AR-804

Summer School on Designing for Resiliency: RE:GENERATE alpine-urban circularity

Binder Claudia R.

Cursus	Sem.	Type
Architecture and Sciences of the City		Opt.
Civil & Environmental Engineering		Opt.

Language of teaching	English
Credits	2
Session	
Exam	Oral presentation
Workload	60h
Hours	**82**
Lecture	14
Exercises	28
Practical work	40
Number of positions	**20**

Remark

Dates : 5-13.06.2021 (core week onsite and virtual) ; 24.05-25.06-2021 (entire virtual framing) Deadlines : 15.04.2021 (onsite participation); 01.05.2021 (virtual participation)

Summary

This hybrid format of nudging social transformative action allows virtual-global and onsite participation. Participants co-design seeds of systemic innovation for resilient and regenerative livelihoods in direct application with local communities, cultivating new urban-alpine solidarity.

Content

Organisers EPFL : Prof. Dr. Claudia R. Binder; Dr. Romano Wyss; Anna Pagani
Organisers ETHZ : Prof. Dr. Adrienne Grêt-Regamey; Dr. Tobias Luthe ; Reto Spielhofer ; Ana Stritih
By employing Tools for Change (TfC) and by planting seeds of systemic innovation at the interface between science, design and practice, this Summer school engages with a mountain community in its resilience re-organization and new growth phase, based on three conceptual pillars:

- **Mindful immersion in the local context**

Arriving to another place, home of locals. Connecting and understanding. Harvesting of place-based knowledge on mountain cultures, economies, landscapes, resilience and alpine-urban solidarity (socio-technical-ecological systems). Both onsite in Ostana, and for virtual participants in their respective location.

- **Co-creation of common visions**

Exploration and definition of what "resilient" and "regenerative" and "solidarity" mean, based on local identity and related with globalization, both for the onsite location, and in exchange with virtually connected locations.

- **Co-designing Tools for Change and local people action for regional regeneration**

Identification of locally functioning and generalizable TfC and seeds of systemic innovation, that stand for Ostana region, and that may hold for global locations.
Theme:
Mountain regions **face multiple challenges**, such as climate change, depopulation, political neglect and economic crises. At the same time, they offer **hotspots of biodiversity, water reservoirs** for downstream life, a home to local people, and valuable complementary spaces for urban areas in terms of tourism spaces and retreats. Mountain communities are **"by nature" trained to adapt and innovate**, to maintain resilience. All of this is being **amplified through Covid-19**, direct and indirect. Yet alpine and urban places are closely connected by various types of flows, be it matter, energy, water, money, or people. Such interdependencies with systemic feedback and side effects we refer to as **circularity**.

In order to exploit their potential as living spaces for the local population as well as complementary spaces for city dwellers, mountain regions are confronted with difficult decisions. How can mountain regions build resilience against undesired types of change, while retaining their key cultural and ecological characteristics? How can the exchange between urban areas and mountain communities be developed in a way that benefits both sides - as kind of "social circularity - solidarity"? And what can mountain life of the future look like, both in terms of form and function? A safe retreat space in times of crises? A new "Alpine urbanism"? A state and place of mind, of compassion building, that thrives back to the urban?
These are truly complex questions which require a systemic approach by design. **Systemic design** is an emerging field between systems science and design, useful to understand and shape inter- and transdisciplinary transition processes. Scientists and Designers, Architects, Engineers and Planners need to jointly interact with local people, policy makers, and practitioners to find creative and attractive solutions to complex problems. The interdisciplinary PhD Summer School "Designing for Resilience: RE:GENERATE alpine-urban circularity" will address this need.
Objectives:
In this Summer school you will immerse in interdisciplinary groups together with local inhabitants and global participants to strengthen local identity and rebuild resilient mountain communities within a regenerative, circular economy. To tackle such complex problems, you will learn methods of systemic design thinking and doing, combining systemic design approaches with scientific and practical methods from your own background. You will explore and apply Tools for Change and plant Seeds of Systemic Innovation.
Location:
The MonViso Institute (MVI) and the community of Ostana will serve both as a study location and a practice example in how to deal with the challenges mentioned above, on integrated spatial and governance scales. The MVI (www.monviso-institute.org) is a real-world laboratory for regenerative design and sustainability transitions in mountain areas and across governance and spatial scales. It is situated in the Italian Piemont mountains, Po river valley, close to Turin, and run in close collaboration with intenational partners, such as the Polytechnic University of Turin. MVI is designed to host and integrate educational retreats, in transdisciplinary cooperation with the local community of Ostana, where students engage in the complexity of integrating theory and practice with direct feedback between science and practical implementation.
As score of the **hybrid Summer school format**, we explicitly create the space to include and cross-fertilize with global participants and teaching staff. We keep the travel footprint low, but the richness and diversity of re-integration and **cross-fertilization from and with other alpine-urban places** and regions high. A global perspective on alpine-urban regeneration: The Global Mountain Biodiversity Assessment (GMBA) showing biodiversity in global mountain rages on their Mountain Portal, for over 1000 mountains ranges newly inventoried by Körner and co-authors. Source: https://www.gmba.unibe.ch/about/news_archive/2016___12___11/
Learning context and methods:
In the early 1900s, up to 1200 people lived in the Occitan community in Summer, mainly from mountain agriculture and livestock. By 1980, due to interrelated economic and demographic reasons, only 5 people officially remained. Today, Ostana is regenerating, based on a more diverse, flexible, circular economy. To better cope with the complexity of the sustainability challenges at stake, you will study and support this regeneration with a **systemic design perspective**. You will explore the interconnections between the technical, social and ecological elements of the system, and proactively design tools that address the needs of the community. To do so, you will integrate established technical planning and engineering skill-sets with ecological life cycle design and social science methods. You will prototype with local people, take part in design-doing workshops, bio-mimetic outdoor learning and sharing activities. Special attention will be given to the interaction with local practitioners in creating new, regenerative solutions, to different types of knowledge (science, local traditions, experience,...), **to mindful innovation and compassion.**
As for the **virtual participants**, we invite you to propose and engage within a comparative alpine-urban or urban-rural place near where you live. Ideally, you sign up with at least one colleague, another student, to form a kind of small group, a **local cohort or learning tandem,** to follow the onsite summer school on your site, and engage in your region with certain tutored tasks that you can feed back into the joint connection times and live virtual meetings accompanied by the Ostana group.
Outputs:
In a low-threshold and inclusive research phase you will collect qualitative and quantitative data. This data will be obtained through the analysis of social networks, drone scanning, mobility experiments or circularity master planning, spontaneous encounters with local people, discussions, joint hands-on working with locals, etc. in order to understand the identity and challenges of the area. You will then develop an adequate communication of the identified challenges and possible solution paths to revive the alpine community and circularities with the urban ("Tools for Change", "seeds for systemic innovation"). For example, this may include short films, systems "giga" maps or technical demonstrations. Finally, you will present and discuss the findings and solutions paths at the local Regenerative Design Talk (RDT) series, open to the local community and the public. In general, we encourage you to contribute with your expertise and use methods from your background to make this Summer school a valuable broadening of horizons. The RDT will then be spiced up with global virtual participants and made accessible online.
Experience:

