



Haley Fitzpatrick speaking to participants of a Systemic Cycles day tour around her PhD research on community resilience.

Eastern High Sierra desert of California, about 2000m asl.

# Systemic Cycles

## Weaving Guide Certification Course

A Systemic Cycles weaving guide is a curious explorer, a skilled bike rider with an interest and background in the field of sustainability and resilient design, and an experienced guide with the drive to co-shaping a more livable world.

Systemic Cycles is a set of physical and mental activities that eventually contribute to co-designing resilient and regenerative economies and ways of living. The wordplay “cycles” stands for bicycles which are the focal means of physically moving through the landscape and consciously exploring how we humans enact living systems. Cycles also stands for circularities, for circular thinking and designing, for lifecycles. “Systemic” stands for systems thinking and curating our awareness of being part of living systems we interact with - landscapes, water flows, vegetation, animals, and us humans.

How do we interact with and as part of nature? How do we live with natural resources, what types of land use fit a place, and how can we build an economy that nurtures healthy ways of living? What can we learn from the past for today, and how do we envision possible futures that are resilient and regenerative?

Systemic Cycles can be framed well through the German term “erfahren”, which’ double meaning describes the act of exploring while moving, sensing and experiencing.



Evening arrival to Melle in Valle Varaita, Italian Piedmont, on the pioneering Systemic Cycles multi-day tour in 2021.

Systemic Cycles is a bicycle tour from hours to multiple days, where we explore a bioregion with its hydrogeography, its natural and human-managed land, where we slow-move and ask questions to people we randomly meet about how they live here with the land, in community, how they make a business, and how they perceive change.

Systemic Cycles tours consciously connect us with places by documenting sustainability through a range of approaches that include geographic and ethnographic storytelling, multi-media storytelling, and data storytelling from real-time environmental sensors.

While each tour may have a different thematic focus, our data collection includes “warm data” as personal narratives, and quantitatively measuring physical parameters of air and water quality along the tour’s paths. These measured and described impressions will be supported by photography and interviews with people we meet.

SC is a tourist activity with an enzymatic function of triggering behavioural change through repetitively revisiting places and people and asking conscious questions about resilience and regeneration. It combines regional planning and development with urban-rural reciprocities. It paints a picture of a bioregional economy fit to a specific place, and it does so by engaging in dialogue of various formats.

SC can be a two-hour business training and a multiple-week bikepacking adventure. It can be done with rented e-bikes and groups of 20 people in an urban environment, as well as a three-people gravel bike tour with frame packs to remote areas.

SC involves physically moving to explore places through embodied cognition - the physical moving is a key element for unfolding the potential of SC as a didactic, inclusive, personal development, co-learning and co-designing practice. The repetitive re-visiting of places and people while asking questions to embrace change, the altering of routes to weave a network of routes, and the skillful practice of weaving between places, people, shared knowledge, narratives, curiosity, ideas and practice, are what makes SC a powerful set of practices with relational values.

Through SC tours we discover linearities in systems that are non-linear, to co-design circular supply chain systems where the circular material economy is only one of at least five types of circular flows, together with water, energy/embodied carbon equivalents, finances, and social flows.

Discovering potentials for social circularities is an underrepresented angle amongst circular flow types, and inhibits tremendous potential for building new consciousness and awareness, new learning communities, and new designerly and economic potential for future bioregional economies.

SC tours with their various places of growing connections will be documented on the new visualizing and learning tool Living Systems Labs explorer, a virtual bio-geo-cultural database, that also serves as a SC distribution communication tool.

We call this set of bioregionally relevant activities “weaving”.

## What does a Systemic Cycles weaving guide do, and what are the required skills?

An SC guide is a bioregional weaver who:

- plans, offers and leads mainly cycling tours from hours to days or weeks in a bioregion they are deeply familiar with,
- curates an ever-growing and deepening social network in their focal region(s) with businesses, officials, privates, landowners, farmers, tourist service providers, protected areas management, city and landscape planners, regional developers and so on,
- leads groups of cyclists on tours connecting the network of places and people, and nudges processes of sensing, wondering, questioning, discussing, reflecting about resilience and bioregional regeneration across scales of governance and space, such as green chemistry, raw material supply chains. goods, buildings, communities, cities, landscapes, regions, and transnational dependencies.

