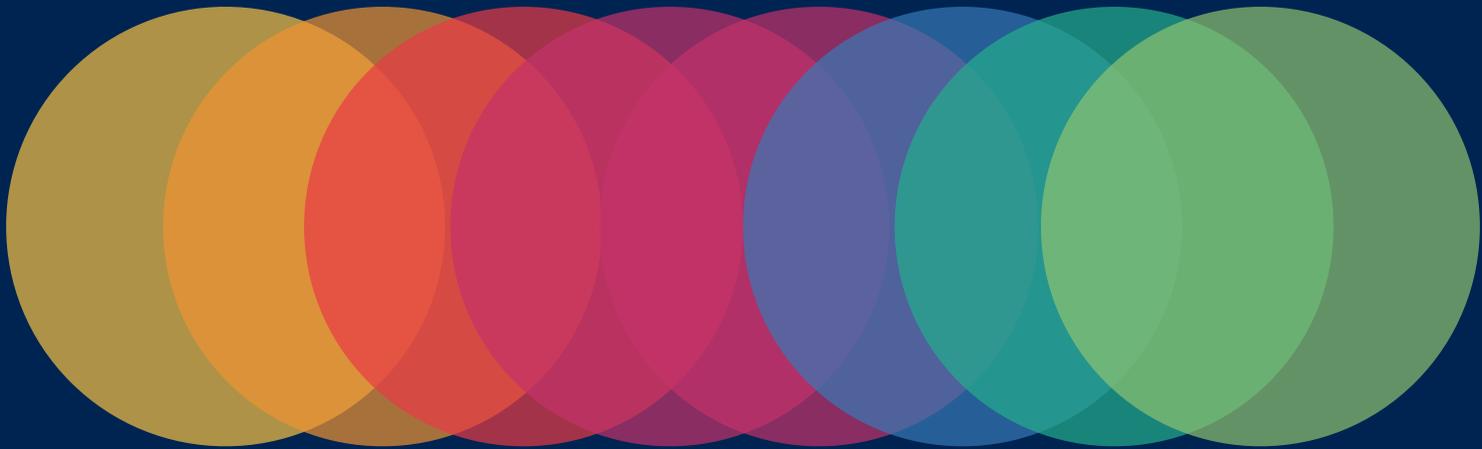


PROTOTYPING OUR FUTURE



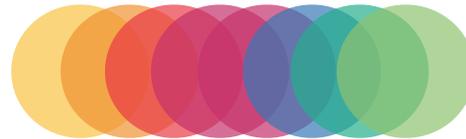
Social Labs for a Sustainable, Regenerative, & Thriving Future

Ana Carolina Rodrigues, Joshua Cubista, & Rowan Simonsen

PROTOTYPING OUR FUTURE

Social Labs for a Sustainable, Regenerative, & Thriving Future

This Guidebook is dedicated to emerging
Social Lab & Sustainability practitioners,
conveners, designers, facilitators, & people who
are committed to creating a sustainable,
regenerative, & thriving future for all.



Prototyping Our Future

by

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References can be found in the 2014 Master Thesis:

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About the Authors

ABOUT THIS GUIDEBOOK

Inspired by the Masters in Strategic Leadership Towards Sustainability 2014 Thesis, “Designing Labs for a Sustainable Future”, this guidebook explores how Social Labs can be designed in order to catalyze systemic innovation while contributing to socio-ecological sustainability, and providing forums for collaboration, collective impact, capacity building, and the emergence of systemic solutions to complex challenges. Through interviewing 26 leading practitioners from the Lab and Sustainability fields including Lab designers/facilitators, users of the Framework for Strategic Sustainable Development (FSSD), and people focused on systemic change and transformative action, our research takes a pulse of current practices and trends in the field.

In part one, we explore the landscape of the sustainability challenge facing humanity and the character of complex challenges. In part two, we present two different sets of Sustainability Principles that can provide boundary or success conditions when moving toward a sustainable future. In part three, we then look at Backcasting from Sustainability Principles as one effective way of addressing complex challenges. In part four, we provide a brief window into the field and definition of Social Labs, and in part five, we present key field notes from our interviews in the form of a model that explores working iteratively when prototyping within a Lab Space and including Sustainability Principles when Defining, Designing, Acting and Evolving within a lab. Additionally, we include with our field notes some strategic questions from our interviews that practitioners ask when designing Labs. In conclusion, part five and six offer a set of guiding principles for emerging Lab practitioners and those interested in exploring the intersection between Social Labs, strategic sustainability, and systemic change - both followed by a toolkit with a sample of core tools, methods, and resources that can be utilized when designing and facilitating Social Labs toward sustainability.



We offer these reflections with our sincere gratitude for everyone who made this work possible, especially our interviewees for their candor, inspiration, and amazing work in the world:

Karl Henrik Robèrt, Ronny Daniel, Berend Aanraad, Göran Carstedt, Saralyn Hodgkin, Stanley Nyoni, Chad Park, Tracy Meisterheim, César Levy Franca, Julián Ugarte, Adam Kahane, Zaid Hassan, Charlotte Millar, Maria Scordialos, Satsuko VanAntwerp, Maaianne Knuth, Hendrik Tiesinga, Batian Nieuwerth, Mille Bojer, Monica Pohlman, Margaret Wheatley, Eduardo Staszowski, Darcy Winslow, Michael Ben-Eli, Joeri van den Steenhoven, and Tim Merry.

Our intention in sharing our research is to mirror back to the field what we learned; and to curate here, key perspectives and findings in support of designing Labs that foster innovations that lead toward a truly sustainable future. With this in mind, this is the first version of this guidebook, please feel free to read it in any order; play with what is offered, and keep in mind that the material within it is experimental in nature. Therefore, we invite you to contribute to the continued development of this research by sharing your reflections or questions with us at: prototypingourfuture.info

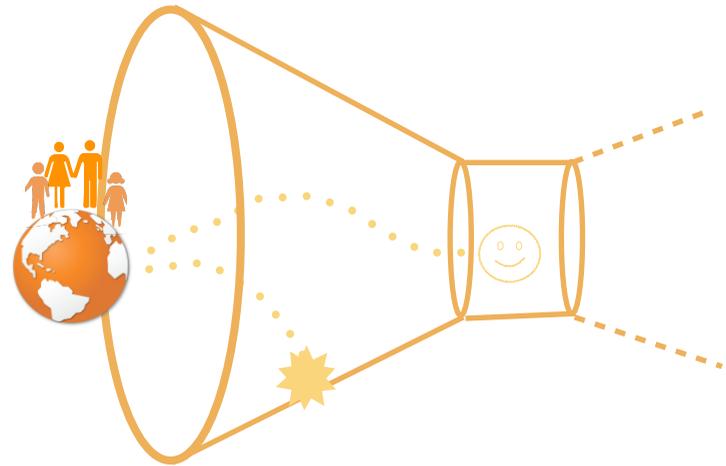
With appreciation and in adventure,
Ana, Joshua, & Rowan



TOWARD A SUSTAINABLE FUTURE

In the world today society faces a mosaic of interrelated socio-ecological challenges that are increasingly complex, global, and contribute to systematically increasing unsustainability on a scale and at a pace unknown before in human history. One way to understand the nature of the sustainability challenge is represented by the metaphor of a Funnel (depicted) which suggests that as the challenges society faces become more severe the pressure and need to overcome these challenges will become more intense.

