Enough/Genug

Designing limits in architecture for an earth of plenty

Introductory Lecture
12.02 | 17 - 18h | HIL E9

Seminars
Online (days tbc)

Colloquium
26.03 | Hönggerberg

Exhibition
25.05 - 28.06.2024 | Hönggerberg, HIL

Final Presentation
27.05 | Hönggerberg

Chair of Architecture & Urban Design
Prof. Hubert Klumpner
ONA J 14
Neunbrunnenstrasse 50
8050 Zürich
klumpner.arch.ethz.ch

For further information

Fernando Túlio
salvarochafranco@arch.ethz.ch
Joni Kacani
kacani@arch.ethz.ch

ENOUGH/GENUG: designing limits in architecture for an earth of plenty

> "Where are you now, my friend? / If you don't change the city / The city changes you." Leonhard Cohen

> "Knowing is not enough, we must apply, willing is not enough, we must do." Johann Wolfgang von Goethe

The overarching aim of the present reader is to help architects and students of architecture make sense of climate change and contemporary concepts of sustainability. Society at large grows increasingly critical and tired of such terms, often perceived as lacking in character. For architects in particular, the absence of a design narrative and connection with concrete projects creates an obstacle in the embrace of principles such as the SDGs (Sustainable Development Goals), and other global benchmarks for a healthy society, such as the thirty-article Universal Declaration of Human Rights. On the basis of these principles, we have to learn to imagine how to redesign architecture for existing and new cities. Our profession needs a position in order for our work to more consistently preserve the climate and natural environment as the basis for long-term prosperity and quality of life. We propose transitioning towards a horizon of ideas based on a minimum inventory with maximum diversity (Peter Pearce, 1971). In this context, the development of sustainable alternatives - in terms of design, architecture, cities, neighborhoods, and beyond - urgently requires new concepts. Our response is to encourage a shifting of the ground for sensible and responsible design through Practice, Studio, and Master's Thesis Projects by asking, 'how can we point to tangible projects, responsive to urgent events like the Climate Crisis, in order to design limits in architecture for an Earth of plenty?'

The 'Enough' Theory

> "We believe that we have enough buildings, enough construction, enough infrastructure. And it is now time to consolidate it and find the qualities within the building. This is not against future production; it is more about consideration of what we really want in cities." Hubert Klumpner, Bi-City Biennale of Urbanism/Architecture, Shenzhen, China, 2015

The concepts behind this Master's Thesis Topic are less about a specific theory or method and more about a process of speculation regarding our role in learning, researching, and designing. Architectural thinking offers the possibility of considering 'sustainability' as a design tool. While reflecting on these issues, we received an invitation from the UN, as part of an SNF project with MDPI Publishers, to develop a Volume on one of the seventeen SDG's. With our interest in all aspects, scales and global approaches to incorporating sustainability topics in our own work, we immediately felt that these benchmarks, the SDG's, could also be understood as an architectural argument. We found that sustainability and climate change are still generally outside (or added on to) the mainstream of the architecture and design fields. Addressing this, the potential of the SDG's, much in the tradition of architectural thinking, is that their targets, indicators, and goals have a structure within them. In fact, many agencies and institutions working on the Climate Crisis, among others working in favor of sustainability, have imported

architecture into their logic. It is, after all, essential to engage architects in order to anticipate questions of socially and ecologically responsible and sustainable design of architecture, cities and neighborhoods. In this sense, we foresee that in our work, there is connecting of dots to be done.

The practice of architecture provides open-ended alternatives, driving the contemporary debate about sustainability away from us as humans - dominating and controlling Earth's resources - towards considerations of managing and doing the most with the least. Producing instead of consuming; using things longer; acting frugally about circular material use; recycling; shaping interactions between species; mitigating conflicting; contradicting and opposite interests; revealing previously underestimated complementary factors of our environmental systems. Stated in another way, designing sustainability today constitutes a critical exercise of making invisible sustainability processes visible. This exercise needs consciousness on all levels, as it is incompatible with architecture's earlier, contradictory view of modernization: that we can consume nature as a 'resource' to make architecture.

Nature in Cities – a New Normal

Can architects engage in a design culture to regenerate harmony between the built and natural environment - between city and nature? If we are talking about sustainable cities, it is not about restoring cities in the sense of historic monuments. Rather than preserving and fixing, our view shifts towards imagining, designing and implementing ecological interaction. So, what kind of future are we imagining for Earth?

