussions on how circular construction is integrated into teaching at European universities. The focus was on the following key questions:

- Is circular construction included in curricula and which concepts are used to teach it?
- Which new skills do students need to acquire in order to be able to propose circular constructions?
- Which hurdles complicate planning with pre-used components or secondary raw materials?
- Which solutions to challenges of reuse in architecture can we communicate to prospective architects during their training?

Possible further topics include:

- Which legal aspects need to be taught in construction management education?
- Which tools do prospective architects need to be familiar with in order to be able to assess the impact of their work on climate and resource protection?
- What contribution can AI and digitalization make to promoting urban mining and the circular economy in the construction industry?
- How do topics of urban mining and the circular economy affect teaching?

Designing with alternative resources An educational practice review

Pelin Asa
Max Planck Institute of Colloids and Interfaces,

Stefan Neuhaeuser
Fraunhofer Institute for High-Speed Dynamics, EMI

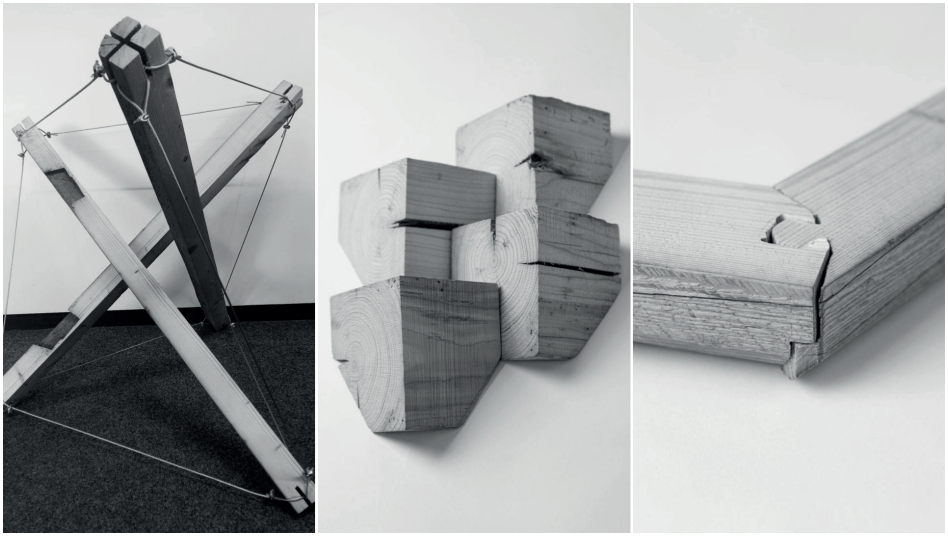
Sakiko Noda
Technical University of Berlin

Inka, Mai
Technical University of Berlin

Kerstin Wolff
Technical University of Berlin

Within a series of design seminars, we explored physical prototyping and digital tools to study the reduction of material use and the utilization of overlooked resources in architecture in light of the ongoing concerns related to timber resources. The first subject examined was material reuse in timber construction. This course introduced digital tools and design methods to study the building systems that can be achieved by using reclaimed timber. By working on full scale prototypes, the students investigated the properties of this irregular material first-hand. A second seminar focused on developing new design methods for insect- and fungus-infected timber as an overlooked construction material. Using digital design and fabrication tools, the students experimented with infected and irregular timber stock to design novel components that can be obtained from diseased logs.

