

Large Scale Collaboration towards Strategic Sustainable Development

Juan Carlos Kaiten, Sonja Niederhumer, Kara Stonehouse

School of Engineering
Blekinge Institute of Technology
Karlskrona, Sweden 2010

Thesis submitted for completion of Master of Strategic Leadership towards Sustainability, Blekinge Institute of Technology, Karlskrona, Sweden.

Abstract

As humanity transitions towards a global society, opportunities and challenges have grown in equal magnitude. Severe, global depletion of ecosystems and social turmoil have initiated a widespread public response. If the many small actions were to connect and collaborate strategically, then a greater impact could be made on the system to move towards sustainability. Along with continuous technological and scientific development, society is discovering new ways of organizing itself for a more just, sustainable and harmonious world. This is giving birth to a large social body that is becoming aware of its own existence and is learning to take its first baby footsteps. This study aims to describe the conditions of successful collaboration of a social body, a collaborative process with phases as well as guidelines and tools for each phase. A navigation tool has been outlined to aid practitioners in complex systems to move towards success in any collaborative context. This thesis is a contribution to the creation of a thriving humanity.

Keywords: Collaboration, Collective Intelligence, Sustainable Development, Social Body, Community of Practice, Network, Emergence

Statement of Contribution

Our thesis group embarked on a journey of deep learning about the potential for sustainable social change and experienced our own personal transformations in the process.

As we journeyed deeply together, we learned to trust each other, open our selves, acknowledge each other's gifts and develop new ones. We walked through the fires of compassionate feedback and confrontation of our personal development edges. We assimilated what sometimes felt like an overwhelming amount of information, and learned how to surface and crystallize something meaningful. On occasion, it felt like true inspiration flowed through us.

We have each contributed wholeheartedly throughout the thesis. Each one of us shone in our unique way which created real synergy. Juan Carlos held the overall vision of the thesis based on his years of working with social networking and collective intelligence. He weaved a tapestry of solid, heartfelt relationships that made the entire work possible to begin. Sonja held an incredible capacity to synthesize theories, models and information into a coherent and beautiful whole and birthed the conceptual understanding of the magic canoe. Kara's skills in communicating to others by simplifying, grounding, and illustrating complex ideas through graphics and presentation gave the work the finishing touches to make it useful and engaging in the world.

In addition, the continual input into our thesis on group processes for successful collaboration influenced our own group dynamics. We were a mini laboratory, in which many of the ideas and insights shared with us, were tried out. Thus, this thesis is to some extent, a product of some of these ideas in action.

It has been a most inspiring journey, blossoming many new seeds and potentials as we step out into the world with a new sense of possibility and contribution to humanity's collective flourishing.

Juan Carlos Kaiten, Kara Stonehouse and Sonja Niederhumer

Acknowledgements

This thesis would not have been possible without the generosity and support of some very wonderful friends and colleagues: Sheri Herndon, Toke Moeller, Tim Merry, Peter Merry, Tatiana Glad, Carlos Mota, Marilyn Hamilton, Jeff Barnum, Jonathan Dawson, Elliot Saxby, Fernanda Ibarra, Craig Henen, Mohan Baghwandas, Manuel Manga, Dumisani Magdlela, Chantelle Wyley, Bridget-Ann Woods, Bob Stilger, Juan Pablo Rico, Regina Rowland, James Reader, Deborah Frieze, Alice-Marie Archer, Tom Atlee, Benjamin Aaron Degenhart, and Dominique Hermans.

We are so grateful for the time you made available for our interviews and draft thesis feedback. The quality of insight, thinking, experience and resources you shared with us, opened beautiful doors and synergies. Your support and belief in the value of this research inspired us to reach for our highest potential.

This spirit of generosity has given us a lived experience of truly open and generative collaboration - knowing that such a calibre of people are so open and willing to engage in this work leaves us feeling hopeful for our future in this time of transition.

A very special thank you to:

Tatiana Glad from the Amsterdam Hub for making us so welcome in her beautiful 'oasis in the city' flat, during our case study research in Amsterdam.

Peter Merry of the Centre for Human Emergence, for providing so many opportunities for us to engage with the Meshworking community. Thank you for connecting us to other thinkers in the field and allowing us to join you on the very first Meshwork Design workshop in the Netherlands.

Our thesis advisors, Andre Benaim and Merlina Missimer for their constant support and guidance to write a clear and coherent thesis document.

You have all supported and walked alongside us on this unfolding journey and it has become such a gift.

Executive Summary

Introduction

When someone feels called to achieve what seems impossible, it can be done if they create a compelling vision and invite people to work together towards it. There is a story told about a magic canoe that grows to fit as many people as needed to paddle together towards a new dream. This metaphor can be used for a generative collaborative process towards sustainability.

In the world today, there is a systemic sustainability challenge which is felt in the physical, social and spiritual dimensions of life. With the challenge comes an opportunity for a redefinition of society which can make the world cleaner, safer and more fulfilling for all of humanity. Currently, people all over the world are exhibiting the will to change. There are millions of non-profit endeavours to deal with the multiple symptoms of our unsustainable society. Yet the efforts lack co-ordination and a strategic whole systems perspective.

Social change agents, inspired by living systems theories and quantum mechanics, have realized that the key to allowing a new society to emerge is to connect a variety of people working for social change, in supportive dialogue and learning. Collaboration is important because the sustainability challenge is systemic and requires government, business, experts and citizens to work together to change the system. Also, facing the sustainability challenge requires a diversity of minds to come up with creative solutions. Finally, the process of dialogue and working together imbedded in collaboration helps people to build trust which can strengthen the social fabric of society. Authors like Peter Russell suggest that through the process of collaboration, a new whole of higher complexity may emerge. In this research the new whole that emerges is referred to as the 'social body'. In order to ensure the actions taken in the complex system are not accidentally counter-productive, a strategic approach to sustainable development can be undertaken. The concept of backcasting from principles using systems thinking is the core of strategic sustainable development that can be applied to the collaborative body.

This research attempts to further the body of knowledge for collaboration in complex social systems, as well as link it directly to Strategic Sustainable Development.

Research question

How do we foster effective collaboration for systemic sustainable development?

Sub Question 1: What are the conditions of success for collaboration?

Sub Question 2: How can a process of collaboration be described?

Sub Question 3: Based on the process, what guidelines lead to success?

Methods

The methods used to answer the research questions were literature review, interviews and case studies. The literature review was used to develop an understanding of success conditions of collaboration and formed the basis of the process of collaboration. Interviews were conducted with practitioners working within the fields of collaboration and sustainability. These interviews helped develop an understanding of the process as well as guidelines for successful collaboration. Case studies with the Netherlands Centre for Human Emergence ‘Meshwork’, Amsterdam Hub and Reos Partners ‘Change Lab’ helped us to understand collaboration at the complexity level of a social body.

Results

Conditions for Success

In order to have a successful collaboration we propose looking at the world from a living systems perspective; where everything is connected, where people rely on the biosphere for their life and when given the right conditions, will tend to strive towards health and wholeness. Following from this perspective we found the following success conditions for someone planning to facilitate a collaborative effort.

1. Higher Purpose – believing in something greater than oneself, helps hold the effort together.
2. Awareness - Mindfulness and helping people become aware of themselves as a system. Making the invisible processes visible.
3. Wholeness - Understanding the issues as a whole as well as parts. Including the whole person; heart, mind, body and spirit.
4. Interior / Exterior - Our internal state of mind is what creates our external reality, so internal development work is important.
5. Love / Power - Relationships and strategy are balanced in a skilful dance, not just focusing on one or the other.
6. Chaos/ Order - Learning together to embrace chaos and create just enough structure for the group to grow.
7. Rhythm - Creating a rhythm of meetings and celebrations that fits with natural life rhythms will help people stay engaged in the process and hold the energy of the collaboration together.

The Process of Collaboration

A general process of collaboration towards sustainability has been described in terms of the group energy and discovery. The collaborating group's emotional and physical energy is initially built up, represented by a rising curve in the first half of the process and then a descending curve as this energy is directed in strategy, action and learning. Celebration, reflection and sharing give space and preparation to raise the energy for the next wave of collaboration. The facilitator can foster the creation of structures (square) which support the relational energy (circle) and strategic action(triangle).

Phases, Guidelines and Tools

Each curve is seen as having seven phases. The upper ‘energy curve’ is about the people and their energy and commitment to the project.

1. The Call - A person senses the need in society and feels called to take action. A core group sharing the call is formed and strengthen their intention to work on a sustainability issue.
2. Convene - People are invited to participate in the collaboration and co-design the process together.
3. Energize – The large group becomes a unified team through meeting and working together.
4. Vision – As the group comes to understand the real needs of the system, a clear vision of success can emerge.
5. Strategize – Working backwards from the vision and sustainability principles, the group creates actionable steps.
6. Action-Learn –Encouraging champions to lead small teams to try out initiatives to make a difference.
7. Celebrate – Reflecting on the process so far and learning from successes and failures of all the small groups. Celebrating achievements and having fun throughout.

The lower ‘discovery curve’ is about the team learning about the issue they are facing. It is adapted from Theory U (Scharmer 2008) and the change lab process.