Tours are repeated and revisit places and people regularly, with different groups, and varying focal points, corresponding with the potential change processes going on where places and people meet. The guide nudges discussions and sets topical stimuli, thereby founding their work in the latest states of the science of sustainability and social-ecological resilience and in designerly, regenerative practice.

Groups interact with places and people they visit - this may range from a curious question on what someone is currently working on, to a longer visual dialogue with the entire group about the circular economy potential of a regional business cluster, to getting dirty hands and helping a farmer in their harvest. An SC guide opens the space for such interaction, and plans certain encounters, curates a curious, open and flexible group climate and day timing to act spontaneously to follow one's curiosity in exploring and letting oneself immerse into the system, beyond the plannable.

On one hand, an SC guide:

- is an experienced cyclist with extensive technical skills in cycling, trained to lead other cyclists on bicycle tours,
- has the required didactic and safety skills.

On the other hand, an SC guide:

- is well-educated in sustainability science and resilience, including relevant frameworks like the circular cross-scale governance spiral, the adaptive waves, the urban-rural infinity loop, the three horizons, and others,
- has embodied regenerative practices and bioregional weaving skills in various fields, and by experience can lead dialogues through systemic narration,
- is a skilled communicator and motivator, able to create and nudge social network relations and curate continuous transdisciplinary joint problem framings.

## Is Systemic Cycles only possible with bicycles?

An SC tour is best done with bicycles because of

the ease of access to its practice and equipment, the regional reach one gets while being slow enough to stop any time and enact with place and people. The self-growth potential while suffering up a slope or against the wind to be switched with the ease of downhill flows are unique. Other forms of slow-moving with embodied cognition effects and direct contact with people are valuable variants, such as walking in smaller places, kayaking in watery regions, ski touring in snowy places, even horse riding. The key is to move human-powered since this gives us a direct relation to the topology we move within.

## What benefits do I have when becoming a Systemic Cycles weaving guide?

Through the SC weaving guide formation, I gain substantial new skills and business opportunities. In detail, as an SC guide:

- I am a certified weaver - a sports guide, a systemic designer, a teacher, a conscious connector between people, places, and projects with the goal of supporting the development of resilient, regenerative systems and specifically a bioregional regenerative economy.
- I advanced my journey of personal development and growth, with new technical, theoretical, interpersonal, and self-consciousness skills.
- I received two ETH DRRS MOOC certificates, showing the rich knowledge I gained in themes around sustainability. Plus I got access to the associated DRRS learning community.
- I expanded my fundamental theoretical knowledge in science, e.g. on social-ecological systems, circularities, resilience, and regeneration.
- I learnt designerly ways of prototyping and iterating change as part of complex systems, and some methods such as visual dialogue that enrich my toolbox.
- I can now offer a new tourist product that is more than a bicycle tour - it is a holistic



The next morning at the “Antagonisti” hostel in Melle: the rainy start of the day is used for a visual dialogue about observations and questions on circularities and land use of the companies, people and places explored during the previous SC day.

Where some of the SC methods are grounded:  
Prof. Birger Sevaldson teaches visual dialogue  
as part of systems-oriented design at the Oslo  
School of Architecture and Design, Norway.



learning exploration in active contribution to a better tomorrow.

- I have new opportunities for offering learning experiences in relation to actors from regional development, agriculture, conservation, land use types, renewable energy infrastructure, various companies, the public sector, and education. This opens up new funding opportunities.
- I now have access to new business opportunities with a product that I can offer to executive clients.
- SC gives me access to new and different clients with a unique guiding service product “beyond sports”.
- I have access to a new visualization and integration platform, the Living Systems Labs explorer database for the documentation of my growing SC tours “weaving network” and access to new global markets.
- I became part of an SC guides database related to bioregions.
- I get access to the global DRRS community with a private SC guide community exchange forum and regular peer exchange.