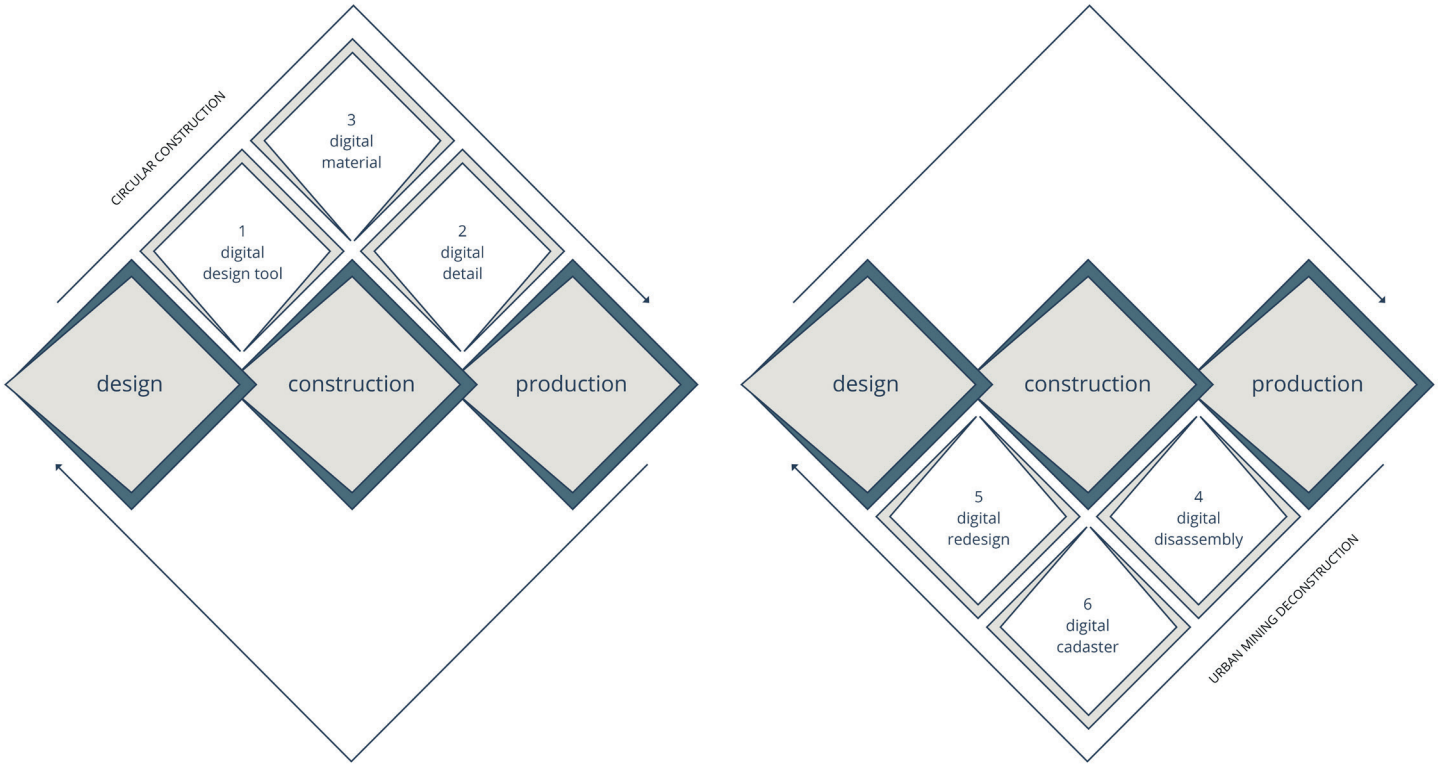
The results of these seminars demonstrated different applications for what can be achieved with alternative sources of timber through smart design choices. This paper reflects on the learning outcomes and presents teaching methods to integrate biomaterials (re)use and resource management in design education.



Pyramidal circularity against the background of individualized standardization

In architecture and building construction, a planning task is defined by multi-criteria requirements that are not necessarily directly linked to each other and therefore lead to increased complexity during the planning process. In order to simplify the overall workflow during the different phases, students should be provided with measures and tools to cope with the complexity of parameters within the entire architectural task. This is achieved by linking a system concept with a cycle-oriented approach for the construction and reversibility of buildings. Methodologically, the strategy of "Individualized Standardization" is used, which requires a balanced implementation of standardization and individualization for the development of future-proof constructions. The research results in the transition towards a new principle of circularity - a "Pyramidal Circularity". New interfaces are identified that ensure a distinct relationship between the system and adaptation planning based on digitalization and automation. A strategy for a circular construction process is provided based on six innovative interfaces. As a result, a workflow for future architectural education is proposed.