1. Co-sense - Sense what trends are calling for attention.
2. Understand - Observe as a group, looking at everyone’s experience from different angles. Listen with open mind and open heart. Visually portray the system in which the sense of need and call resides. Look for where are sustainability principles are being violated.
3. Let go - Release assumptions and old mental models of how the system works. Set aside time to connect deeply inside and integrate all the observations and experiences so far.
4. Root Problem - Share insights from the process so far. A clear understanding of the core needs and root problems can emerge.
5. Prototype - Test out the ideas in simple models, paper based, found object sculptures or computer simulations.

6. Crystallize - Put ideas into real life and test them. Understand what makes an impact and learn how to get things done. Let the intentions set from the beginning come into being.
7. Sharing/Learning - Learn from and tell others about successes and failures. Create structures that can hold new initiatives.

Guidelines have been listed for seven phases of the energy curve. The interviewees also mentioned tools which help achieve the guidelines.

Discussion

The magic canoe is the vessel that carries the energy and patterns of social change agents towards more co-ordinated and strategic collaboration. This supports the development of a social body capable of responding to the complexity of the global sustainability challenge. The magic canoe tool can be used as a design aid and diagnostic guide for practitioners working with complex collaboration and / or Strategic Sustainable Development.

Conclusion

Looking at the big picture, the magic canoe tool helps people move strategically towards sustainability by providing a blueprint of how to foster effective collaboration. Practitioners working from the Framework for Strategic Sustainable Development could use the Magic Canoe as a tool when trying to understand the system they are working in and when developing strategy for collaboration. There are many opportunities for further application of this work on an online-collaborative wiki or a book to explore concepts in more depth, including our personal journey. Another future application can be an interactive learning experience for workshops and consulting services. Interesting further research in this field would be to explore in more depth online collaboration tools for the social body and strategic culture shift for sustainability.

Glossary

Backcasting - A strategic planning methodology in which a future desired outcome is envisioned and the necessary steps to achieve it are determined.

Chaordic - The behaviour of any self-governing organism, organization or system which harmoniously blends characteristics of order and chaos, and is characteristic of the fundamental organizing principles of evolution and nature (Hock 1999).

Collective Intelligence - Collective intelligence is the capacity for a group of people to sense and proactively respond to the stimulus in the wider world, and to collaborate in order to decide upon its own future and reach its goal in a complex context (Noubel 2006, 20).

Collaboration - When more than one individual, group, organization, or community of practice actively decide to work together to achieve a shared goal or vision (Archer, Fei, Petzel 2009).

Collaborative Change Agent – A practitioner who works with collaboration processes to move society towards a vision of success.

Community of Practice (CoP) – A group of people who share an interest, craft or profession in a particular field. Knowledge and experience is shared freely so everyone can develop professionally and personally (Lave & Wenger 1991).

Core Team - A small group of people usually 5-7 in number, who facilitate a process for numerous other people.

Emergence – Emergence happens when a many parts are connected around a common purpose and a new coherent whole arises with properties not contained in the individual parts. Emergent phenomena often appear suddenly and surprisingly (Weathley-Frieze, 2006).

Global Collective Intelligence – Collective intelligence applied at a global scale.

Generative Development – Development which is sustainable, restorative & reflecting the values of a life affirming, co-operative paradigm.

Holism - Considering the whole as more than the sum of its parts

Holacracy - Holacracy is a governance structure for an organization. The structures and processes attempt to be organic rather than mechanical, integrate the collective wisdom of people throughout the company, and align the organization with its broader purpose (Holacracy One 2010).

Holopticism - The means by which any participant perceives, in real time, the activities of other members of the group as well as the overall emerging organization (Noubel 2006, 20).

Human Emergence - The unfolding of human potential, the ability to provide the space and conditions that allow human beings to bring all of their potential and gifts to the space or setting. The individuation and maturation process described by Jung, Personal Mastery described by Peter Senge, First Habits of highly effective people described by Covey, and Enlightenment described by mystics.

Life cycle of Emergence – The process by which living systems begin as networks, shift to intentional communities of practice, and have the potential to evolve into powerful systems capable of global influence (Weatley and Frieze, 2006).

Love - A choice and a way of acting in the world, where we see each other, understand each other, respond to each others' needs and to care for each others' growth. The feeling of love we experience is a by product of this way of acting – not the starting point. Love is foremost a choice and an action, not a feeling (Fromm 1996).

Meshwork - A human organization process, in which the many different types of organizations and actors weave together their activities and capacities in order to achieve a larger common purpose (usually the solving of a shared complex problem). The structure may make use of hierarchies along with self organizing webs of relationships. Some features may include aligned capacities and functions of participants, information sharing technology, vital signs monitors which assess the needs and create feedback loops for attaining a dynamic but stable state of well-being (Hamilton, 2009, 221).

Meshworking - A verb describing the act of creating and maintaining a meshwork.

Network – A network is an informal web of relationships that people use to find resources such as skilled people and good quality information. This system is driven by individual needs satisfaction and self-interest (Wheatley and Frieze 2006).

Social Body – An emergent whole, resulting from many people working together in a co-coordinated and coherent manner to make systemic change in society. Concerned citizens and stakeholders from many types of organizational structures, assemble around a common purpose (e.g sustainable food systems), assess the needs of the system and organize cohesive action. The leadership strategy is to work with ‘emergence’ meaning enabling connections and self organization, rather than command and control.

Social Network - An interconnected group of people, organizations or systems that share information, knowledge and resources. This can occur through an online system or through physical central spaces functioning as nodes. Social Networks are created around shared interest and common values.

Systemic - Interconnection of elements or a web of interrelated relationships and causes within any living system. Any problem is embedded within a web of interrelationships and connections, thus to solve a problem you need to work with the whole system.

Team - A team comprises a group of people linked in a common purpose. Teams are especially appropriate for conducting tasks that are high in complexity and have many interdependent subtasks. A group in itself does not necessarily constitute a team. Teams normally have members with complementary skills and generate synergy through a coordinated effort which allows each member to maximize his or her strengths and minimize his or her weaknesses

Wiki - A technology that enables all users to contribute, change and edit the content of a web page. It is this wiki technology that enables millions to participate in the writing of Wikipedia, the popular user-generated web based encyclopaedia (Archer, Fei, Petzel 2009).

Table of Contents

Statement of Contribution	ii
Acknowledgements	iii
Executive Summary	iv
Glossary	ix
Table of Contents	xii
List of Figure and Tables	xvi
1 Introduction.....	1
1.1 Building a Magic Canoe.....	1
1.2 Global Society's Current Reality	2
1.2.1 A Time of Challenge, Opportunity and Choice.....	2
1.2.2 The Sustainability Challenge.....	2
1.2.3 Will to change & current attempts.....	3
1.3 Framework for Strategic Sustainable Development (FSSD)	5
1.3.1 Collaboration and Strategic Sustainable Development ...	7
1.4 Social Body: Taking Collaboration to Scale	8
1.4.1 Collective Intelligence.....	8
1.4.2 Emergence of the Social Body	8
1.4.3 Types of Participation in the Social Body.....	10
1.4.4 Global Social Body.....	11
1.4.5 Collaboration Processes.....	12

1.5	Research.....	13
1.5.1	Purpose of the Research.....	13
1.5.2	Research Questions	13
1.5.3	Scope and Limitations.....	13
2	Methods.....	14
2.1	Research Design	14
2.2	Literature Review	14
2.3	Expert Interviews.....	15
2.4	Case Studies.....	16
2.5	Analysis	18
3	Results	20
3.1	Conditions for Success	21
3.1.1	Success Condition 1: Higher Purpose.....	22
3.1.2	Success Condition 2: Awareness	23
3.1.3	Success Condition 3: Wholeness	24
3.1.4	Success Condition 4: Interior/ Exterior.....	25
3.1.5	Success Condition 5: Love/Power	26
3.1.6	Success Condition 6: Order/Chaos	27
3.1.7	Success Condition 7: Rhythm.....	28
3.2	The Collaborative Process	29
3.2.1	Relational and Strategic Energy.....	29
3.2.2	Energy and Discovery Curves	30

3.3	Collaborative Phases, Guidelines and Tools	33
3.3.1	The Call	34
3.3.2	Convene	35
3.3.3	Energize	36
3.3.4	Emergent Vision	37
3.3.5	Strategize	38
3.3.6	Action Learning	39
3.3.7	Celebration, Reflection and Sharing.....	40
3.4	The Journey of the Magic Canoe	41
4	Discussion	44
4.1	The Magic Canoe: Results as a Whole.....	44
4.2	Conditions for Success	45
4.3	Process of Collaboration	47
4.3.1	Phases within the Process of Collaboration.....	48
4.3.2	Guidelines	49
4.4	Magic Canoe as a Practical Tool	50
4.5	Limitations of the Magic Canoe as a Tool	50
4.6	Feedback and Validity of Results.....	51
4.6.1	Validity of the methods	52
5	Conclusion	54
5.1	Key Findings	54
5.1.1	The Magic Canoe and SSD	54

5.2	Future Applications	55
5.3	Further Research	57
5.4	Catching the Wave	58
Appendix A: Expert Interviews		66
Appendix B: Interview Outline.....		68
Appendix C: Sample interview transcript		69
Appendix D: Categorizing Interview Transcripts.....		76
Appendix E: Case Study Partners		77
Appendix F: The HUB data		79
Appendix G: Sample of Meshwork data		80
Appendix H: Explanation of Tools		83

List of Figures and Tables

Figure 1.1: Sustainability Principles.....	6
Figure 1.2: Participation in the Social Body.....	10
Figure 2.1: Research Questions and Methods.....	14
Figure 2.2: Results Matrix Layout.....	18
Figure 3.1: Metaphore of the Magic Canoe	20
Figure 3.2: Terms for Balancing and Unifying Polarities.....	29
Figure 3.3: Energy and Discovery Curves	30
Figure 3.4: Paddles for Each Phase.....	33
Figure 3.5: Journey of the Magic Canoe.....	43
Figure 4.1: Structure of a the Magic Canoe Tool.....	45
Figure 4.2: Mental Model of the Magic Canoe.....	47
Figure 5.1: Magic Canoe as an Online Resource.....	56
Table 3.1: Aspirational and Boundary Success Conditions.....	22
Table 3.2: Guidelines and Tools.....	34

1 Introduction

1.1 Building a Magic Canoe

In his remarkable essay called “The Magic Canoe”, Eric Young from the Center for Social Innovation in Toronto, Canada, tells the story of how the Kitlope people, in northern British Columbia, saved their tribe from being vanquished by the logging industry.