This challenge is illustrated by the narrowing walls of the funnel, which suggest that the room to maneuver towards sustainability becomes more limited as time moves on. As human population and the demand for resources systemically increase, the Earth's carrying capacity and ability to provide these resources is systematically decreased, as is illustrated by the narrowing walls of the funnel. The challenge for humanity is to find ways to navigate toward a sustainable future by reaching the funnel opening. The alternative is that society will "hit" the walls of the funnel which implies the collapse of the socio-ecological system, at which point it may be too late to transition toward a sustainable society.



*“We know the issues we are dealing with.
The silence is broken.”
- Tim Merry*



As the challenges we face become more global, interrelated, systemic, and fast paced, complexity increases. We can see the impact of this complexity through reflections upon globalization, increasing exponential change, and as social and ecological boundaries of the biosphere become more clear. The organization Reos Partners suggests that the complexity we face can be understood in three interrelated ways:



Dynamic in that the space between cause and effect become further apart in time and space;



Social in that there are more choices to be made between more people with more perspectives than ever before;



Generative in that the future is unknown and emergent, and we are tasked with creating the future as it emerges in improvisational and adaptive ways.

“In general, as the issues are too hard to compute we want a combination of rationale and intuition.”
- Adam Kahane



Similarly, the Cynefin Framework, offers a way of understanding the various states that a system can be in, including: obvious, complicated, complex, and chaotic. This framework offers a guide for how to approach different kinds of system challenges, by employing appropriate ways of thinking and acting in order to achieve the best possible results for a given endeavor.

When dealing with complex issues, it is important that approaches are designed specifically for complexity and not for obvious, complicated or chaotic situations. Often, approaches for dealing with the sustainability challenge are treated as issues falling into the complicated domain.

When dealing with complicated issues the appropriate response is to analyze and understand the details of the system, assuming that a connection between cause and effect can be found. Regarding sustainability, it is important to consider the high level of the complexity of the whole socio-ecological system, rather than having a fragmented view of just the parts; by understanding the nature and scope of the challenge at hand, it becomes easier to identify the appropriate approaches for a given type of challenge.

COMPLEX Relationship between cause and effect can only be known in retrospect	COMPLICATED Understanding relationship between cause & effect requires specialized analysis or knowledge
CHAOTIC Unknown relationship between cause and effect	OBVIOUS Cause and effect is obvious and known by all

*Adapted From Cynefin framework
by David Snowden*





In response to the complexity of the challenges society faces, we have often sought to remedy the situation by focusing on finding obvious and complicated ways to deal with increasingly complex and chaotic issues. One way we have tried to do that is by focusing our attention into silos of inquiry and action promoting specialization and expertise.

While this kind of thinking and acting has fostered many positive innovations for society, the drawback is that it has also promoted detrimentally, what physicist David Bohm spoke of as fragmentation of thought, action, and society. In many cases, the models of reality and systems we have created, which in turn reflect our world-views, are built for yesterday's world. Furthermore, the truth is that we do not have all the answers to the questions and challenges that are before us, nor have we effectively organized to collaborate and lead the changes that are needed on a global, or in many cases, local scale.

Therefore, we need a new kind of leadership and collaboration, experimentation, and definition of success, if we are to navigate through our time in history toward a sustainable future. New models that reflect the world we want to see are needed. We need to experiment and prototype toward visions of the future that inspire and engage people in meaningful work and play. Leaders, facilitators, designers, and change agents who are equipped to strategically navigate, inspire, and co-create with people toward collaborative success will be at the vanguard of innovation, prototyping our future.





“In order for you to be strategic, you have to know where you are going.”
- Karl Henrik Robèrt

*“We need to understand our world views and assumptions,
so we can trust and collaborate for systemic change.”*
- Maria Scordialos

SUSTAINABILITY: A PRINCIPLE-BASED APPROACH

The Framework for Strategic Sustainable Development offers a scientifically sound and strategic approach to dealing with the complexity of the sustainability challenge in a unified systemic way. The framework was originally developed by Dr. Karl-Henrik Robèrt in 1989. The FSSD offers both a scientific understanding of the definition of sustainability, as proposed by the following Sustainability Principles, and a stepwise planning approach to more sustainable ways of operating in a complex and adaptive system such as our biosphere.

*“We need to understand that the future cannot
be systematically undermined.”
- Saralyn Hodgkin*



FSSD SUSTAINABILITY PRINCIPLES

In a sustainable society, nature is not subject to systematically increasing...



1. ...concentrations of substances extracted from the Earth's crust,



2. ...concentrations of substances produced by society,



3. ...degradation by physical means

and... people are not subject to systematic barriers to...



4. ... personal integrity

5. ... influence

6. ... competence

7. ... impartiality

8. ... meaning

The eight FSSD Sustainability Principles provide the boundary conditions within which humanity can foster a sustainable society; and, form the foundation upon which the definition and discussions on sustainability, within this guidebook, are based.

Simply stated, these principles suggest that in order for humanity to navigate through the "funnel" we must not take out of the earth faster than it can regenerate, or put more into the environment than it can assimilate, or trash our earth faster than it can rejuvenate, or impede present or future generations abilities to create a thriving future for themselves and future generations.

Another approach to Sustainability Principles that offers additional aspects of the conditions that contribute toward a truly sustainable society, can be seen by the work of Michael Ben-Eli and The Sustainability Laboratory, who offer the following definition for sustainability:

Sustainability: a dynamic equilibrium in the processes of interaction between a population and the carrying capacity of an environment, such that the population develops to express its full potential without adversely and irreversibly affecting the carrying capacity of the environment upon which it depends.