Kirsten E. Hollmann-Schröter
Technical University of Dortmund

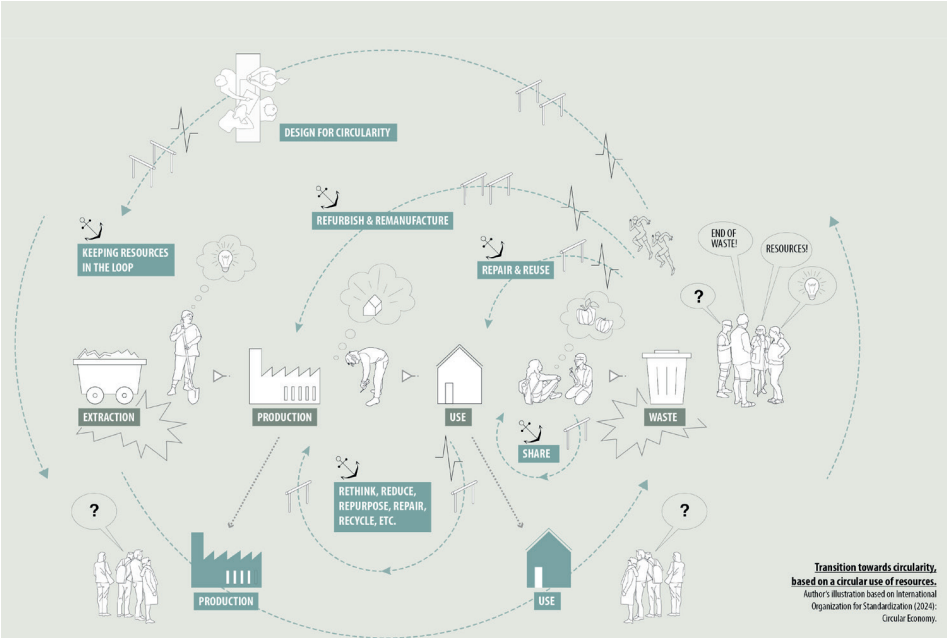


Exploring circular construction Insights into research-oriented teaching and learning

Daniela Konrad
City University of Applied Sciences Bremen

Sustainability can benefit greatly from a circular economy, due to the potential of avoiding waste and thus limiting the consumption of finite resources – or at best avoiding the latter altogether. To strengthen research-oriented learning on prevailing topics, a series of elective modules was initiated at the chair of Sustainable Planning and Building in the Urban Context, School of Architecture Bremen. The aim of the first module was to understand which theoretical and practical knowledge is available on circular construction and how learnings can be applied to future architectural design. Four key findings guide our future research-oriented teaching on circular construction:

(1) To comprehensively analyze and understand reference projects, research methods such as on-site analyses and stakeholder interviews need to be integrated. (2) Research should focus more on the origin, transportation, and storage of building materials and components. (3) The degree of circularity needs to be quantified in order to better compare knowledge gained in theory and practice. (4) Follow-up modules on the application of theoretical knowledge with emphasis on the design of single material and reversible construction details are essential.



bauHof NGS – Poetics of circular construction

Tim Simon-Meyer
Bauhaus-Universität Weimar

Luise Leon Elbern
Bauhaus-Universität Weimar

Julius Tischler
Bauhaus-Universität Weimar

Sebastian Schröter
Bauhaus-Universität Weimar

The project “bauHof NGS” challenges conventional architectural approaches by adopting the concept of “form follows availability” and circular design methodologies. These methodologies allow students to move beyond the traditional linear pro-cess of design and construction, where design typically precedes materials selection. Instead, they engaged in a reciprocal relationship where the materials themselves influence and shape the design.

Through this interaction between body and materials, questions relevant to the design are negotiated and decisions are made that are represented in drawings or models, and vis-à-vis. This hands-on approach broadens students’ understanding of circularity across dimensions of materials, construction and society based on real world experiences. The necessity of rethinking the conventional linear model of production, use and disposal was a key focus throughout the semester.

These learning experiences challenge the traditional hierarchical relationship between design and construction, theory and practice, planning and execution. They go beyond conventional classroom teaching to prepare students to make a meaningful contribution to creating a more resilient built environment.

LESS is happiness

Sufficiency and good life in urban design

Prof. Dr. Verena Butt
Prof. J. Schultz-Granberg
Prof. Sielke Schwager
MSA

Thus far, the strategies of efficiency and consistency alone were hardly capable of reducing the consumption of resources in the overall ecological balance of the construction industry. Therefore, sufficiency – a rather undervalued sustainability pathway – comes into play, especially in the wider field of urban design and under consideration of societal aspects. However, in urban design education, the concept of sufficiency has only received fleeting recognition and application. This panel looked for contributions on teaching formats that deal with notions of "lifestyles of restraint" or more comprehensive approaches of transforming urban environments in relation to sufficiency. This led to the focal question and subsequent topics to be explored:

How can sufficiency play a role in the teaching of urban design as a parameter conditioning both the production of space and the integration of people?

- How can education incorporate strategies for incentivizing certain behaviours oriented on sufficiency in urban design?
- How can sufficiency be conceived as a benefit, instead of a sacrifice?
- To which degree can user-based urban design or the inclusion of DIY-methods become vectors for sufficiency?
- How can we define design criteria for "sufficiency", "happiness" and "good life" in urban design?
- How can the design of scenarios communicate appealing "lifestyles of restraint" for users of architecture?
- Which methods of utopian prototyping are capable of envisioning lifestyles of sufficiency and happiness attractive to future users?
- To what extent can architectural education be charged with futures literacy?