In the main exhibition 'Climate Care, Reimagining Shared Planetary Futures', at the MAK Museum during the 2021 Vienna Biennale curated by our team, we reflected on the different degrees of necessary interventions - potential inputs that may help steer the Master's Thesis topic. For example, we commissioned an original work by Crimson Architectural Historians, together with Herman Kossman and Dirk Sijmons / Rotterdam, entitled, 'Anthropocene 2.0'. The large-scale installation in the form of a suspended black box, equipped with four viewing slits, allowed for a journey of discovery along four philosophical viewpoints. The first view presented denial of those who do not believe in the goal of sustainability at all. The second, that of eco-modernists who believe in technological fixes to avoid a disastrous future. The third, that of post-humanists who believe humanity should step back and live more equally together with other species. Finally, the fourth arrived at 'Anthropocentrism 2.0', the thesis that we have a responsibility to actively regenerate nature. We are confronted with the task and responsibility of active agency and engaging with a defiant Earth.

Elsewhere in this exhibition, we presented further cases addressing other registers of concern: for example, the case of indigenous activists in New Zealand working to endow the Whanganui River with personal legal rights, the case of Ecuador granting nature constitutional rights stopping mining projects, and the case of Bogota prioritizing bikes and the right to play on streets over cars, among many others. We derived from Alexander von Humboldt's big-picture approach, a view on the entire Cosmos. Elsewhere, we presented Steward Brandt's 'Whole

Earth Catalog', highlighting the recommendation for self-sufficiency, ecology and alternative thought through the sentiment, 'stay hungry, stay foolish'. All cases serve to update our repertoire of assumptions, our 'new normal', in the continuation of our collective work and pedagogical practices[1].

The Digital Transition

Science, technology and policy, along with behavioral science, law and medicine, can also be understood in terms of architectural arguments. Notably, architectural thinking is a leading driver of digitalization processes, making spatial and environmental computation plausible for the masses. This digital transition, where scales become indifferent, plays a role insofar as information can be computed up and down the decision-making ladder, informing a variety of actors in key executive fields. In this sense, digitalization is more than a toolbox - it is a place to situate archives and institutionalize places of support for design culture. With AI and quantum computing, those of us engaged with project development may use Digital Twins - virtual copies of cities - and hyperreality to start understanding a form of multidimensionality that may provide new impetus to the sustainability debate. Anab Jain, from Superflux / London, put it thusly: 'we need to imagine the future to better understand our position in the here and now'. This brings us the environmental paradigm. How can students harness these tools to be sensible to, rather than exploit or denigrate our relationship with natural environments?

Urbanization, Digitalization, Ecologization

We are witnessing the articulation of three interrelated contemporary developments, characterized by an emancipatory potential for architecture: Urbanization, Digitalization, and Ecologization.

Urbanization has always been the engine of contrast producing differences and limits - cities and countryside, for example - which can be read as metaphors for inequality. Yet, the Climate Crisis highlights the need for a territorial connection uniting all Earthly inhabitants, regardless of, class, belief, origin, with their living environments. The provision of public services, community infrastructures, built and natural environments for culture, education, health care, parks, work, housing, food, safety and security, are the basis for a principle of citizenship situated in a shared place and time. The Swiss context is no exception – we recall Armando Silva's 20th century thesis, that 'you do not have to live in a city anymore, to lead an urban life', an idea contrasting with Jean Jacques Rousseau's 18th century notion that 'the whole of Switzerland is like a big city, divided into thirteen districts, some of which are in valleys, others on hills and still others on mountains'. In this sense, contemporary Switzerland can be read as a highly urbanized territory with dense infrastructures, and cities as centralities – a powerful driver of differences and limits that may also benefit from architectural and design reimagination within a context of sustainability.

---

[1] https://www.mak.at/programm/ausstellungen/vienna_biennale_for_change_2021

In this transitory situation, the emergence of alternative formats of Urbanization, Digitalization and Ecologization is, therefore, a design challenge. How can we use architectural thinking to steer the transitions in design for limits within the plenty of Earth? With this overarching Master's Thesis Topic, we propose to shift the ground by focusing on the interconnectedness of these areas - Urbanization, Digitalization and Ecologization - as intrinsic to discourses of sustainable design culture.

Suggested Reading

Transitioning to Sustainability (Book Series): **SDG11 – Transitioning to Sustainable Cities and Communities** (MDPI Publishers, Forthcoming 2023). Editors: Hubert Klumpner, Professor of Architecture and Urban Design / ETHZ, Urbanthinktank_next; Klearjos Eduardo Papanicolaou, PhD Researcher, Chair Architecture and Urban Design / ETHZ; and Georgeen Theodore, Professor of Architecture and Design / NJIT, Interboro Partners. Link: https://polybox.ethz.ch/index.php/s/VoeBchc4YwwqR06