*"If you wish to fly and want to successfully construct an aircraft, you need to understand the basic principles of aerodynamics. Similarly, if we are serious about ensuring a sustainable future, we need to be guided by a set of principles which underlie sustainability as an enduring state."
- Michael Ben-Eli*

1st Principle: Material Domain

Contain entropy and ensure that the flow of resources, through and within the economy, is as nearly non-declining as is permitted by physical laws.

2nd Principle: Economic Domain

Adopt an appropriate accounting system, fully aligned with the planet's ecological processes and reflecting true, comprehensive biospheric pricing to guide the economy.

3rd Principle: Domain of Life

Ensure that the essential diversity of all forms of life in the Biosphere is maintained.

4th Principle: Social Domain

Maximize degrees of freedom and potential self-realization of all humans without any individual or group, adversely affecting others.

5th Principle: Spiritual Domain

Recognize the seamless, dynamic continuum of mystery, wisdom, love, energy, and matter that links the outer reaches of the cosmos with our solar system, our planet and its biosphere including all humans, with our internal metabolic systems and their externalized technology extensions. Embody this recognition in a universal ethics for guiding human actions.



BACKCASTING FROM SUSTAINABILITY PRINCIPLES

When prototyping toward a sustainable future there are a variety of methods to choose from such as: Scenario planning, Forecasting, or Backcasting; the last of which will be highlighted here. Unlike Forecasting, in which one seeks to predict the future based upon current trends, in this context Backcasting, from principles, is the process where one articulates a vision of success within the boundary conditions of the Sustainability Principles, and then identifies strategic action steps necessary to achieve the desired outcome.

Backcasting from Sustainability Principles is one of the unique contributions that the FSSD makes to strategically creating a sustainable future. The process depicted below is known as the A,B,C,D Process and is a method used for strategic sustainability action planning in organizations and communities all around the world. The first step (A step), is to define a vision of a desired future that is as creative and imaginative as you desire, while also being within the boundaries of the sustainability principles. The second step (B Step), is to assess the current reality, and the third step (C Step), consists of identifying the gap between vision of success and current reality (A and B) and devise a list of ideas for actions that can bridge that gap. The actions are then strategically prioritized (D Step) toward success.

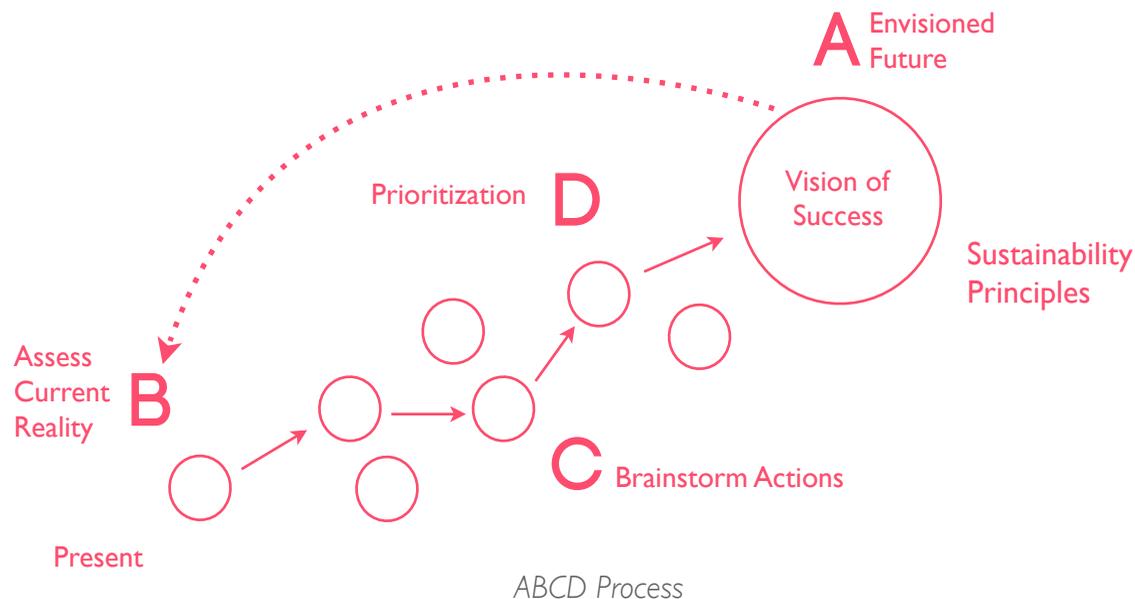
*“You need a principle-based vision of a sustainable future to Backcast from, then you can play the game in a million different ways.”
- Göran Carstedt*



To prioritize the actions, three prioritization questions are asked. Are given actions: 1) oriented in the right direction toward the vision, 2) providing a flexible platform from which future actions can continue to build toward the vision, and 3) providing a return on investment (ROI) either financial, social, or ecological, to build upon when taking future steps toward your sustainable vision of success?

As stated above, forecasting focuses on predicting what will happen in the future based on current trends, past actions and patterns. Given that these patterns and trends are often part of the problem, forecasting is not the best approach when dealing with complex challenges. With that in mind, Backcasting from principles, as described in the A, B, C, D process, is very useful when:

- The issue of focus is complex;
- There is a need for major change;
- Dominant trends are part of the problem;
- The problem, to a great extent, is a matter of externalities;
- The scope is wide enough and the time horizon long enough to leave considerable room for deliberate choice.





“There is a deep disconnection from meaning. I think that that is what Labs do, Labs explicitly say that we are here to connect you to the things that really matter and others on a similar quest.”

- Charlotte Millar

“Often it is relational innovation, not intellectual that is important, because otherwise you would think that what is needed are new ideas. New ideas are not in short supply, but what is in short supply is coalition, people who are willing to work together to implement the ideas.”

- Adam Kahane

SOCIAL LABS: EXPERIMENTATION, PROTOTYPING, & PORTFOLIOS OF INNOVATION

Given the increasing scope and complexity of social challenges in the world today new ways of dealing with these challenges are needed. Conventional planning, development and strategic responses to these challenges have proven inadequate because they have failed to address deep complexity and unpredictability. As Zaid Hassan, author of “Social Labs Revolution” points out, “strategic planning fails 99% of the time, we need a new way to address the complex challenges we are facing”. Furthermore, addressing the sustainability challenge requires approaches that are systematic, participatory, and emergent, all at the same time, enabling a grounded approach that is simultaneously adaptable and responsive to the changing nature of the challenges we face.