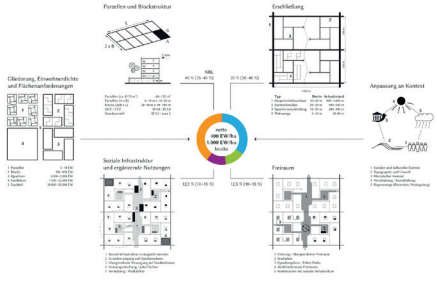
Sufficiency in rapidly urbanising regions – Coproduction of neighbourhoods as an alternative strategy for sustainable urban design

Dr. Manuel Giralt
Karlsruhe Institute of Technology (KIT), Institute for Urban and Landscape Design

In order to address the challenges of future architectural education, it is necessary to consider the concept of sufficiency as a part of a wider approach to sustainable urban development. In the global context of climate change, it is essential to include the role of rapidly urbanising regions in the discussion. This offers the opportunity to implement new strategies of sufficiency at a larger scale, with the potential to create long-lasting positive impacts regarding resource consumption and social development.

The number of inhabitants of informal settlements in the global south is expected to increase significantly by 2050. Various experts are demanding the recognition of the informal sector as the predominant form of future urban space production, by anticipating the development of self-built settlements and by incorporating them into formal planning processes.

The concept of coproduced neighbourhoods adopts the above-mentioned approach of anticipation and develops it further into the “Incremental City” strategy, a hybrid urban development model that brings together aspects of top-down planning and bottom-up self-organisation, as well as providing ample space for informal self-building.



Urban Design Tool Box

KIT Master Studio Sebeta 2021

LESS land_more space Designing virtual space for architectural education and practice

Michela Barosio
DAD, Politecnico di Torino

Elena Vigliocco
DAD, Politecnico di Torino

The topic "Architecture and urban spaces" is totally absent from the list of peer review evaluation panels of the European Research Council (ERC). "Architecture" appears twice, the first mention associated with civil engineering and the second understood as "Computer Architecture" in the Panel with the evocative name "PE6_1 Computer architecture, pervasive computing, ubiquitous computing".

The observation that the digital world has its own Architecture is associated with the concept of ubiquity. It characterizes the digital network and apparently goes beyond the concept of (urban) space. The digital world, the net, does not cancel space, on the contrary – it transfers it into another dimension, making it usable in another way, allowing experiences of ubiquity. This so-called virtual space requires an architectural design of its spatial dimension which, if not urban, we should at least determine as a public, collective or shared dimension.

The progressive de-materialization of the project process has led to a wide range and types of spaces for architectural design: online platforms, repositories, archives are comparable to contemporary design offices, libraries, galleries, meeting and conference rooms. How to design those spaces in order to make them more effective and collaborative?

In ascolto (stanza dello spettatore) / Listening (the spectator's room), Giulio Paolini 2005.www.alfonsoartiaco.com (July 2024)

Collaborative governance in integrative architectural and urban planning

Rene Lisac
Faculty of Architecture, University of Zagreb, Croatia

Kristina Careva
Faculty of Architecture, University of Zagreb, Croatia

Teo Giljević
Faculty of Law, University of Zagreb, Croatia

Goranka Lalić Novak
Faculty of Law, University of Zagreb, Croatia

Tijana, Vukojičić Tomić
Faculty of Law, University of Zagreb, Croatia

This paper presents an interdisciplinary educational unit. It aims to connect contemporary knowledge on collaborative governance with knowledge on integrative architectural and urban planning. These thoughts and working methods are already on the borders of professions, and they are also interdisciplinary. They are connected through the criteria of sustainable development in the pursuit of achieving a citizen- and community-oriented and more integrated society. We believe that the related learning principle contributes to reducing misunderstandings and developing new and suitable methods for transferring good design into the built environment, by using citizen participation as a driver of intentions and a test for decisions. Students can learn how governance principles can be implemented, supported and influenced, all with the goal of making informed (evidence-based) decisions about changes in our built environment.

Architecture students gain a better understanding of the functioning of the society in the context of which they attempt to design. Such insights enable them to better communicate in their professional work. Specifically, when we talk about stakeholders of the civil sector, students are introduced to participatory methods, in order to better integrate the needs of the community into functional, formative and constructive solutions. Special attention is paid to the possibilities and ways of involving citizens in the detection of real problems, the selection of adequate solutions and the successful use of spatial artifacts. This ultimately contributes to the development of the cooperation skills needed to adequately deal with the multiple crises the world faces today.