The story started when one man of their tribe felt a calling to help his people, and transformed his life from alcohol addiction and street living to bringing an ambitious dream into reality. One by one, he inspired key people to join him, in what he called a “Magic Canoe”. This metaphorical canoe was a collaborative effort built on a common dream and shared purpose, and magically expanded to welcome anyone person who wanted to join the effort. The situation was transformed from a hopeless battle between people with conflicting interests, to an empowered community, capable of finding win-win solutions and changing their destiny (Young 207, 4).

If we apply the story of the magic canoe to a large scale collaboration process, it becomes a useful metaphor, illustrating how the power of an inclusive attitude and cohesive collaboration can help large groups of people facing complex problems, work together towards a common goal. This thesis research takes us on an exploration of this very challenge: what would it take to build such a ‘canoe’ in which potentially all of society could join in an effective collaborative effort to reach our greatest vision as humanity.

1.2 Global Society's Current Reality

1.2.1 A Time of Challenge, Opportunity and Choice

As the world has become increasingly interconnected and interdependent, humanity is rapidly entering a new phase where cultures, people, and countries are intertwined in a common global destiny. As the vast wealth of knowledge and capacities of our world's cultures combine, a vision of a new planetary society has for this first time in our history, become a real possibility. A vision of an environmentally sustainable, spiritually fulfilling and socially just human presence on this planet stands before us as an achievable reality (Lynn Twist et al. 2008).

However, the path to this vision is not simple, as concurrent to this opportunity our global community is sending the repeated message of crisis – global warming, financial meltdowns, terrorism, mass poverty, peak oil, species extinctions and food shortages. It seems that as the world has accelerated in its global interconnection, interdependence and generative potential, the challenges have grown in equal magnitude (Swimme 2008). Humanity seems to have reached a crossroads of breakdown or breakthrough, a time of collective choice, and a small window of time in which that choice may be made (Goleman 2009).

1.2.2 The Sustainability Challenge

The root causes of many of these critical symptoms are the dominant cultural values of expansion, consumption and competition which produces goods and services for the sake of maximum profit at the expense of humanity's wellbeing and environmental care (Assadourian 2010). If we view the sustainability crisis in a systemic way, we can observe the following three dimensions:

Environmental degradation. As the Millennium Ecosystem Assessment Report states, human expansion and mass consumption of ecosystem resources is currently bringing every natural domain on Earth under severe stress and degradation. This includes 5%-20% ozone depletion, 75% elimination of original rainforests, 30% of the world's arable land has been lost in the past 40 years and more than 200 oceanic "dead zones" exist worldwide. These statistics are growing along with many other environmental losses and species extinctions in our global ecosystems

(Hayes 2008). The ability of Earth's ecosystems to sustain our future generations can no longer be taken for granted (Brown 2008).

Social degradation. The environmental degradation is directly linked to a social crisis, as over consumption and expansion models are creating a greater gap between the rich and the poor. Labour exploitation, racism, drug consumption, insecurity, terrorism, are among many pressing social matters we increasingly face (Assadourian 2010). People living in abject and growing poverty, over exploit their own environments as their only survival strategy. As environmental degradation grows, and millions of people are affected, they are forced to move from their original habitats to live in often unsafe conditions in big cities where they are often unable to meet their basic needs. This easily leads to more conflict, crime and competition, and the vicious cycle of distrust of one another deepens (Sachs 2005).

Spiritual crisis. Behind the social and environmental crisis lies a deeper crisis, which is one of meaning and purpose. Society, to a large extent, has become immersed in hopelessness, disconnected from one another and from the Earth. This loss of hope, and hunger for meaning has created an immense void of loneliness, depression, escapism into consumerism, drugs, crime (Fromm 1956) and many other social ills and poverties of wellbeing (Max Neef 1993). This escape into mass consumerism, once again drives the vicious cycles of social and environmental degradation deeper (Assadourian 2010).

1.2.3 Will to change & current attempts

In response to this multi-layered sustainability crisis, an emerging movement with no name, no leader and no specific structure and organization is emerging as 'Mother Earth's immune system'. Environmental activist and author Paul Hawken calls this movement a "Blessed Unrest", in which millions of people around the world are beginning to share and act on their hopes, dreams and concerns about our common future. At present, the majority of these grassroots efforts remain disconnected from one another, and are thus unable to make impacts at larger systems scales and correct the ecological diseases that society has generated (Hawken 2007).

However, first attempts at mobilizing this 'blessed unrest' by creating greater interconnection and pooling of influence within this emerging movement are underway. NGO's and non-profit grass roots organizations around the world are beginning to organize themselves through a wide variety of networks and

global events. Growing numbers of online social networks like WiserEarth.org and TakingITglobal are vivid online communities of shared knowledge, information, resources and best practices aiming to create a better reality for all. In the same line, mass social action events such as 350.org, referred to the most widespread day of political action in the planet's history with more than 5200 events in 181 countries taking part (McKibben 2010), are setting the stage for even more sophisticated and influential events of global collective action.

In the global political arena, efforts that governments are making to cope with global environmental issues still face significant challenge. An example could be seen at the Conference of the Parties (COP 15) in Copenhagen in December 2009. Expectations, stress and media attention were very high. During the process, some countries felt left out and some countries were accused of purposefully disrupting the process. Talks continue as a clear agreement has not been reached yet (Allen 2009). It is very difficult to be globally strategic towards sustainability when all the players have different motivations and the process is not conducive to collaboration from the onset.

Despite the growing awareness of the need to act, as well as the increasing efforts for change emerging on a global scale explored above, our collective human activities continue to systematically degrade environmental health. As a collective, we have yet to find the way to move successfully towards social and environmental sustainability. However, we are in the midst of a massive experiment, made up of people working all over the world, to find ways of working together for a safe, clean and just world.

1.3 Framework for Strategic Sustainable Development (FSSD)

The field of Strategic Sustainable Development is using a scientific and strategic, systems thinking mindset which invites more sectors, like business and government to engage with the issues of the sustainability challenge. Also, a collaborative rather than adversarial approach has been attempted. For example, Greenpeace and other NGOs are now making strategic alliances, working with corporations to get their messages heard and implemented into society (Stafford, Polonsky and Hartman 2000). When these groups come together, they need to find a common language for talking about sustainability and an approach to tackle the complexity of the problem.

One approach that is designed to meet this need for a systems thinking and a common definition of sustainability is the Framework for Strategic Sustainable Development (FSSD). The FSSD is a framework that supports strategic decision making and planning to move organizations and communities towards sustainability. It is scientifically rigorous and grounded in systems thinking, and offers the following advantages: being generic enough that it may be applied in all contexts and scales, support in making best use of available resources, managing tradeoffs over time and allowing flexibility to move towards newly emerging opportunities (Holmberg and Robèrt 2000).

The FSSD approach works from the basis of four sustainability principles, which describe the safe boundaries in which society can continue to develop, whilst still ensuring social fabrics and ecosystems will not be systematically degraded. These principles were developed through a process of scientific critique, in which respected experts in relevant fields of science discussed and challenged these principles to the point where a collective consensus was reached (Robèrt 2002). The sustainability principles offer a collective understanding of sustainability, from which agreements about how to move strategically towards sustainability may be based.

The sustainability principles are as follows:

Four Sustainability Principles

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

- i. concentrations of substances extracted from the Earth's crust
- ii. concentrations of substances produced by society
- iii. degradation by physical means
and in that society...
- iv. people are not subject to conditions that systematically undermine
their capacity to meet their needs

Figure 1.1 Sustainability Principles (*Holmberg and Robèrt 2000, 10*)

In order to be strategic, we need to have a clear idea of what we are moving towards as a desired future, and then determine the most effective steps to take us towards this. This process is known as ‘backcasting’ (Holmberg and Robèrt 2000, 4). Backcasting from a vision, for example: ‘solar power for everything’, can be limiting as this closes our minds to new possibilities that may emerge over time. In addition, our understanding of the problem (and thus the solution) may also change over time. However, we can allow our visions to remain flexible and diverse, when they are contained within collectively agreed upon boundaries of scientifically robust sustainability principles. Thus backcasting from sustainability principles offers a safe, as well as flexible way to be strategic as we move towards sustainability. In addition, this approach gives ample space for creativity and diversity. This is especially important in multi-stakeholder collaboration because people will have very different views of the world and may not agree on a future scenario, but can agree on the boundaries of the sustainability principles.