The concept of a Lab or Laboratory has traditionally been focused in the domains of science and technology, now however, Laboratories dedicated to societal transition are being created in diverse fields of endeavor such as technology of all kinds, innovation of finance, food systems, transportation, education, organizational change, and sustainability. The focus of laboratories as a space for discovery and innovation has evolved over time from focus of chemistry to biology, to psychology or production; such as Thomas Edison’s famous “Menlo Lab” in the 1800’s, where the telephone and the light bulb were invented or John Dewey’s Laboratory dedicated to education and community cooperation. The concept of creating intentional spaces and focusing resources toward experimentation, discovery, and innovation, has, over time, demonstrated the relevance of Labs for invention and development, scientific advancement, medical research and new technologies, as well as the emerging application toward solving complex societal challenges.





Here we will explore the latter form of Labs that are designed to create forums for both personal and collective (organizational, community) learning and transformation. Labs that integrate rapid prototyping, action learning, and leadership development for stakeholders from different sectors and disciplines in society in order to address complex socio-ecological challenges at a systemic level. The emergence of these labs has been inspired by diverse fields of inquiry and action such as: systems thinking, complexity science, group psychology, participatory process, design thinking, cross sector collaboration, social innovation, disruptive innovation, and a wide variety of tools and methods such as Theory U, Appreciative inquiry, dialogue, prototyping, and computer modeling/iterative software development strategies such as Scrum and Agile.

While Labs of this nature maintain certain aspects in common with technical and natural science laboratories such as experimentation, learning by trial and error, and focusing on innovation, these new kind of Labs come in many forms and with many names such as Design Labs, Social Innovation Labs, Change Labs, Sustainability Transition Labs, Social Labs or a variety of other names and definitions as explained by Hendrik Tiesinga co-author and convener of the Book “Labcraft”.

“The use of the name ‘laboratory’ outside the natural sciences has a certain history in academia, in particular interactive media studies (e.g. MIT’s Media Lab) and it has recently gone beyond and different forms of ‘innovation labs’ are popping up inside businesses, in civil society, arts (Edwards 2010). Some of these labs are no different from conventional networks or think tanks; others are really experimenting with new forms of social organization. A societal laboratory can thus have widely different meanings”





As Russell Ackoff one of the grandfathers of systems thinking suggested, analytical and reductionist approaches are effective strategies for complicated endeavors or technical problems, such as manufacturing a car or designing a building, where the innovation to be created or the solutions to be worked toward have a clear outcome. In contrast, systemic complex issues or adaptive challenges require a more dynamic approach where the actions taken to address the challenges are able to be adapted as the needs and contexts of the challenges change. When dealing with complex adaptive challenges there are no one size fits all answers, there are just solutions, and actions that offer possible options out of many, for addressing a given challenge.

In the face of complex challenges, however, people often fall back on conventional planning methods as a way to address these challenges. In contrast to traditional planning approaches that assume predictability of the future, Zaid Hassan suggests that what is needed are new ways of dealing with complex social challenges that focus on an experimental and prototyping approach to creating portfolios of innovation that can increase the probability of resolving complex challenges. An approach he calls Social Labs:

“A Social Lab is a strategic approach toward addressing complex social challenges. As a strategy, it isn’t too hard to grasp. It can be stated simply. Bring together a diverse, committed team and take an experimental, prototyping-based approach to addressing challenges systemically at a root-cause level. Keep going. That’s it”.



Examples of Labs in the field include:

- Sitra/Helsinki Design Lab
- Mind Lab
- The Sustainable Food Lab
- The Sustainability Laboratory
- Socialab
- The Finance Innovation Lab
- The Natural Step -Sustainability Transition Labs
- Parsons DESIS Lab
- MARs Solutions Lab
- Living Labs
- Kennisland
- IDEO
- Nesta
- Reos
- Harvard Innovation Labs
- MIT Media Lab
- Stanford Change Labs

For a wider overview see map of 100 Social Labs: <http://social-labs.org/mapping-the-landscape-of-labs-a-google-map/>



“We need to be putting people back in the driver’s seat of change.”

- Berend Aanraad

“No more waiting. Start doing, prototyping. The skills of having good relationships and being in conversations are pretty well spread, so this is about taking action and getting shit done.”

- Tim Merry



FIELD NOTES: A SYNTHESIS OF OUR RESEARCH



ORIENTATION

In order to understand how to design a Lab for experimentation toward a sustainable future it became clear in our research that it is important to understand the orientation that the Lab must have in order to achieve such a goal. Therefore, before designing a Lab space and/or the processes within it, it is important that Lab designers and practitioners determine whether a Lab approach for resolving complex challenges is suited for the intended purpose.

Furthermore, Labs are trending around the world at the moment, and as Adam Kahane suggested to us: "whenever there are two people in an elevator they call it a lab." In this light, as synthesized from our field interviews, we offer the following characteristics as a set of guidelines to support the orientation and definition of a Lab toward the qualities and processes that come into play when using Lab spaces and approaches to address complex societal challenges. A Lab in this context, therefore, has the highest probability of success when it focuses on:

- Creating new models of relationship and engagement
- Returning agency to people as leaders of change and innovation
- Developing innovations toward a socio-ecologically sustainable future
- Developing capacity and leadership for systemic change
- Addressing systemic root causes
- Utilizing collaborative, multi-stakeholder, and cross-sector processes
- Focusing on action, experimentation, prototyping, and iterative processes
- Focusing on learning, research, documentation, and theory



SPACE

Labs addressing societal challenges have traditionally been viewed, by and large, as innovation and problem solving processes, and/or projects with relatively finite timelines.

Labs are now evolving from a process/project focus toward an organizational model that employs many processes to resolve complex challenges over longer timeframes moving from processes of innovation, to spaces within which innovation processes take place.

As depicted beside, the Lab is the circle within which is created a space for experimentation, discovery, and the creation of a portfolio of innovations.