Redesigning Post-Industrial Cities (RePIC), course illustration

Post natural urban regeneration design – Applying renewable energy communities in disused military areas

Karla Cavallari Rodrigues
Department of Architecture, University of Ferrara, Italy

Alessandro Gaiani
Department of Architecture, University of Ferrara, Italy,

Alessandro Massarente
Department of Architecture, University of Ferrara, Italy

Transforming urban environments in relation to sustainability and sufficiency requires developing, through an interdisciplinary approach, methodologies and tools for evaluating and valorizing certain abandoned spaces in the city: for example, areas in disuse linked to pre-existing military complexes that have significant dimensions and strategic positions.

In their interactions with territorial structures, military areas often reveal their links with networks that have characterized their transformation over time, due to historical strategic and military assets that have defined their urban form.

A case study in Bologna was conducted within a research project (The architectural design process in the digital transition. An interdisciplinary approach to the evaluation and valorization of "discarded" spaces in cities. FIRD 2023 Department of Architecture University of Ferrara, Principal Investigator A. Massarente, with K. Cavallari, G. Emmi, C. Erdmann Goldoni, E. Guidetti, A. Gaiani, M. Patamia, V. Radi, A. Tessari, 2023-2024). It was complemented by teaching activity, based on which we will develop possible different urban regeneration strategies leading to new scenarios.

Bologna figure ground plans:
1. rural plain
2. residential
3. industrial
4. military
5. rural hill

image: Karla Cavallari


LESS
IS MUST

LESS routine, breaking new ground

New concepts in architectural education

Prof. Kristina Sträter
Prof. J. Schultz-Granberg
MSA

Architectural teaching is as much about the content that we teach as it is about the tasks and questions that students work on. Against the background of current challenges, it becomes clear that studying architecture should be less about the fulfilment of duties or the achievement of best possible grades. Instead, students are increasingly required to demonstrate a heightened awareness of social responsibility and problem-solving skills. How can lecturers and professors organize curricula so that students are encouraged to take individual responsibility to greater degrees? Which skills are needed to meet the state-of-the-art and future requirements of architectural practice?

By its focus on pedagogical concepts, this panel reinforced the cross-sectional character of education for all topical fields in teaching architecture. In the context of the EAAE Congress, we invited contributions on new and unfamiliar pathways and concepts in architectural teaching according to the following topics:

- Me or us: How do we prepare students for the new challenges they will have to master as future architects?
- Co-operations: Can pressing issues be solved by a single actor? How important is teamwork and how can it be strengthened?
- What are the assessment criteria we use to award grades? Is individual grading appropriate and does it motivate students? How can learning be fun?
- Which project partners do we involve in teaching?
- Regulations: How do we escape the mania of standardization and guidelines?

Bestand der Dinge – A summer school as a condensed approach to teaching and learning

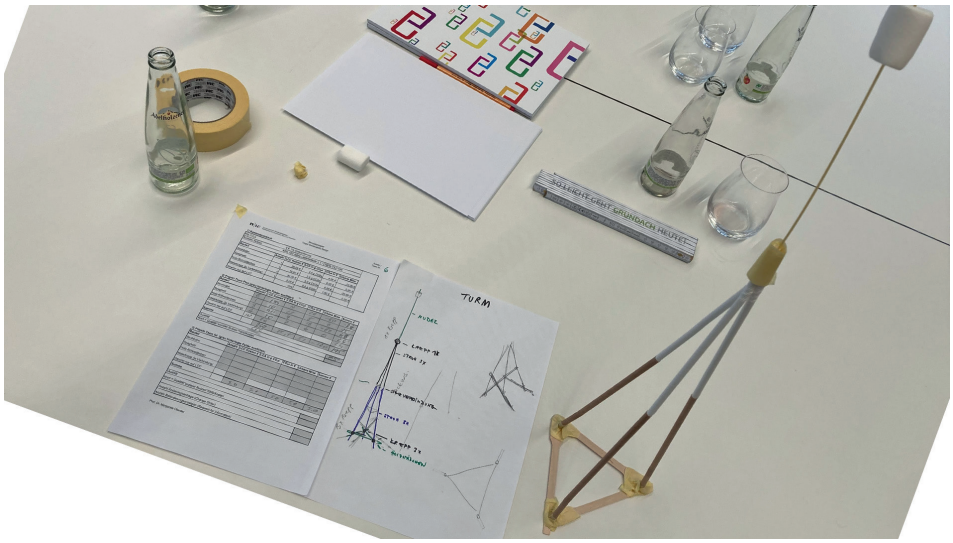
Sorana Rădulescu
baunetz CAMPUS
Berlin, Germany