The FSSD is a tool that helps a practitioner to strategically direct and co-ordinate social efforts towards sustainability. However, to achieve sustainability on a large scale, the capacity to unify and align collective energy and skills of people across geographies, as well as economic, political and social sectors becomes essential. Processes that enhance our ability to collaborate and thus align our skills, efforts and resources, are an essential aspect of creating strategic and sustainable solutions at a systems level.

1.3.1 Collaboration and Strategic Sustainable Development

Collaboration plays an essential role in the process of working strategically towards sustainability on a large scale for the following reasons:

Complexity. Due to the interconnection and complexity of the challenges society is facing to become sustainable, multiple actors need to be involved in the process of finding and implementing any solution. Multiple perspectives, skills, resources, and the creativity that comes with diversity, are all required to solve these problems on a systems level. This is beyond the capacity of any single organization (Eisenstadt 2009).

Interdependence. Since most organizations are dependent on multiple suppliers and services, if the organization wishes to become sustainable, various actors within the supply chain would also have to become sustainable. For lasting and credible sustainability efforts, companies will have to collaborate with their suppliers to transform their supply chains and resource flows.

Many pieces of the puzzle: People from different areas of expertise, sectors and cultures, all hold pieces of the puzzle of a viable future. The greater the diversity of people working together the more chance there will be to find effective systems wide solutions. Among the current initiatives, none seem to have the whole answer, but many seem to have a good part of the solution for their area.

Restoring social fabrics: The fourth sustainability principle implies that until we have achieved social sustainability, people will continue to deplete scarce resources as it offers the only available means to survive. Collaborative projects encourage dialogue and sharing between people. When dialogue includes voices from many cultures and classes, the social fabric of the community can be strengthened. This could build a strong foundation from which larger sustainability challenges may be tackled. By listening to many voices in a sincere way, it opens up the possibility to access a higher level of intelligence of the group or community.

1.4 Social Body: Taking Collaboration to Scale

“Simply stated, humanity is going to need to learn to work together, intelligently, and en masse, very soon, for the prognosis offered if we continue on our current trajectory, paints a bleak picture for our future survival as a species” (Goleman, 2009)

1.4.1 Collective Intelligence

When people learn to really listen to each other and get past stereotypes and prejudice, a collective intelligence in the group can emerge. Collective intelligence is the ability of a group of people to respond to external challenges in a way that is effective and beneficial for the health and development of the individuals, the community, and the systems in which they co-exist (Pör 2010). Intelligence consists of different aspects, which include intellectual, emotional, body and spiritual intelligences (Gardner 1983).

Much like the brain connects neurons by the weaving of multiple synapse pathways, collaborative change agents are starting to play an important role in humanity’s evolutionary journey by weaving critical connections in all sectors and levels of society to foster the emergence of new collective social capacities and intelligence (Hamilton 2008, 222).

1.4.2 Emergence of the Social Body

Research by evolutionary biologist Elisabet Sahtouris shows that in nature, evolution and the emergence of increasingly complex organisms, is driven by a process of co-operation, as opposed to competition. Sahtouris’ research into bacteria in their immature stages of evolution, revealed the growth and expansion of microscopic empires, fierce competition for resources, and even the development of complex communication webs. At a certain point however, the success of the bacterias’ activities began to turn against them, as they fouled their living environment to the point where they were threatened with extinction. In response to this critical external threat, the bacteria moved from competition, to co-operation, eventually unifying together into new simple organisms (Sahtouris 2000, 5). The parallels to human society offer some interesting insights. The success of humanity’s competitive, consumptive and expansionist activities are bringing us to face a similar threat of extinction, or opportunity for survival

and thriving through collective and cohesive action. In addition, parallels to Sahtouris' research and human living systems alludes to humanity being on the cusp of a new evolutionary leap, challenging us to integrate, respond collectively and intelligently, and catalyze the emergence of a new level of complexity, capacity, social maturity and harmony (Hubbard 1998).

The term 'social body' is used in this thesis to describe this emerging level of complexity, in which individuals and collaborating groups form 'cells' and 'organs' of specific function, working in a coordinated way for the thriving of the whole. Social bodies can occur at various scales, from local, regional, national to global. They differ from other forms of collaboration structures in their complexity, ability to integrate multiple other forms of organization, being driven by a common vision and cohesive action, and their self-organizing behaviour.

As discussed earlier, Paul Hawken's evidence of a growing blessed unrest reveals that the foundational building blocks or 'cells' of what could potentially emerge as an intelligent and cohesive whole, are amassing and beginning to connect, thanks to the rapidly growing global communications, travel and online social networks.

1.4.3 Types of Participation in the Social Body

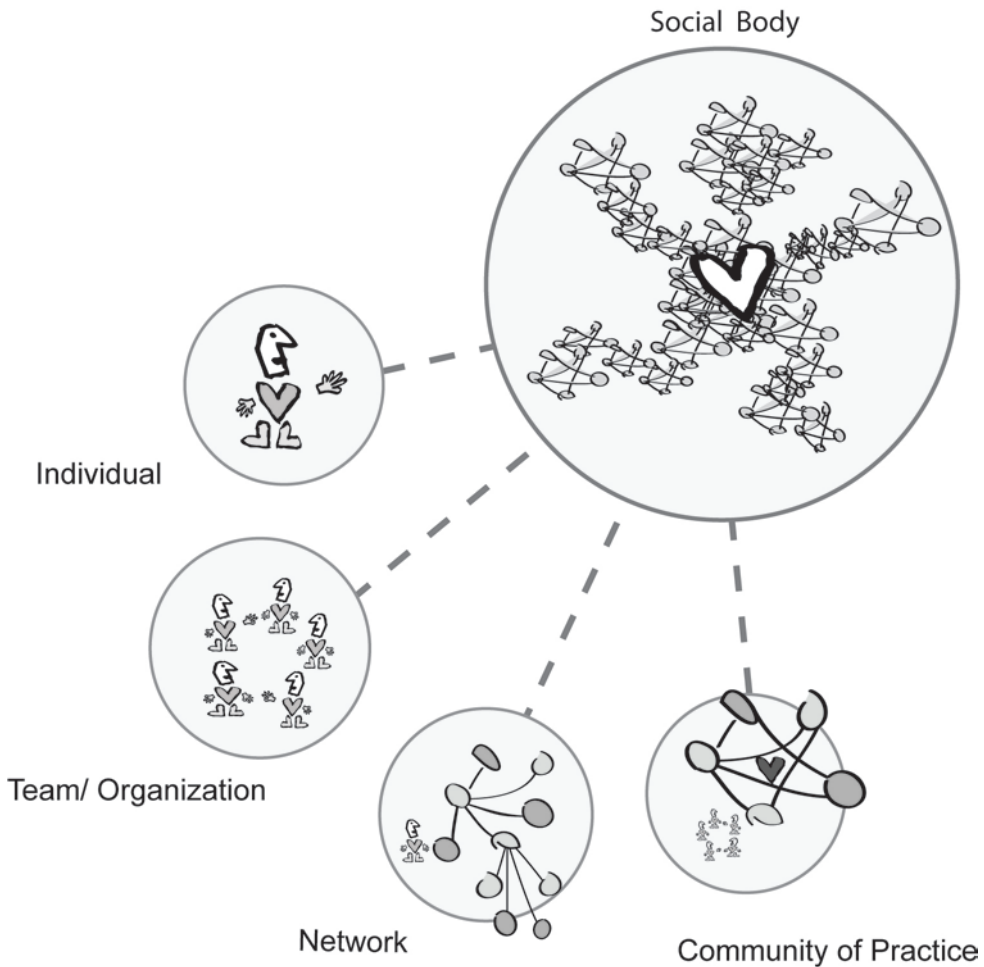


Figure 1.2: Participation in the Social Body

The social body of collaboration required to solve our current global challenges operates at a high degree of complexity. People can participate in many ways and may play roles in several organized structures. As illustrated in Figure 1.2, someone can participate as an individual, as part of a team, a network or a community of practice. The different parts can be combined at a local or global level and at a various scales. These parts do not comprise a linear progression, but can rather be seen as an ecosystem of

diverse entities that combine in infinite combinations and quantities. The part as are described below.

Social Body. The emergent whole, resulting from many people working together in a co-coordinated and coherent manner, to make systemic change in society. Raising awareness of the existence of a social body is an attempt to gain the capacity to sense the whole system and make co-ordinated and strategic projects and campaigns to move towards sustainability (Hamilton 2006, 221 - 228).

Community of Practice. A community of practice is based on strong relationships between individuals, organizations and / or networks who share knowledge based on experience in a domain. The intention is learning, and support for each others' work. Participation is not only driven by personal needs but also to serve the needs of others and a greater whole (Wheatley and Frieze 2006).

Network. A network is an informal web of relationships that people use to find resources such as skilled people and good quality information. This system is driven by individual needs satisfaction and self-interest (Wheatley and Frieze 2006).

Team / Organization. A group of people formally working together towards a common goal and mutual needs satisfaction. This applies to any scale, from a small team or entrepreneurial venture, to a large multinational.