As systems thinkers, scientists, designers and practitioners, as tourists and locals, we embrace the complexity of human-environment relations. The mission of this PhD Summer school is to provide for such systemic interaction and emerging connections through interwoven periods of work and play, of collective discourse and individual space. We host an academic environment that provides ample space to understand and **experience the local context**, enjoying outdoor activities within the beauty of the Italian Alps, while inviting and **integrating voices from global participants and places**. Social dining, joint barbecuing at the open fire, drone photography, hiking, rock climbing, forms of connecting with the inner and outer nature, and many other activities will allow you to interact with the locals and the unique nature.
As for **virtual participants**, we create a daily routine to integrate you into the onsite week, with **mindful movement morning practices**, **live onsite-virtual joint topical and reflective infusions twice a day** in the late morning and the early evening. You will be undertaking **your own local design exploration** and cross-feed this back into the onsite work, including nudged physical outdoor time where ever you dial in from. To create for a richer learning experience, we encourage virtual participants to **sign up as small "cohort"##** group with at least two or more students.
Expect learning experiences beyond your mental and physical comfort zones, which is where innovation and systems change thrive.

Note

The majority of onsite seats is reserved for the financing institutions ETH Zurich and EPFL Lausanne. In our new European cooperation on Systemic Design with the partnering institutions AHO Oslo, Technical University Delft and Politecnico Torino, we offer a limited number of onsite seats for PhDâ##s from these institutions as well. All other PhD students are invited for virtual participation.
The onsite number of PhD students for this summer school is **limited to 15**. For virtual participation we allow a **maximum of 30 participants**.
To apply, please **register online for either onsite or virtual participation**, including uploading a detailed CV and a letter of motivation (300-500 words), stating why you want to participate, how this relates to your PhD project, and how you believe you can contribute to this summer school. If you apply for **virtual participation**, please reflect about an urban-rural/alpine location near to you, and about a potential "cohort" to build around you as local physical support and experience network â## and name both in your motivation letter.
For any further question or inquiry please contact the organizing team by email: phd-school-regenerate@ethz.ch
Organizational note to the COVID-19 situation
We plan this summer school as a hybrid format so that it could take place even fully virtual, if required. Ostana mountain community is a remote and very sparsely inhabited place, where physical distance is easy to keep. We take specific precautions according to EPFL/ETHZ and Italian regulations and experience Ostana as the safest place to be. However, we are aware of the challenges to plan for the near future and remain flexible with the summer school schedule. You are welcome to apply to the onsite summer school and cancel your subscription any time before the 1st of May 2021. After that date, onsite subscribers will be able to cancel in case of unforeseen circumstances (i.e. a positive Covid test).

Keywords

Local identity; resilient landscapes; regenerative economy; mountain communities; urban-rural; cross-scale; tourism; real-world laboratory; Italian Alps; hybrid format.

Learning Prerequisites

Important concepts to start the course

This PhD school accepts applications from higlhly motivated, interdisciplinary students currently enrolled in a wide range of PhD programs. The openness and ability of students to engage with the local community is key for the success of this Summer school. Interest in mountain environments and practical experience in the fields of planning, design, engineering, architecture, mountain tourism, grahical communication or construction are an advantage. Be ready to "get dirty hands" in the mountain soils and to sweat on a mountain hike.

Learning Outcomes

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

- Understand the challenges and opportunities facing mountain communities, recognize their social, ecological, and economic specificities, and identify their strengths and vulnerabilities in coping with future challenges (immersion)

- Get a feeling of compassion for alpine (rural)-urban circularity, and within social circularity of solidarity
- Apply systemic design methods to integrate socio-ecological, technical and planning perspectives and cope with the complexity of sustainability challenges in the real world (design)
- Develop innovative solutions that can support regenerative and resilient mountain livelihoods (regeneration and resilience)
- Effectively communicate complex problems and systemic design solutions to various stakeholders.

Resources

Bibliography

Bibliography will be communicated directly to the participants. Information can be found on the website.

Websites

- http://systemicdesignlabs.ethz.ch