The summer school "Bestand der Dinge", which took place in Berlin in September 2023, introduced a novel approach that went beyond the traditional academic context. It was the result of a collaboration between baunetz CAMPUS, the German online portal for the academic world of architecture, and Prof. Jan Kampshoff of the Technical University of Berlin. With 30 students from various German and Austrian universities in attendance, the summer school challenged participants to explore the intricacies of working with the existing built fabric – an aspect that is often overlooked in the curricula of architecture schools. Positioning itself at the intersection of architectural production and its critical communication, it opened a space for negotiating pressing issues within the discipline and explored the role of architecture in a world where transformation rather than new construction is the primary goal. A variety of teaching methods and the expertise of numerous guests and mentors enhanced the learning experience. The paper discusses the potential of such a condensed format to catalyze change and elaborates on the main questions posed and on the teaching methods used. The baunetz CAMPUS summer school will become an annual event, with the next iteration scheduled for September 2024 in Wuppertal.

Gamification of education Overcoming conflicting sustainability goals in a playful way

Margarete Olender
University of Applied Sciences, Northwestern Switzerland
Institute of Sustainability and Energy in Construction
Muttenz, Switzerland

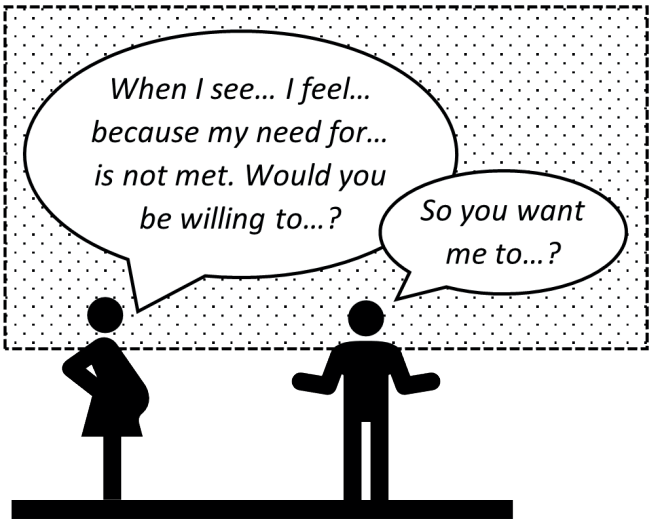
This paper examines the use of a simulation game to implement Target Sustainability Design (TSD), a method promoting collaboration within multidisciplinary teams in construction projects. TSD addresses the conflict between minimizing costs and implementing social and ecological measures, integrating stakeholders in creating cost-efficient and sustainable buildings. The simulation game serves as a tool to teach TSD by replicating construction project processes, engaging students in two rounds of designing and building towers. The TSD process involves three steps: set targets, design to targets and build to targets. Students play the roles of different stakeholders, while time constraints simulate real-world conditions. Data from professional participants and students alike showed the game effectively taught TSD principles, improved collaboration and supported the achievement of sustainable goals in construction projects. However, limitations include a small sample size and potential bias from students' pre-existing sustainability knowledge. Despite this, the paper highlights the importance of clear targets and multidisciplinary collaboration in achieving sustainability goals in real-life projects.

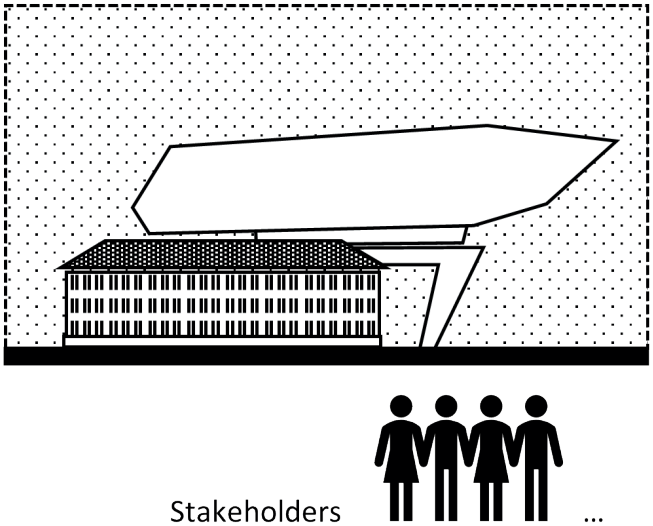


Compassionate conversations in architecture An educational experiment in the field of adaptive reuse