Individual. The basic unit of all collaboration is the individual. Each person has their unique contribution and perspective. When individuals develop their skills for collaboration, they also help the entire collaborative effort to move forward.

1.4.4 Global Social Body

Learning to act collectively in an intelligent manner at a large or global scale is giving birth to a new level of complexity of collaboration in the world, which can be described as the "Global Social Body". During the past few decades as globalization and technology have increased the interconnectivity and interdependence in society, a collective social body is emerging and learning to take its first steps. Some of the necessary

elements to access global collective intelligence and ‘Global Social Body’ are a deep understanding or the interdependence and interconnection of all its stakeholders. At the same time new tools need to be used in order to create a holoptical view, where all parts can see the whole, have equal access to information and be supported by structures where power and decision making are distributed, bringing with it the possibility of cohesive action and effective communication (Noubel, 2007).

Collective Intelligence in practice may also be referred to as ‘Meshworking’. Authors such as Marilyn Hamilton are beginning to use this term, to describe the capacity to collaborate effectively at a high level of complexity. In her book *Integral City*, she describes a Meshwork as: “A way to integrate enabling hierarchies and self-organizing webs or relationships by aligning different capacities, functions and locations so they can be of service to a purpose and each other. Meshworking creates the information highway that makes possible the design and implementation of highly sensitive vital signs monitors that create the feedback loops for attaining a dynamic but stable state of well being.” (Hamilton 2009. p 221.). This new means of social interaction is also referred to by other names: the Global Brain by Peter Russell, Collective Consciousness by Jean Francois Noubel or the Super Organism by Fernanda Ibarra.

1.4.5 Collaboration Processes

A social body, or any complex living system, consists not only of parts, but also of the interrelationships between these parts and the emergent capacities that arise from their synergies. Thus, processes that weave parts together, are essential to facilitating the growth of the global social body. A number of organizations around the globe are beginning to prototype collaborative processes that can potentially support the emergence of an intelligent collective body. Two collaborative processes that are doing noteworthy pioneering work in this field are the ‘Meshwork’, developed by the Centre for Human Emergence, and the ‘Change Lab’, as developed by Reos Partners.

1.5 Research

1.5.1 Purpose of the Research

The purpose of this research is to contribute to the understanding of collaboration processes for strategic sustainable development. The aim is to provide a useful synthesis of information from the current field of practice that will support both experienced and novice practitioners in their work in collaboration. This in turn helps a larger social body to be realized.

1.5.2 Research Questions

How do we foster effective collaboration for systemic sustainable development?

Sub Question 1: What are the conditions of success for collaboration?

Sub Question 2: How can a process of collaboration be described?

Sub Question 3: Based on the process, what guidelines lead to success?

1.5.3 Scope and Limitations

The scope of the research was centred on large scale collaboration towards sustainability. The worldview of human society as a living system in the ecosphere was assumed. The content for this research was drawn from the USA, Canada, Mexico, South Africa, Netherlands, Denmark and the UK.

The topics of culture and language with regards to multi-cultural collaboration was touched on only briefly in this research, however it is an important element to explore more deeply when dealing with multiple world view and cultural contexts.

This research focuses predominantly on the face-to-face aspect of collaboration and does not investigate the online technology aspect. The use of online technologies is an important enabler of large scale collaboration at the societal level but is outside the scope of this research.

2 Methods

2.1 Research Design

To answer the research questions, a qualitative method was applied following the guidance from the book, *Qualitative Research Design* (Maxwell, 2005). The three methods used were literature review, interviews and case studies. Question one, concerning conditions for successful collaboration, was answered primarily through literature review and was verified by information from case studies and interviews. Question two, describing a process of collaboration, was informed initially by theoretical models of collaboration from literature, and developed further through case studies and interviews. Question three about guidelines, was answered primarily from the interviews, with additions from the case studies and matched with information in the literature. Figure 2.1 illustrates the relationship between the research questions and the methods employed.

Question	Primary Method	Supporting Data
Q1 Success	Interviews Literature Review	Case Studies
Q2 Process	Literature Review	Case Studies Interviews
Q3 Guidelines	Interviews	Case Studies Literature Review

Figure 2.1: Research questions and methods

2.2 Literature Review

The sustainability challenge and collaboration were explored from the perspective of living systems. The literature review covered the topics of Collective Intelligence, Evolutionary Biology, Integral Theory, Spiral Dynamics, Systems Dynamics, Holacracy, the Lifecycle of Emergence and Gestalt Psychology based Organizational and Systems Development.

Traditional avenues were also explored such as Collaboration Theory, Organizational Behaviour and Learning.

Scholarly databases such as EBSCO and SWePub were searched, using the following search terms: collective intelligence, civic intelligence, collaboration and sustainability, group decision making, emergence, community of practice, social exchange theory, network theory and collaborative leadership. Useful articles were found in *The Journal of Human Systems Management*, *Emergence: Complexity & Organization*, *Journal of Psychology*, *Journal of Society, Information and Communication*, and the *Systems Thinker*. The interviewees also provided references to articles from MIT and the Integral Institute.

Publications by the case study participants included Marilyn Hamilton's book, *Integral City* (Hamilton, 2008) Peter Merry's *Evolutionary Leadership* (Merry 2009), Adam Kahane's book *Power and Love* (Kahane 2010) and the change lab process by Reos Partners (Eisenstadt 2010). Ideas were also drawn from the "Five Breaths" model (Art of Hosting 2010) and the Chaordic Stepping Stones (Corrigan 2010) from the Art of Hosting Community.

2.3 Expert Interviews

The purpose of expert interviews was to collect distilled wisdom from real life experience, in order to find practical guidelines for collaboration. Invitations were sent to close contacts developed by the researchers over the last five years of working and studying in fields related to the research.

Twenty two experts, from around the world, were interviewed with experience in many fields including multi-stakeholder dialogue facilitation, collective intelligence research, strategic business consulting, evolutionary leadership, and sustainability consulting. Their work also touched on different aspects of society, such as community groups, youth work, eco-villages, NGOs, corporate business and national governments. A list of the interviewees and their field of work is provided in Appendix A.

The interviews were semi structured and based on the personal experience of the interviewee/expert. Most interviews were conducted over the internet, many with video capability. The interview design stemmed from

the Appreciative Inquiry process of: discover, dream, design, destiny (Cooperrider and Whitney 2005, 25), and was adapted to include barriers to collaboration. The interview outline is presented in Appendix B. The key elements covered in the interview were success factors and barriers to collaboration and imagining the full potential of the expert's work in complex scenarios such as global actions for climate change remediation. The researchers followed the thread of the conversation and asked for more information in specific areas. This allowed a natural conversation flow which drew out information that was unique to each participant

Each interview was transcribed, and the comments were divided into categories based on the phases of a collaborative effort. The initial phases were chosen from a compilation of a Gestalt Psychology model called the Cape Cod Model (Melnick et al, 2006), the Five Breaths model from the Art of Hosting community (Art of Hosting 2010) and the case study publication from the Reos Partners (Eisenstadt 2009). Some examples of the categories were: Create the Core Team, Convene People, Host Events, and Implementation. See Appendix C for an example of a transcribed interview. Also, see Appendix D for a sample of a categorized transcript. The categorized data was printed out and cut into strips. Similar ideas from different people were grouped together to distil the ideas into guidelines offered by the experts. For each phase of collaboration, several guidelines and tools were identified.

2.4 Case Studies

The purpose of the case studies was to deepen the understanding of the state of the art in collaboration for complex issues. The three case studies chosen were the Amsterdam HUB, Reos Partners, and the Centre for Human Emergence. The selection was based on their depth of study and experience of facilitating collaboration in complex levels of organization. The choice was also affected by location, availability for fieldwork, the ability to participate and observe the organization and access in-depth information. For detailed description of the partner organizations, see Appendix E.

The Amsterdam Hub. A lunch time discussion was hosted at the Hub in Amsterdam to explore how it facilitates collaboration to empower individual entrepreneurs. A conversation café style of dialogue was chosen to get input from many members in a short time and create an open

atmosphere where HUB members were talking to each other rather than being disturbed from their work. Additional insights were gathered through an extended informal interview with one of the founders, Tatiana Glad, and direct observation and use of the working space over a few days. Results were captured in audio recordings, transcribed flipchart paper and a blog write up to share with the participants. A sample of the data collected is in Appendix F.

Reos Partner's Change Lab. The change lab is multi-stakeholder engagement process. The change lab process was explored in an introductory workshop hosted by the Reos Partners. The method for this case study was primarily reading published material by the Reos Partners. The sustainable food lab case study (Eisenstadt 2010) and Adam Kahane's book *Power and Love* (Kahane 2010) both provided in-depth, self reflective, open analysis of the process. One of the Reos Partners, Jeff Barnum was in contact with the research team and offered feedback and improvements on the work.

Centre for Human Emergence's Meshwork. Initial contact with the Centre for Human Emergence (CHE) was made by attending a Meshwork event in Copenhagen during the COP 15 Climate Change Summit. Research continued through conversations with the founder, Peter Merry, reading documentation about their processes and joining a research group on the CHE website. Fieldwork consisted of a Meshwork Design workshop where world thought leaders like Don Beck and Marilyn Hamilton and thirty cutting edge researchers and leaders of sustainability initiatives met to discuss the creation of a functioning meshwork. This event was recorded on video, audio and documented on the CHE website. Online access to participant's notes and comments was obtained. The data collected focused on principles of Meshworking and practices for creating and maintaining networks, communities of practice and Meshworks. A sample of the data collected is in Appendix G.