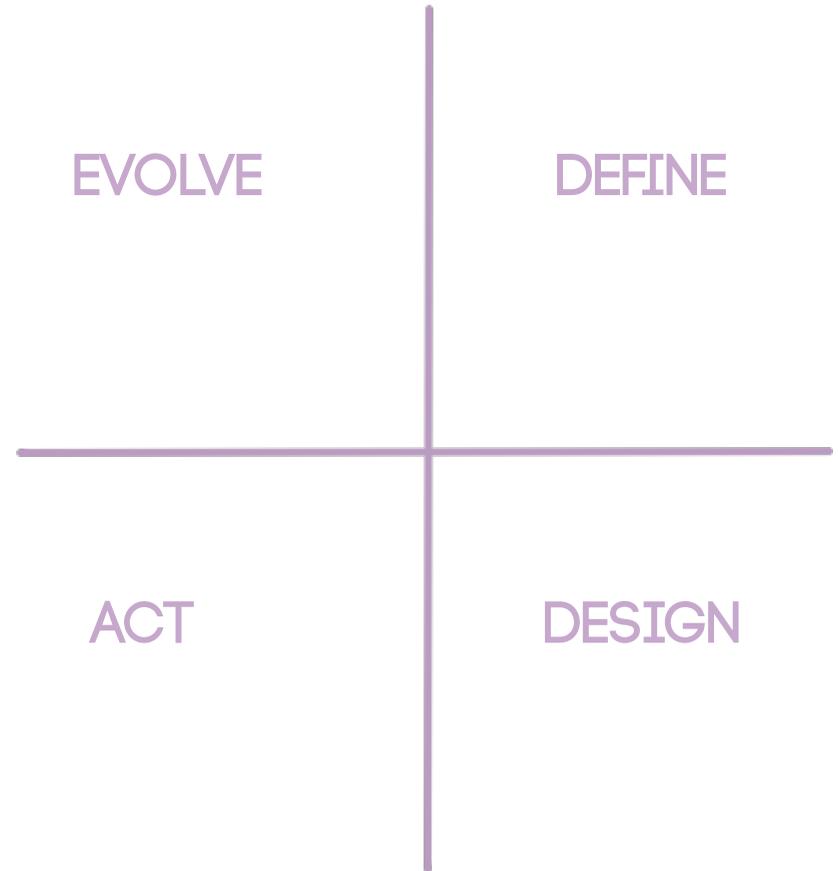
Furthermore, the Lab space is defined by the characteristics that the Lab focuses on; in this case, determined by the Lab characteristics presented above in the *Orientation* section.



ELEMENTS

Within the Lab space, the following elements were identified during the course of research as ways of understanding some of the dynamics of what is at play at various moments in the Lab Space.

Each element is an individual area for action, and collectively, the four together make a whole greater than the sum of their parts, which are what makes up the interior of the Lab experience. It is the intersection of each element and the relationship between them that makes up the dynamics within the Lab. While our research focused primarily upon the Define and Design Elements, we explored the nature of each element by asking practitioners what strategic questions they ask when creating a Lab, which are compiled in the following pages.



DEFINE

When navigating, this element includes defining the system of focus, the current reality of the situation; and, the vision of where you want go. The challenge, and who has a stake in the addressing the challenge. Define and scope, in a clear and compelling way, including why it is important to address this challenge. Co-create a compelling vision that engages people in the present; and for the future, fostering a sense of community and shared purpose. And, when focusing on the people involved, it is important to map the stakeholders and define who needs to be in the conversation.

Strategic Questions

Current Reality:

- What is really going on right now?
- What is needed?
- What kind of innovations are already present in the field?
- What are the challenges? What are the opportunities?
- Where is the innovation already happening in the system and how can you build on that?
- What resources/assets do you have?
- What resources/assets do you need?
- What relationships is it important to build for success?

The Challenge:

- What is the problematic situation/challenge/opportunity for innovation?
- Will the public be interested, and can you gain support?
- How can it be appealing for people to join in?
- To what extent does the challenge identify concrete barriers to sustainability in the system that cannot be addressed by a single organization?
- Does the change have the potential to endure?
- Does it matter to the participants and their stakeholders - does it address a burning need?
- What is the balance of risk and reward by addressing this challenge?



Strategic Questions

Vision of Success:

- How can we accelerate innovation as an ecosystem of innovation, that is more thriving than right now?
- What are the leverage points to create impact in the system?
- What do partners see 5, 10, 20+ years into the future? How do they see their collaboration?

People:

Core Team

- Who are other people holding the same questions in your community?
- Who else cares and could make a difference?
- What new people could you invite into the conversation?
- What diversity do you seek (gender, age, ethnic, racial, religious, economic, hierarchical, organizations, etc.)?
- Why are you seeking or limiting diversity?
- What shared understanding do people need to have?
- Who will be able to make the commitment you are asking?
- Who has the resources in the community to implement prototypes?

Stakeholders

- Who needs to participate?
- Who is essential to the process? Who is the center, who do you want to bring in?
- Who are the key people? Who are the stakeholders?
- How are the participants part of the problem and the solution?
- Who represents the system of focus?
- Who is needed at each point in the process?



DESIGN

This element includes designing the Lab Space toward the vision of success, and in order to address the chosen challenge. Design the process, the outcome, your invitation, organizational structure, and as much as possible, co-design with your stakeholder for long term and shared success. Backcasting can be included in this phase, and designing with the harvest and outcomes in mind can help create more impactful results.

Strategic Questions

Governance:

- What are the rules of the lab?
- Where are the people at? Who are they, what language is appropriate to use?
- How to meet people where they are at?
- What language and methods makes sense for the stakeholders involved at this point?
- What organizational structures are needed at this time?
- Who is responsible for what?
- What organizational support is needed?
- What is the administrative work needed? Who will do that?

Purpose & Process:

- What is the purpose of what you are trying to achieve?
- What processes and methods are best suited?
- What flow best serves the process and desired outcomes?
- What methods should be used?
- What are the meeting points on the journey, when do we meet and how do we meet?

Timeframe:

- What is the timeline?
- Where do we want to be by the end of that timeline?
- Have I had time to stop and process?
- What do we want to achieve in each phase? What are the best methods to do this?



Strategic Questions

Convening Team:

- Does the convening team have to represent the system?
- Are the convening team excellent organizers?
- Are the convening team good designers?

Invitation:

- Who is convening? Are they trustworthy in the eyes of the participants?
- Is the invitation clear?
- What is already clear?
- What in the invitation is open for co-creation?
- Is the purpose clear?
- Is the desired outcome clear?
- Is the invitation understandable for the participants?
- What is the most effective way of reaching the participants?

Stakeholders:

- Who needs to be part of co-designing the Lab?
- Who needs to be present for this stage?
- Who should be invited?
- Who needs to be included in the experience, experiments, and prototyping in the Lab?

Harvest/Outcomes:

- What are the short/mid/long term results we are designing for?
- What results and impact does it make sense to measure and how?
- How do partners see 5, 10, 20+ years into the future?
- How do stakeholders see themselves in that future?
- How do they see the collaboration?



ACT

In this element, move forward in creating results, document it, and gather feedback. This is a time to prototype new solutions and document what is being done. The facilitation, the meeting, the experience. Develop personal capacities for acting and gather feedback.