Els Hannes
Hasselt University
Hasselt, Belgium

This paper reports the outcomes of an educational experiment (set-up, execution and evaluation) in the master program 'Adaptive Reuse' and exchange programs at the faculty of Architecture and Arts of Hasselt University in Belgium during the first semester of 2023-2024. The framework of "non-violent communication" (NVC), also called "compassionate communication", as developed by Rosenberg was introduced to a mixed group of 32 international students. The aim was to improve their intercultural communication skills while building a frame of reference in adaptive reuse. Students learn how to use NVC as a lens for human interaction and for spatial transformation projects simultaneously. The paper explains NVC and its relevance to (interior) architects. Next, it reports how NVC was introduced gradually in consecutive classes and field assignments of the "Study Visits" course. Some results are highlighted, and a critical evaluation is shared. The paper concludes that linking NVC principles with architectural language seems to enhance (interior) architecture students' understanding of NVC as such, and raise awareness regarding their ability to actively contribute to empatic design.





Architects for Future goes Hochschule

Elisabeth Broermann
Architects for Future Deutschland e.V., TU Berlin, Berlin, Germany

Jan Kampshoff
TU Berlin, Berlin, Germany

Linda Hildebrand
RWTH Aachen, Aachen, Germany

Kim Tran
RWTH Aachen, Aachen, Germany

Architects for Future have articulated 10 demands for a transition of the building and construction sector to sustainable practices. This shift must be embedded in educational programs, and we need to establish new networks and teaching initiatives. Together for the the building transition, the "Bauwende"!

Since 2019 Architects for Future has been the leading voice in the movement for the Bauwende in Germany. More and more people are joining our cause, which has now become international. In 2023 we were invited to hold a visiting professorship in "Architecture for Future" at TU Berlin, where we integrated the Bauwende in the architectural curriculum. In 2024, we launched a new network of professors who are committed to incorporating the Bauwende into their courses. We also started a new hybrid lecture and dialogue series, with 13 universities participating and 22 experts providing insights on the 10 demands of Architects for Future. Each week, we reached over 750 students.

We intentionally sought to introduce the topics of the Bauwende and the climate movement into education to raise students' awareness and knowledge, while also encouraging political engagement to some extent. Architecture is far more political than many realize, but these connections have yet to be adequately addressed in academic programs.

LESS utopia

Architectural visions and future demands (student workshop)

Prof. Daniel Blum
Chantal Keyvork
MSA

"Imagine there´s no heaven
It´s easy if you try
No hell below us
above us, only sky
[...]
Imagine all the people
Living life in peace ... "

John Lennon's song "Imagine", arguably one of the best pop songs of all times[1], is essentially an enumeration of absences. These absences, however, suggest new possibilities, alternative societies and systems: new utopias.

UTOPIA, the OU-TOPOS, this "place that cannot be"[2] is liberated from probabilities and reasonabilities – it is a place of ideas and ideals.

In times of crises UTOPIAS boom, as they provide a dialectic service of comfort and empowerment: We escape reality by imagining alternative worlds and orders – this gives us comfort. At the same time, through this escape, we gain trust and confidence in the idea that a better reality is possible. This notion provides us with guidance and power for change.

If LESS IS MUST – which utopias slumber in LESS? In John Lennon's song, the paradigm of less goes beyond renunciation and deficiency. It elevates and liberates – it creates an abundance of possibilities.

In the framework of the 2024 EAAE conference in Münster, we invited participants to discuss how utopias or scenarios of less can contribute to our common effort to overcome the multiple crises we face today.

1 - Until 2010 the song was ranked no. 3 in the Rolling Stone Magazine list of 500 greatest songs of all times. In 2021 it still ranks in the top 20 – over 50 years after its first launch.

2 - The English statesman (and humanist author) Thomas More coined the utopian concept as an ideal non-place (ou-topos) as early as 1516 in his work „De optimo statu rei publicae deque nova insula Utopia (Of the best constitution of the state and of the new island of Utopia)".

Anomàli

Polina Blinova
Technical University of Berlin

Fancesco Sbrighi
Technical University of Berlin

Lanhua Weng
Technical University of Berlin

Anomàli mirrors the symbiotic efficiency of an ant colony, embracing "less is enough" as a design strategy for responsible stewardship. We explore architecture that preserves our built fabric while safeguarding resources, environment and culture:

Less addition, more subtraction (the role of the architect): Architects focus on reducing energy and material use within planetary boundaries. Buildings are valuable resources, prioritized for repurposing rather than demolition and expansion.

Less permanent, more maintenance (a common built environment). Architecture embraces change, with adaptable, lightweight structures designed to return to the earth. Community participation in bio-based maintenance fosters resilience and deepens our connection to the built environment.

Less property, more cooperation (a social contract): Sharing strengthens belonging and expands access to resources. Possessing less individually, we gain more through cooperation and care for all living beings.