2.5 Analysis

To begin the analysis, a ‘results matrix’ was created as pictured in figure 2.2, with the general phases of the collaboration process along the top and the parts of the social body down the left.

Guidelines Common to all levels

Complexity	The Call	Converge and Design	Emergence	Emergent Vision	Nature	Strategic Action Learning	Collaborative	
ALL LEVELS	<p>Sharing & making the call & gathering Core Teams of Change Agents</p> <p>Awareness of process, visible, visible, personal, collective</p> <p>Quality of interaction depends on the nature of the interaction, outside the common design in the larger group</p> <p>Work emerges / Individually</p> <p>Always connect to the higher purpose</p> <p>Just enough structure for success</p> <p>Enable sense of greater whole</p> <p>Collaborative design</p> <p>Design flexibility</p> <p>Diversity of views and skills, when the wild card person in the discussion</p> <p>Co-design to create generative space</p> <p>Focus is something bigger than individuals</p> <p>Creating a sense of ownership and commitment</p>	<p>Converge: Actions and Design Elements of the Collaboration</p> <p>Keep it Simple</p> <p>Hold integrity intention</p> <p>Work integrity / Individually</p> <p>Just enough structure for success</p> <p>Enable sense of greater whole</p> <p>Collaborative design</p> <p>Design flexibility</p> <p>Diversity of views and skills, when the wild card person in the discussion</p> <p>Co-design to create generative space</p> <p>Focus is something bigger than individuals</p> <p>Creating a sense of ownership and commitment</p>	<p>Build Group Energy and Relationships</p> <p>Strong sense of purpose</p> <p>Make the energy of the group visible</p> <p>Name and work with the shadows</p> <p>Collective body work - generosity</p> <p>Authentic Space of Trust and Deep listening to all stakeholders</p> <p>Develop shared vision and purpose</p> <p>Build roles and responsibilities based on purpose and need</p> <p>Design flexibility</p> <p>Diversity of views and skills, when the wild card person in the discussion</p> <p>Co-design to create generative space</p> <p>Focus is something bigger than individuals</p> <p>Creating a sense of ownership and commitment</p>	<p>Visible: Emergent vision becomes</p> <p>Make the Whole visible</p> <p>Use evidence and connection with nature to make sense of the whole</p> <p>Sit with the discomfort</p> <p>Let go old structure and language</p> <p>Understand sustainability principles and collaboration principles</p> <p>Practice letting go of old mental models and attachment to results</p> <p>Make public commitment</p> <p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Transition from ideas to reality</p> <p>Build commitment with relational and resource support</p> <p>Involve new ideas</p> <p>Use backcasting from principles and a vision of success</p> <p>Make public commitment</p> <p>Governance supports, relational and strategic</p> <p>Governance meets the needs/values of the system</p> <p>Be the world you want to live in</p> <p>Be spontaneous, experimental</p>	<p>Implement Strategy: Action/Structure and Learning</p> <p>Transparent decision making - builds ownership in group</p> <p>Information exchange - keep it simple and robust</p> <p>Visioning and backcasting</p> <p>Governance supports, relational and strategic</p> <p>Governance meets the needs/values of the system</p> <p>Be the world you want to live in</p> <p>Be spontaneous, experimental</p>	<p>Collaboration and Reflection and Sharing with others</p> <p>Foster connections between people</p> <p>Tell stories</p> <p>Show down to speed up</p> <p>Constant feedback</p> <p>Continuous learning and improvement</p> <p>Prepare for, allow feedback</p> <p>Be the world you want to live in</p> <p>Be spontaneous, experimental</p>	
INDIVIDUAL	<p>Personal Ministry of Individuals on the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Personal Development designed into the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Individual progress is consistent/heard in the group process</p> <p>Individuals have a choice to decide about commitment</p> <p>Personal energy blocks are attended to</p> <p>Authentic communication space, culture of openness</p> <p>Practice being together in line with vision</p> <p>Including the sacred</p> <p>Culture of assuming responsibility for quality in relationships</p> <p>Large gatherings once a year</p> <p>Engagement of whole person, body, etc, using choice</p> <p>Inclusive involvement in events, participation not mandatory, creative contributions</p>	<p>Encourage champions and leaders to hold projects</p> <p>Visioning and backcasting from purpose and intent</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Individual self-manages and adds value to the group</p> <p>Group members support, works together to build energy</p> <p>Track personal development</p> <p>Group practices together, works together to build energy</p> <p>Track goals and health of the group</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	
GROUP	<p>Personal Ministry of Individuals on the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Personal Development designed into the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Individual progress is consistent/heard in the group process</p> <p>Individuals have a choice to decide about commitment</p> <p>Personal energy blocks are attended to</p> <p>Authentic communication space, culture of openness</p> <p>Practice being together in line with vision</p> <p>Including the sacred</p> <p>Culture of assuming responsibility for quality in relationships</p> <p>Large gatherings once a year</p> <p>Engagement of whole person, body, etc, using choice</p> <p>Inclusive involvement in events, participation not mandatory, creative contributions</p>	<p>Encourage champions and leaders to hold projects</p> <p>Visioning and backcasting from purpose and intent</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Individual self-manages and adds value to the group</p> <p>Group members support, works together to build energy</p> <p>Track personal development</p> <p>Group practices together, works together to build energy</p> <p>Track goals and health of the group</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>
COMMUNITY OF PRACTICE	<p>Personal Ministry of Individuals on the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Personal Development designed into the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Individual progress is consistent/heard in the group process</p> <p>Individuals have a choice to decide about commitment</p> <p>Personal energy blocks are attended to</p> <p>Authentic communication space, culture of openness</p> <p>Practice being together in line with vision</p> <p>Including the sacred</p> <p>Culture of assuming responsibility for quality in relationships</p> <p>Large gatherings once a year</p> <p>Engagement of whole person, body, etc, using choice</p> <p>Inclusive involvement in events, participation not mandatory, creative contributions</p>	<p>Encourage champions and leaders to hold projects</p> <p>Visioning and backcasting from purpose and intent</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Individual self-manages and adds value to the group</p> <p>Group members support, works together to build energy</p> <p>Track personal development</p> <p>Group practices together, works together to build energy</p> <p>Track goals and health of the group</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>
SOCIAL BODY	<p>Personal Ministry of Individuals on the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Personal Development designed into the process</p> <p>Healthy Self discipline</p> <p>Group focus based on healthy or common interest</p> <p>Core team commitment</p> <p>Core team diversity</p> <p>Developing core team capacity</p> <p>Core team maturity</p> <p>Group work is for higher purpose than the group</p>	<p>Individual progress is consistent/heard in the group process</p> <p>Individuals have a choice to decide about commitment</p> <p>Personal energy blocks are attended to</p> <p>Authentic communication space, culture of openness</p> <p>Practice being together in line with vision</p> <p>Including the sacred</p> <p>Culture of assuming responsibility for quality in relationships</p> <p>Large gatherings once a year</p> <p>Engagement of whole person, body, etc, using choice</p> <p>Inclusive involvement in events, participation not mandatory, creative contributions</p>	<p>Encourage champions and leaders to hold projects</p> <p>Visioning and backcasting from purpose and intent</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Encourage champions and leaders to hold projects</p> <p>Join supportive structure</p> <p>Work on ideas to make more real</p> <p>Form projects and organizations</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>	<p>Individual self-manages and adds value to the group</p> <p>Group members support, works together to build energy</p> <p>Track personal development</p> <p>Group practices together, works together to build energy</p> <p>Track goals and health of the group</p> <p>Daily debrief of relevant info</p> <p>Prepare to sit in the question, or chaos</p> <p>Focus on the question</p> <p>The wild card value it, emergence comes from somewhere else</p>

Figure 2.2 Results Matrix Layout

The phases were refined through discussion based on information in case studies, literature review and interviews. The distilled results from the interviews were placed in the appropriate square of the results matrix. For example, many interviewees stated the importance of the core team having a routine grounding or spiritual practice (Moeller 2010, Henen 2010, Merry T. 2010, Dawson 2010). This was placed under ‘core team’ and ‘common to all levels’. Data from the case studies was also added into the matrix. This helped to identify what is essential, as efforts move through a process of collaboration and evolve into more complex forms of organization.

Conditions for Success. The data that was common to all levels and tended to show up throughout the process of collaboration was the starting point for the conditions of success. In combination with the literature review, fourteen preliminary conditions were identified. To evaluate their relevance, each condition was critiqued through discussion as to whether it met the criteria of a useful principle. These criteria were: is this condition, scientifically justified, necessary, sufficient, general and concrete (Robèrt, K-H et al. 2007, xviii).

From this process, concepts were chosen which are relevant for collaboration and the number of success conditions was distilled down to seven. Various interviews then added details to the ‘aspiration’ and ‘boundary’ aspects of the conditions (Henen, Moeller, Wyley, Merry, Mota, Glad, Herndon). These specific conditions were chosen due to their relevance for the whole collaborative effort, as opposed to just specific phases of it.