Strategic Questions

Collaborative Action:

- What is needed to build relationships in the group now?
- How are you creating time for tending personal capacity building in the process?
- What do the participants need to be able to work most effectively together?
- How can we have enough understanding of the realities of the others?
- What are you or we willing to risk to get the intended results?
- How can you build the courage and bravery of the group?
- How can you foster a culture comfortable with failing early and learning, rather than being perfect?
- What limiting beliefs do you need to let go of?
- What actions can most deeply build trust and foster innovation?

Documentation:

- What do you need to document?
- What documentation is serving to move the process forward?
- How are you documenting your learning?
- What is not working? What can we stop doing?
- What is working excellently?
- What is there to build on and strengthen?



EVOLVE

Move forward, process the feedback, reflect and learn. Evolve the relevant innovations to scale, in service of the purpose of the Lab. Have a long term perspective: working toward impact requires a long term support structures. This is where the next iteration is born and you are ready to be moved back into **DEFINE**.

Strategic Questions

Learning & Implementation:

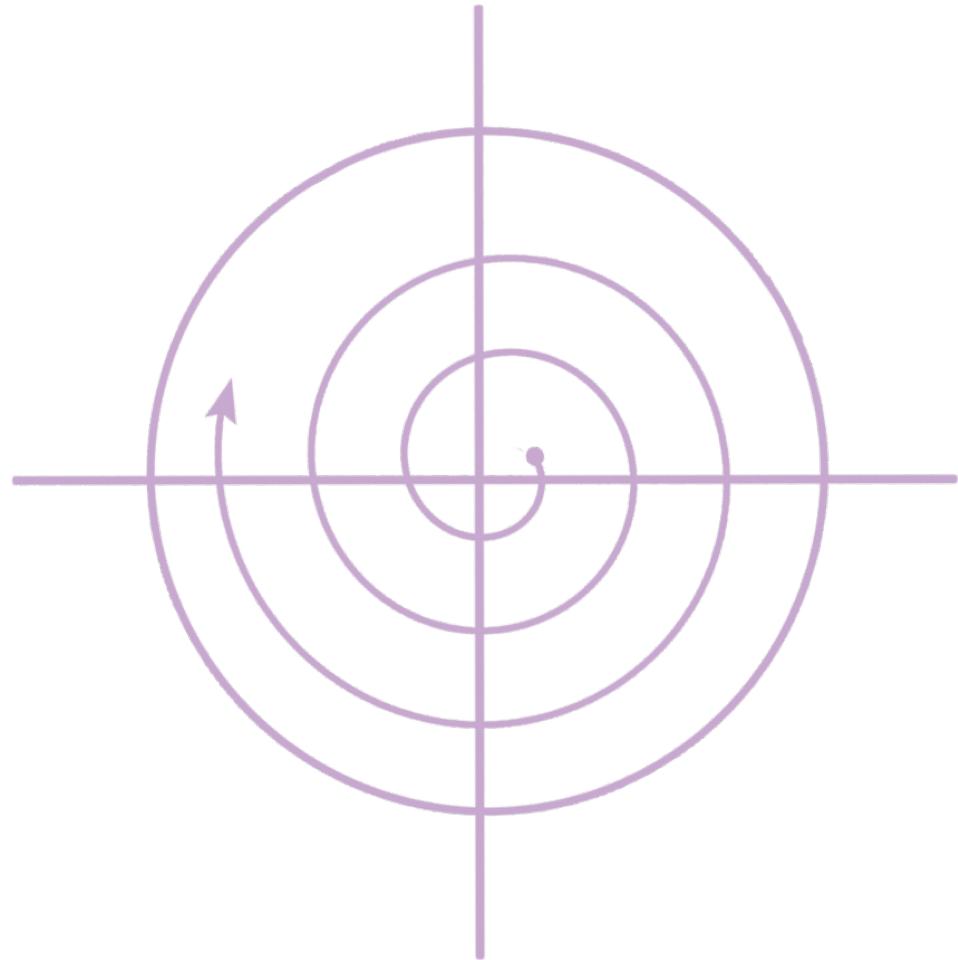
- What did we learn from the process/action?
- What is the information that we need to measure?
- How are we measuring and making sense of the results and impact?
- What implication does our learning have? What needs to be changed or adjusted?
- What are you not seeing?
- How can we break beyond what we know and think we know?
- What are the assumptions that people are making that are not necessarily true?
- What are we missing, what are the blind spots, and how can we investigate in a fast and thorough way?
- How to move toward success?
- What does success look like?
- What is your strategy for scaling solutions?
- Who needs to be included in the institutionalizing of innovations?
- How will you communicate and share your innovations/results?



SPIRAL

An ongoing iterative process

While there are directional and temporal aspects to Labs, in that they do have a beginning, middle, and end or evolution, Lab designers and facilitators often revisit core aspects of each stage throughout the lifespan of the Lab, continuously widening the scope and/or focus of each stage and the Lab space as a whole. The pattern of actions in a Lab can be seen as an iterative spiral of actions that incorporate feedback loops, rather than a straight line going strictly from one phase to the next. This iterative design process is mirrored in iterative software development and prototyping processes which have contributed to the evolution of the Lab approach, and can be seen within current trends in the field.