Less necessity, more contingency (an individual role): Rather than extracting endlessly, we prioritize preservation to ensure abundance for future generations, redefining our relationship with resources beyond mere utility.

Anomàli - (detail)
image: the authors

Advanced landscapes in public space

Spontaneous, wild, unexpected. New paradigms for open spaces of European cities

Adriano Dessì
Università di Cagliari

Landscape is a concept that increasingly experiences advancement in public space design.

But we also know that the most important public spaces in Europe - such as Piazza del Campo in Siena, Potsdamer Platz in Berlin, the Buttes-Chaumont Park in Paris, and so on - had historically already been pieces of a pre-existing landscape that has been incorporated by the city.

The basic relationship between nature and urban open space – ecological, morphological, and social, at the same time - is a quality of European public space that has been progressively lost. Yet, in fact, in the European city the possibility exists to find its ancient – and never forgotten – relation with the natural dimension. It is precisely defined by the deep comprehension of its system of public and private open spaces, in their typological and morphological structure, and ultimately down to their matterial features.

The paper briefly retraces this relationship and proposes certain contemporary cases in which the MUST connecting the public spaces to the original landscape could be interpreted as a new way of imagining and designing the European city. Is its consequence the LESS of human presence, materials, and architecture?

Drawing as a prelude to an uncertain future

Josep, Eixerés - Ros
Universitat Politècnica de València

Marcel lí, Rosaleny - Gamón
Universitat Politècnica de València

In the face of the advance of new artificial intelligence technologies, it is worth considering how these systems impact and construct our environment. Facing the polarized vision that the change of paradigm provokes, it is revealing to understand the historical progression of utopian visions. This is less the case from the point of view of nostalgia, but instead should be viewed as a construct capable of originating new ideas. The article focuses on the duality between the real represented by the somatic act of analogue drawing versus a seductive hyperreality that confuses formal appearance with content. It is illustrative to discover that the tool is meaningless when control exceeds a voluntary act.

Bruno Taut: „The Building Area seen from Monte Generosos", Alpine Architektur, p.17

New concepts in freehand drawing education at architectural faculties

Beata Makowska
Cracow University of Technology

The paper discusses the attempt to adjust the syllabus for freehand drawing courses taught to students of landscape architecture at the Faculty of Architecture Cracow University of Technology in Poland and the International School of Engineering at Tianjin Chengjian University in China. This adjustment addresses the changing needs and future requirements in architectural practice. New concepts in freehand drawing education (less: routine, schematic thinking, fragmentary knowledge) were introduced in order to teach students the most important competences. New sketching topics are based on problem-solving skills (analytical and creative thinking, flexibility), the cross-sectional character of architectural education, critical thinking, awareness and individual responsibility, as well as elements of play. Sketching develops valuable skills that are extremely important for contemporary practice. They ensure fast decision-making, cognitive economy, independence from rules, incessant interaction with imagination, which are especially important at early stages of design. Therefore, this technique can still be a driving force of innovation, opening new perspectives in a drawing-based approach to the education of future architects.

EXCURSION

Field trip to Essen, Ruhr region on day 04 Saturday, 31-08-24

The Ruhr region in Germany was once a smoke-polluted, dark area dominated by heavy industries and mining. However, starting in 1989, a breathtaking and long-term transformation took place in the region with the "International Architecture Exhibition Emscher Park" (IBA Emscher Park). This initiative turned the Ruhr into a diverse, vibrant, innovative, and dynamic cultural landscape. Creative and green open spaces, along with lovingly restored historic industrial buildings, now offer spaces for cultural centers, museums, start-ups, and offices, characterized by a strong identity. These spaces are adjacent to contemporary residential estates and workers' dwellings from about 100 years ago.

We invite you to join us in exploring and experiencing the architecture of the Ruhr region, where history meets modernity. From impressive new buildings to industrial heritage sites such as Villa Hügel and the Zollverein Coal Mine Industrial Complex, there are numerous architectural highlights to discover. These projects are not only interesting in terms of urban planning and architecture but are also important symbols of sustainable structural change in the Ruhr region. The wide variety of architectural styles and programmatic mix turn the region into a fascinating urban laboratory. Enjoy a day filled with visits to remarkable sites and pleasant breaks with tasty refreshments in a friendly atmosphere.

- Zollverein Coal Mine Industrial Complex (Zeche Zollverein)
- Red Dot Design Museum Essen
- The Mine, Coffee Break
- Industrial Park M1 Essen
- Folkwang Museum
- Villa Hügel
- Folkwang Library

CITY OF ESSEN