Process. The process for collaboration was distilled from the following bodies of thought: U-theory, Change Lab, Cape Cod Model, Five Breaths model from Art of Hosting Methodologies, Emotional Intelligence, Organizational Learning. Specific pieces of the processes were then added or emphasized through the following interviews: Wyley, Henen, Mota, Merry, Ibarra, Moeller, Herndon, Magdela, Barnum, Reader. The names of the energy curve phases were defined mostly from the Sustainable Food Lab case study and the five breaths model from Art of Hosting and refined after the information was gathered from the interviews.

Guidelines. The detailed information in the results matrix lead to the guidelines for each phase of collaboration. The interviews were categorized into the phases of the collaboration, and the key success factors at each phase became guidelines. In the interviews, experts mentioned tools which help achieve the guidelines. These were also listed since they are helpful for people who are reading the thesis.

3 Results

The research methods described above lead to the following conditions, processes and guidelines for successful collaboration. In this section, the ‘magic canoe’ metaphor is used as an image that helps to contain and contextualize the findings of the research. Each subset of results contributes to a piece of the canoe as follows:

- *Conditions for success* - building a boat that floats in all weather
- *Collaborative process* – developing a crew’s cohesion, and skill
- *Collaborative phases* – the detailed steps of becoming a successful crew
- *Guidelines and tools* – picking up the right oars and rowing

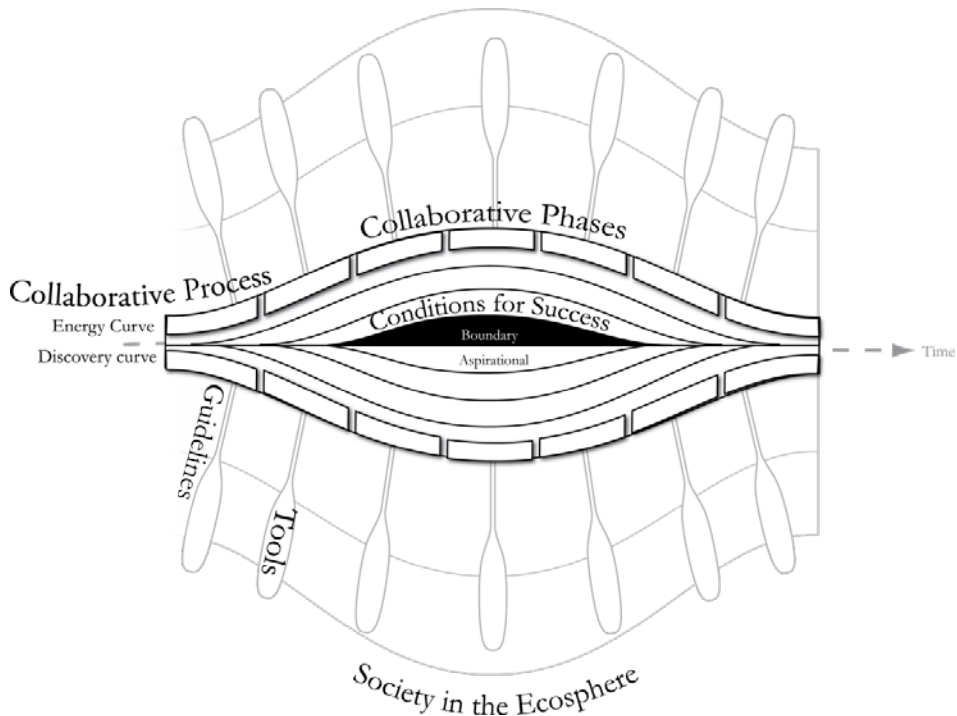


Figure 3.1: Metaphor of the magic canoe (as seen from above)

3.1 Conditions for Success

Building a boat that floats in all weather

Drawing from literature in Natural Systems Science (Capra 2002), Evolutionary Biology (Sahtouris 2000), Gestalt psychology based Cape Cod Model (Melnick et al 2006), and Human Intelligences (Hamilton 2009) various conditions under which human groups and organizational systems flourish or deteriorate were found. Based on this understanding, conditions for success in collaboration were developed.

Each condition for success is communicated in terms of an aspirational and boundary aspect. The aspirational aspect is an ideal benchmark and the boundary is the limit after which collaboration would deteriorate. These two aspects are helpful as they provide a spectrum within which a practitioner may choose to act. It provides a conceptual space for reflection, so that over time the capacity to move towards the aspirational aspect would be developed.

- ***Aspiration aspect*** This describes the ideal scenario we want to aim for. It helps us to harness and work alongside the natural energies in human systems, thus unleashing and directing their full creative potential and intelligence, while increasingly developing their capacities to achieve their purpose.
- ***Boundary aspect*** This describes what NOT to do, as it may be destructive to the wellbeing of a collaborating human system and reduces its effectiveness and capacity to achieve its purpose. Provided that our actions fall within these boundaries, we also ensure we are not wasting our energies working against the natural rhythms and behaviours of human energies in the collaboration effort.

These conditions apply throughout the entire collaborative process and help achieve the vision of success by working within natural boundaries, energies and rhythms of human collaborative groups. The success conditions are shown in table 3.1

3.1.1 Success Condition 1: Higher Purpose

In collaborative efforts, having a meaningful and inspiring higher purpose gives the group the ability to transcend differences and create changes often not thought possible (Mota, 2010 and Mandela, 1995). A meaningful higher purpose draws people together. A massive and urgent purpose such as dealing with global climate change can unify people to work together at unprecedented levels of complexity (McKibbin 2010).

HIGHER PURPOSE	ASPIRATIONAL ASPECT	BOUNDARY ASPECT
	Have a higher purpose that is inspiring, meets a valid social need (Merry, 2010), fosters deep commitment and can transcend differences (Mota 2010).	Do not build collaboration efforts around predetermined visions that fail to tap people's highest aspiration.

Table 3.1 Success conditions with aspirational and boundary aspects.

3.1.2 Success Condition 2: Awareness

Only when an intervener is consciously aware of a dynamic within a collaboration system, does he or she have the choice to effectively respond to it (Covey 1989). Awareness is thus the process of sensing into a system, detecting something ‘invisible’, making it ‘visible’ by seeing and understanding it (Melnick et al, 2006). This also includes fostering an awareness of how social systems interact and are interconnected with ecological systems, so the group may consciously choose to move towards sustainability.

AWARENESS	ASPIRATIONAL ASPECT	BOUNDARY ASPECT
	Heighten the ability of the system to be self aware (Henen, 2010). This includes being open to all sources of information, and heightening the ability of information to flow throughout the system (Atlee, 2010).	Avoid systematically suppressing / ignoring dissonant voices, information, feedback and resistance (particularly through the use of power, status and control of information flows (Melnick et al 2006).

Table 3.1 continued

3.1.3 Success Condition 3: Wholeness

To address a problem in a complex collaborating system, we need to understand it as a whole, as well as the parts, interrelationships and context, from the individual level up to the social body (Meshwork Design Exploration 2010). It is also essential that the whole person is engaged through body, heart, mind and spirit throughout the process. Leading from wholeness means that the leader assumes each person will do the right thing to move the whole system towards health and allows the system to connect to itself to generate success rather than separating people and controlling the outcomes.

	ASPIRATIONAL ASPECT	BOUNDARY ASPECT
WHOLENESS	<p>Deeply understand the system as a whole in order to properly identify root causes of problems within the system (Eisenstadt 2010)</p> <p>Invite the whole self into the effort (Ibarra, 2010).</p>	<p>Avoid intervening at the symptoms level (Eisenstadt 2010)</p>

Table 3.1 continued

3.1.4 Success Condition 4: Interior/ Exterior

The state of health of the interior mental-emotional patterns and responses of an individual or a collective, is directly linked to the quality and effectiveness of their exterior behaviours and actions (Henen, 2010). The exterior actions and behaviours, however, are a useful ally in detecting disequilibrium in the interior (Senge, 1990).

By extension, the interior quality of a facilitating core team is mirrored in the external behaviours of a group they are intervening in (Herndon, 2010), which has further ripple effects out into the larger system in which the group as a whole is working to affect change (Mota, 2010).

A group's interior is affected by external conditions (social values and beliefs, culture, governance systems) only to the degree that they are unaware and emotionally reactive to it, as opposed to having the awareness to consciously respond to their environment. This is known as personal mastery and group mastery. (Covey 1989)

INTERIOR/ EXTERIOR	ASPIRATIONAL ASPECT	BOUNDARY ASPECT
	<p>Create generative spaces and conditions that facilitate the development of high quality interior capacities (Herndon, 2010). Bring capacity potentials into the larger system, by embodying those capacities in the core team (Melnick et al, 2006).</p> <p>Bring awareness of cultural context and worldview of different participants (Mota 2010).</p>	<p>Do not focus solely on the exterior behaviours and impacts as your primary intervention strategy (Change Lab workshop, 2009). But you can observe the exterior behaviours and impacts to lead you to understand imbalances in the interior perceptions and patterns (Henen, 2010).</p> <p>Do not blame the system for resistance or negative feedback (Melnick et al).</p>

Table 3.1 continued

3.1.5 Success Condition 5: Love/Power

The ability to nurture strong relationships as well as work with strategic elements of power, leadership and hierarchy leads to a healthy balance in the collaboration.