Sustainable Innovation

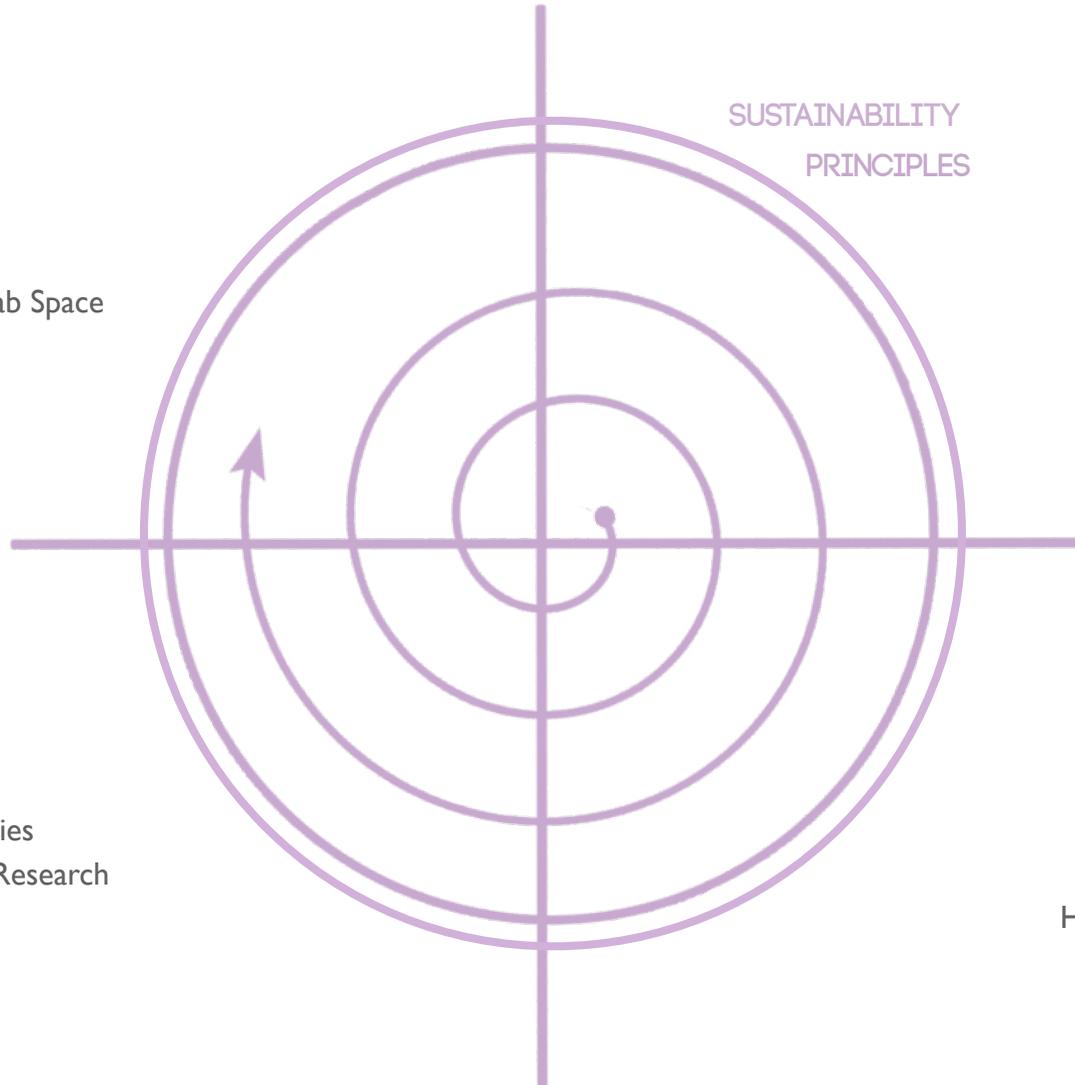
Our research suggests that when done in an inclusive and context relevant manner, uniting the Lab Space, Spiral, and Elements with the emphasis on innovation toward systemic solutions through experimentation, prototyping, multi-stakeholder process, capacity building, and relationship building, with strategic sustainability and the emphasis of Sustainability Principles, Backcasting, and systemic action, together increases the probability that innovations created within Lab's can contribute to transitioning society toward a sustainable future.

EVOLVE

- Reflect & Evaluate
- Metrics for Success
- Iterate within the Lab Space
- Scale Innovations

ACT

- Experimentation
- Prototyping
- Developing Capacities
- Action & Learning Research



SUSTAINABILITY
PRINCIPLES

DEFINE

- System
- Need/Purpose
- Challenge/Solution
- Resources
- Core Team
- Stakeholders

Vision of Success
Current Reality

DESIGN

- Lab Space
- Structures
- Processes
- Governance
- Harvest/Outcomes





“We need to work together in unconventional ways for new solutions.”
- Adam Kahane

*“Humanity has to come together to make one major effort together,
the whole planet has to become one big laboratory.”*
- Michael Ben-Eli

THE PRACTICE OF PROTOTYPING OUR FUTURE

This guidebook is based upon the premise that in our world today we are facing a mosaic of systemically increasing complex adaptive challenges we cannot resolve from the same level of thinking that created them in the first place. Therefore, we must experiment and prototype new ways to innovate, collaborate, and build leadership capacity for systemic change in complex situations. Traditional planning methods, and silo solutions have fallen short of resolving the complex challenges that we face, which invites the exploration into how more agile and collaborative processes can contribute toward prototyping the future we envision.

Laboratories with focused resources that are dedicated to resolving complex challenges, and innovating toward a sustainable future, offer a uniquely adaptive, experimental, and collaborative approach to the resolution of such challenges. At the same time Strategic Sustainability provides a basis for understanding the systemic and complex nature of the sustainability challenge we face, as well as offering ways for taking strategic action toward global socio-ecological sustainability. Together these two approaches have the potential to assist humanity in navigating toward a sustainable, regenerative, and thriving future for all.





Imagine, for a moment, if humanity, rather than funding campaign's to fight fear and scarcity, rather re-focused our resources toward the resolution of the sustainability challenges before us and the innovation toward discovering the highest leverage actions to create a healthy, happy, and contributive human presence on this planet, for all.

Buckminster Fuller whose work contributed, in part, to the emergence of what has become the field of Social Labs, asked the question:

“If success or failure of this planet and of human beings depended on how I am and what I do, how would I be? What would I do?”

For emerging Lab and sustainability practitioners, conveners, designers, facilitators, and those interested in prototyping our future, we echo this question, and offer the following guiding principles for Social Lab design toward sustainability, in support of the widespread emergence of ways to work and play collaboratively, while exploring this question together.



GUIDING PRINCIPLES FOR SOCIAL LABS

Do No Harm

When we are working with the innovation of society and capacity building toward a sustainable future, we must take into account the roots of deep meaning and purpose, the imperatives of daily life we all face, and the profound questions and choices this work requires. The invitation to do no harm, borrowed from initiation into the practice of medicine, as a guiding principle, invites us to reflect upon our actions and the repercussions they have, that ripple out into the world through our practice of this work.

Model Socio-ecological Sustainability

In a million different voices, our world is calling us to action. For our innovations to be aligned with the long term success of humanity, they must lead toward systemic global socio-ecological sustainability. To support these efforts we have at our disposal a wide variety of tools and methods that can assist in transitioning society toward sustainability. To this purpose, employing Strategic Sustainability in dynamic and context relevant ways, including such things as Sustainability Principles and Backcasting toward visions of Success within those principles, can not only assist in the modeling of sustainable innovations, it can also contribute to positioning your efforts at the vanguard of sustainable innovation.





Be Systemically Radical

If we seek to shift systems to work for the whole of the biosphere we will be required to address the root causes within ourselves, our organizations, communities, and systems both on a local and global scale. This is brave work for there is no map forward. We must create the path as we walk it in the midst of increasing complexity, ambiguity, and rapid change; all of which requires us to think, act, and collaborate in more radically systemic ways than we ever have before.