## What specific skills do you learn in this formation?

Participants are experienced cyclists with local knowledge from their home bioregions. Building upon these diverse experiences, you will deep-dive into a rich, world-leading body of knowledge on designing resilient regenerative systems by taking the free-of-cost ETH DRRS MOOCs #1 and #2 before the course starts. This theory and designerly practice foundation enables us in the course to work on SC practices based on shared foundations and language.

During the direct interaction with the trainers and the other participants, you:

- will learn to plan an SC tour of various types - from a short business-training-like version on foot and on cycles, to a full-day tour, to a multiple-day tour.

- will co-design and co-guide during the cycle week, and be given various tasks on the concrete case of the Venice lagoon bioregion.
- will learn about bioregional weaving in practice, about types of circularities and how they relate to resilience.

We explore concepts of flow and how we can build organic emergence. We will practice group guiding and facilitation techniques, visual dialogue, and mapping. You will learn to develop your own bioregional cross-scale map and to use the Living Systems Labs explorer.

Multiple discussions on regenerative land use, food and energy systems, mobility, local climate impacts, social tipping points, product design and many more will automatically come up and shape our joint group learning processes. At the end of this course, you will be able to plan, offer and guide compelling SC tours.

## Mapping as an essential practice

Systemic Cycles is more than cycling and looking at projects. It involves the practice of scaling deep into place specificity by moving slow, by asking conscious questions, by wondering about circularities and zooming out and back in cross-scale governance. Through repetitive SC tours, we map bio-geo-physical-cultural assets and embody relational data of specific regions.

The bioregional regeneration map at the end of this document is a two-dimensional representation of cross-governance regenerative thinking, a snapshot from the bio-geo-cultural data explorer [livingsystemslabs.net](http://livingsystemslabs.net), which is an asset we learn to use in this course.

This illustrative map is deeply grounded in resilience, circularity, governance, and bioregionalism science while tapping into place-specific land use, culture, supply chains, and system embodiment. Such mapping connects with place and lays the foundations for regenerative design. In this Systemic Cycles weaving guide training course, we learn to map

regenerative thinking and design in both 2D physical maps, and on the virtual data explorer.

## How is the formation set up?

This course is a hybrid course with virtual and physical presence times.

The ETH DRRS MOOC#1 and #2 can be taken self-paced before the course starts. This guarantees a shared state of foundational knowledge and a shared language.

The course start is on 29 April 2024, with a virtual meeting on Zoom 8-10pm CET to get to know each other and prepare the cycle week details. The cycle week is the core part of the formation and takes place 5-11 May, Sunday to Saturday.

The location is the Venice lagoon bioregion, Italy, with our partner's large campsite Ca'Savio hosting us near Jesolo directly at the beach. We will spend two nights at the campsite's experience lab and start an SC walk across the rich and vast campsite on day one.

The next day we practice a one-day SC tour directly at the lagoon. The mornings and evenings are planning and discussion times, expanding from the theoretical knowledge of the MOOCs and everyone's own experience.

Then, we embark on a three-night four-day SC tour across the Venice lagoon bioregion.

We pre-plan one to two contact points per day along a basic loop track. We practice various SC practices during these days and open space for emergence. There will be ample joint planning and discussion time to dig deep into SC practices, again expanding from the MOOCs body of preparatory knowledge.

After the cycle week, there is one month time until 9 June to plan your own SC tour in your bioregion, and upload the prototype setup to the LSL explorer. During this one month, we meet for two further virtual learning sessions on Zoom. Here, every participant will receive mentoring on their first SC tour planning process.

The planned SC tour documented on the LSL explorer and discussed with the trainers counts as the course exam and needs to be uploaded latest by 30 June. The virtual course finishes on 30 June, via Zoom. Application period 2024 is 30 March till 15 April.