Embrace Progressive Success

When focusing on action, experimentation, prototyping, iterative processes, implementation, and scaling toward global change remember to celebrate the small successes along the way, to enjoy the journey of discovery and innovation, and embrace progressive success as a way to fuel the fire of working toward such worthy goals.

Cultivate The Field

When engaging in such endeavors as action learning, research, documentation, or developing theory, we have the opportunity to make valuable contributions not only to our stakeholders but also to the field at large, by sharing our experiences and learning with one another.

Whether it is through open source documentation or publication of a variety of methods, the sharing of what we are learning as we are learning it, and the sharing of resources, intellectual or otherwise, can greatly assist in the cultivation of the field and this work in the world.



Develop Leadership Capacity

In order for the innovations created within the Lab Space to be more than just good ideas, they need to have champions and groups who are capable of implementing them in their communities, organizations, and in the world. Developing leadership capacity with the core team, stakeholders, and participants of your Lab can greatly contribute to the implementation of innovations and the transfer of learning out into the world.

Play

Consciously choosing to engage in play, playfulness, and joyful engagement in the challenges and opportunities that are before us is a door way into generative action, learning, and collaboration. Allowing for creative disruption, imagineering and playful prototyping can foster hope, engagement, and inspiration.

Engage in Relational Innovation

One of the great opportunities that this work presents is the active engagement of the personal, social, and systemic and how these three spheres interrelate when developing, implementing, scaling, and leading innovation. Through collective impact, collaborative leadership, and multi-stakeholder and cross-sector engagements we have the opportunity to co-convene, co-design, and co-create Lab Spaces, processes, and portfolios of innovation that have never before been imagined. At the same time through our collaborations, we have the opportunity to empower each other and foster agency in those we work with, as leaders of change and innovation toward a sustainable future for all.





*“We need a whole new way of thinking. You can't get there from here.”
- Margaret Wheatley*

*“We need the biggest ‘We’ we have had in a 100 years”
- Monica Pohlmann*

TOOLKIT

Labs

Social Labs Revolution: <http://social-labs.org>

Labcraft: <http://labcraft.co>

Change Lab/Design Lab For Social Innovation: http://sigeneration.ca/documents/Paper_FINAL_LabforSocialInnovation.pdf

Labs: Designing The Future: <http://www.marsdd.com/systems-change/mars-solutions-lab/news/labs-designing-future/>

Laboratories For Societal Innovation: <http://www.societal-innovation.org>

Social Innovation Labs - SIG: <http://www.sigeneration.ca/home/labs/>

Think Thrice: <http://thinkthrice.ca>

Design & Process

Design Science: http://issuu.com/buckminster_fuller_institute/docs/designscience

Art Of Hosting - 8 Breaths: <http://artofhosting.ning.com/page/core-art-of-hosting-practices>

Theory U: <https://www.presencing.com/theoryu>

Chaordic Stepping Stones: <http://chriscorrigan.com/Chaordic%20stepping%20stones.pdf>

Sustainability

FSSD: <http://www.alliance-ssd.org>
<http://www.naturalstep.org/en/our-approach>

Sustainability Laboratory 5 Core Principles:
<http://www.sustainabilitylabs.org/approach-principles.html>

Permaculture: <http://en.wikipedia.org/wiki/Permaculture>

Biomimicry: <http://en.wikipedia.org/wiki/Biomimetics>

Systemic Change

The Academy For Systemic Change:
<http://www.academyforchange.org>

Leverage Points: Places to Intervene in a System:
<http://www.donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>

Cynefin: <http://cognitive-edge.com>

Related GuideBooks

The Weave: <http://www.theweave.info>

The Lotus: <http://www.thelotus.info>



AUTHORS

ANA CAROLINA RODRIGUES - BRAZIL

Ana Carolina Rodrigues was born and raised in Rio de Janeiro, where 1.7 million people live in slums. Ever since childhood she felt touched and amazed by how, in a place of such misery, the diversity of experiences could create such a vibrant mosaic of life. She is a journalist graduate, has post studies in integrated communication, and recently earned a masters in Strategic Leadership Toward Sustainability, which she completed at Blekinge Technology University, in Sweden. She is founding an organization focused on designing and facilitating experiences focused on creating positive impact in the world, and most of all, she is curious and would love to talk to you about how we can have fun and make great change in the world.



JOSHUA CUBISTA – CANADA/U.S.A

Joshua grew up in Japan, Canada, and the U.S.A, and has lived, worked, and studied around the world including Australia, Europe, China, and Kazakhstan, and a range of Eco-villages and Human Potential Education centers. Joshua holds a B.A. in Sustainable Community Development and Integral Psychology from Prescott College, a MSc. in Strategic Leadership Towards Sustainability from BTH in Sweden, and is a Global Sustainability Fellow with The Sustainability Laboratory NYC and Earth University in Costa Rica, and is a fellow of the Institute For Sustainable Social Change at Prescott College. With a passion for igniting personal, social, and systemic leadership he brings together Experiential Design and Facilitation, Strategic Action, Sustainability, Leadership Capacity Building, and Intentional Evolution in order to facilitate experiences dedicated to the highest possible purpose that individuals, communities, and organizations can imagine and fulfill.



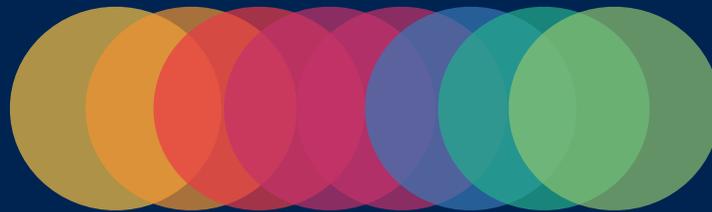
ROWAN SIMONSEN - DENMARK/COLOMBIA

Rowan grew up on a small farm in Denmark. Raised by an American mother and a Danish father. He learned from an early age to navigate different cultures. He has continued exploring the beauties and differences of the stories in the world. He now lives with his two daughters and his lovely wife in Colombia. Rowan is driven by a love for nature and for hosting spaces for conversation that really matter. He has worked with leadership development in all sectors, and is now especially focused on transforming the educational system to a more innovative, creative, and holistic system. A special passion of his is learning from nature in nature, and he guides multi-day leadership solo experiences in the wild. He has founded and directed Upstream Consulting since 2008 and he co-founded the "Academy for Heart, Body and Creativity" and the Biomimicry Network, in Colombia. He is also a member of SOL Colombia and is a dedicated Art of Hosting practitioner.



PROTOTYPING OUR FUTURE

Social Labs For A Sustainable, Regenerative, & Thriving Future



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