## What are the preconditions to join this weaving guide certification course?

Successful applicants to the SC guides certification course 2024 have at least started the ETH DRRS Massive Open Online Courses MOOC#1 and #2 by the time of applying. At the start of the cycle week, MOOC#1 needs to be successfully passed and MOOC#2 needs to be done at least halfway.

Participants need to prove sufficient bike mechanic skills and medical training.

In addition, the following documents need to be submitted:

- a short letter of motivation, describing why you are applying for the guides course and what your goals with the new formation are,
- a bicycle touring report needs to be submitted showing substantial cycling experience at least over the last five years,
- proof of international health and accident insurance,
- proof of personal/professional liability insurance,
- proof of a first aid course (or of signing up to one).

You need to bring your own gravel or bike-packing hardtail type of bike with bike-packing gear for a multi-day trip. We can assist in renting a bike locally if you don't want to travel with your bike.

Disclaimer: Every SC guide is self-responsible to check the local legal conditions for guiding groups on cycle tours. In addition to the SC guides certificate, a bicycle guide formation from a national cycling association may be required for insurance reasons.



SC co-founder and trainer Martin Schütz is walking the talk: instead of only taking a look at this stone tiles production facility in the Italian Piedmont, he gets a lesson from the local expert and embodies the sensation of stone handcraft - a lasting moment for him, the group, and the local practitioner.

Camping Ca'Savio, SC partner site in the Venice lagoon, Italy, and base for the first SC weaving guide certification course.



## What are the costs for this formation?

The SC guides certification course fee is 3000€, including:

- two experienced SC trainers who teach the course,
- three virtual course teaching sessions, one before and two after the cycle week,
- one-week field trip organisation and hosting by our local partner,
- teaching and guiding the cycle week,
- mentoring of your own first SC tour offer as part of the course exam deliverable,
- one-year subscription to LSL explorer,
- listing in the SC guides database,
- access to a private SC exchange space on the DRRS network.

Please note, course fees can be paid in installments. If you cannot afford the full course fees, please contact us and we'll find out how we can support you.

Additional costs to cover by yourself are for travel to/from Casavio, accommodation, and food. Count for about 600€ plus travel to/from Ca'Savio. We stay three nights on the hosting campsite 5-7 May and 10-11 May. You can choose between a shared bungalow or you bring your own tent. Three hotel nights during the multi-day trip: 7-10 May (double rooms), plus food and drinks.

## What equipment do I need to bring to the cycle week?

You will need your bicycle equipped with bags for a multiple-day tour including basic repair and first aid material, your bike clothing for a summery climate at sea level, and swim clothing.

If you like to camp in your own tent for the first two and the last nights, bring all you need to camp. For bungalow sleepers, duvets etc will be provided.

You need a laptop or tablet for visual mapping on Miro, a camera and GPS to geolocate SC markers. If your phone has sufficient memory, it will do both tasks in one.

## Who are the trainers teaching this course?

**Martin Schütz** is an engineer, designer and product development expert, and a university lecturer. Martin has been active as a bike designer since the early 90ies. He develops all kinds of Bikes - cycling and cycles are his passion and part of his life. Martin teaches at the Zurich Art School and at the Technical University ETH Zürich.

With Systemic Cycles, Martin connects his passion for moving by bike with his interests in a sustainable future and in what people do, therefore.

**Tobias Luthe (PhD)** is an academic transdisciplinary hybrid. He works as professor for sustainability science and regenerative design, directing Systemic Design Labs at ETH Zurich, and being associated at The Oslo School of Architecture and Design (Norway). He is founding director of the MonViso Institute in the Italian Alps, a living systems lab for sustainability transitions and regenerative design. And he co-founded Grown, a design-as-nature lab and experience collective, winning industry awards for biocomposites.

Tobias is a mountaineering guide and photographer. Engaging beyond the conventional, challenging movement of body and mind in nature, linking science with design for transformative action are among his passions: Systemic Cycles bring all these together.  
[www.tobiasluthe.net](http://www.tobiasluthe.net)