Relational processes build group energy through connection, trust, openness and finding a shared vision (Melnick et al, 2006). This aspect of a collaborative processes can also be called Love (Kahane 2010), or Yin, as it is nurturing and generative of human energy through meaningful connection and care. Strategic processes efficiently direct and use energy (generated by the relational processes), within time and resource constraints, to actualize the shared vision (Melnick et al, 2006). This aspect of a collaborative processes can also be called Power (Kahane 2010) or Yang.

Adam Kahane, in his book ‘Power and Love - a theory and practice of social change’ likens this balance to the metaphor of walking – one leg representing relationship (Love) and the other representing the strategic (Power). Successful walking requires the continuous interchange of the two (Kahane 2010) which creates a dynamic balance.

	ASPIRATIONAL ASPECT	BOUNDARY ASPECT
LOVE/POWER	Develop group energy, enthusiasm, commitment and trust around a shared goal by relationship building and nurturing activities. Channel this energy with appropriate strategic processes that efficiently direct this energy in pursuit of the higher purpose (Moeller, 2010). Emphasize relational or strategic when appropriate (Melnick et al).	Avoid excesses of either relational or strategic functions relative to one another (Kahane, 2010).

Table 3.1 continued

3.1.6 Success Condition 6: Order/Chaos

In nature nothing is wasted and complex systems are co-ordinated through feedback loops of resources, without any governance structures. This is what is referred to as self-organization. From a very chaotic looking system a new simple whole can emerge (Capra 1998).

A social body movement towards sustainability will not spontaneously self-organize in a short time frame without leaders and hosts to build up the energy and support communication. However, many interviews and literature pointed to the fact that too much structure is stifling and the design of processes and structures must be flexible (Herndon 2010, Mota 2010, Manga 2010 and others). The goal of most practitioners is to use as little structure as possible to get the job done, set the energy in motion and then let the process emerge. This can also be referred to as Chaordic design (Hock 1999). The key to working with this emergence is understanding that chaos is part of the process of collaboration, is appropriate and even necessary at certain phases of the process.

ORDER/CHAOS	ASPIRATIONAL ASPECT	BOUNDARY ASPECT
	<p>Use just enough structure necessary to get a job done, no more.</p> <p>Create new structures that allow flow of information and enable personal connections and relationships (Merry T. 2010).</p> <p>Make plans and intentions, then be flexible and let them go (Herndon 2010, Mota 2010, Manga 2010).</p>	<p>Do not try to control the system or force people to join the collaborative effort (Herndon, 2010).</p>

Table 3.1 continued

3.1.7 Success Condition 7: Rhythm

All living systems are in constant dynamic processes of movement and change. Within this constant change, structure, order, identity and a sense of security through predictability are maintained by regular rhythms, patterns and cycles (Capra 1982). Vibrating atoms, a human heart beat, in breath and out-breath, daily rhythms of night and day, and seasonal cycles all give space for change and flux within ordered rhythms and patterns (Capra 1982).

Similarly, collaboration is energized by change and diversity, when held within appropriate rhythms of face to face meetings, daily practices of awareness and connection, weekly, monthly and yearly cycles and rhythms of planning, reflection and celebrations. These form an identity, or culture, in which a group feels secure. Rhythmic structures and patterns also support the group in times of uncertainty and confusion (Glad 2010).

RHYTHM	ASPIRATIONAL ASPECT	BOUNDARY ASPECT
	Support meaningful rhythms for the group including face to face meetings, celebrations and periodic meals together (Glad, 2010) routine reflection and daily awareness practice (Moeller 2010)	Don't force unnatural rhythms or empty rituals on the group or ignore the importance of emerging new rhythms. Avoid lack of rhythm in collaborative efforts.

Table 3.1 continued

3.2 The Collaborative Process

Developing a crew's cohesion, commitment and skill.

3.2.1 Relational and Strategic Energy

A key theme from the research is the balance of relational and strategic energies in enabling structures. The following findings show the need for working with each of these three elements.

1. Relational elements develop the group's cohesiveness, shared purpose and understanding through trust and healthy relationship. This creates enthusiasm, commitment, positive emotional and physical energy (Wyley, 1996). *(Symbolized by black circle)*
2. Strategic elements efficiently and effectively direct this group energy, within time and resource constraints, to achieve the group's shared purpose (Kahane, 2010). *(Symbolized by white triangle)*
3. Structural elements (processes, systems, procedures and structures), which hold and support the Relational (Love-Yin) and Strategic (Power-Yang) functions in achieving their purpose (Moeller, 2010). *(Symbolized by grey square)*

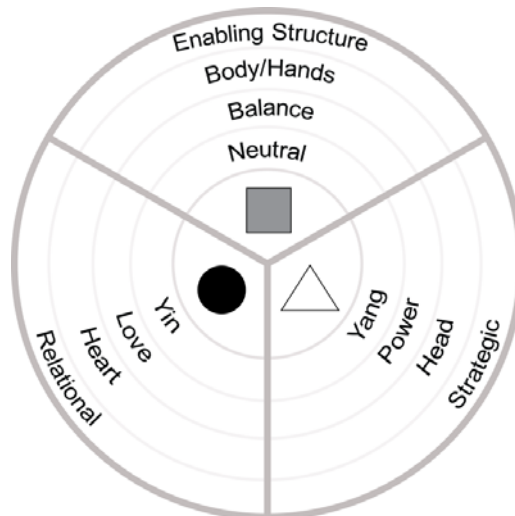


Figure 3.2: Terms for balancing and unifying polarities

The relational and strategic aspects apply to the whole collaboration process. Either may be emphasized during specific phases depending on the need, but overall, a good balance needs to be maintained for the collaboration to be generative and sustained (Melnick et al, 2006). This can also be described as the art of dancing between the dynamics of Love and Power in collaborating systems (Kahane, 2010). Structures and processes support the proper functioning of these two energies (Moeller, 2010).

3.2.2 Energy and Discovery Curves

The process of the magic canoe is described in terms of energy and discovery of the people moving through the process of collaboration.

The capacity to work intelligently with both energy and discovery curves is also explored. As defined in the introduction, intelligence refers to the capacity to respond in an effective and generative manner to a challenge. The multiple intelligences referred to in this work are: physical, emotional, intellectual and spiritual intelligences. The greater the intelligence capacity in a curve, the more powerful that part of the curve is in its positive impact on the overall collaboration effort.

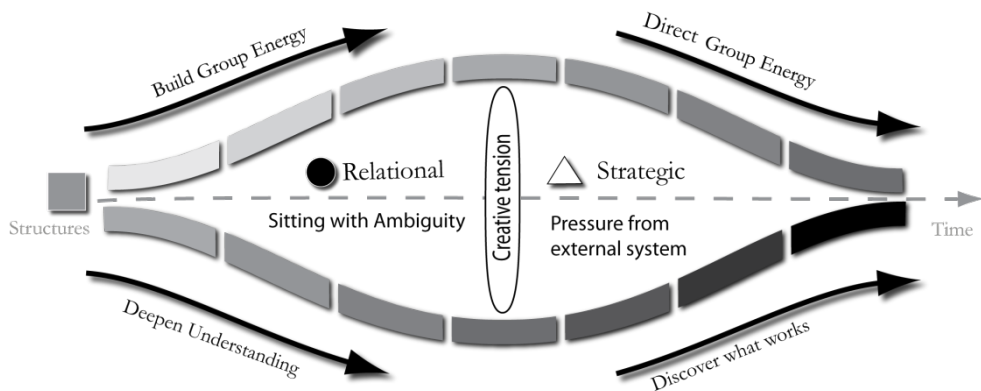


Figure 3.3 Energy and Discovery Curves

‘Energy’ Curve: building emotional & physical energy

The upper curve of the model expresses the flow of emotional and physical energies within a group. The rising curve represents the energy as it builds up during the predominantly relational phase. The curve descends in a predominately strategic phase as the energies are channelled towards the achievement of a goal (Nevis et al, 2003). Emotional intelligence is needed to skilfully sense, hold, understand and balance these energies. Energy is raised in the group as people spend time together, engage in conversations that matter, and begin to form a shared vision. Group energy is channelled by recognizing a shared vision and working together to make a plan of action and trying things out in the world. Physical energy gives us the strength, flexibility and stamina to do work. Since our bodies, hearts, minds and spirits are all part of an interlinked system, healthy physical body supports the functioning and capacity of the emotional, mental and spiritual intelligences as well (Henen, 2010).

‘Discovery’ Curve: deepening collective understanding & intellectual intelligence

The lower curve on the model represents the deepening understanding of a complex system. Individuals are encouraged to reflect, to allow their inner knowing to emerge about the system they are in and let new possibilities of action come. Then the understanding is applied to the situation, by prototyping and testing proposed solutions. (Scharmer, 2007, and Reos Partners Change Lab workshop, 2009).

As the group travels down the discovery curve, the mass of data collected may lead to confusion and discomfort (Henen, 2010). However, if the container of the group’s emotional and physical energies strong, the people can tolerate the feelings of discomfort and lack of control, until the required clarity and resolution emerges (Barnum, 2010). The discovery curve highlights the intellectual intelligence aspect of a collaborative process, supported by the growing emotional and physical capacities. Fostering healthy emotional and physical energies within the group may be seen as important parts of the process of collaboration.

When putting the energy and discovery curves together as a whole, the process of collaboration demands and develops the group’s spiritual intelligence. Firstly, the facilitators must have the personal integrity to hold the energies of the group in balance. This can come from having an attitude in line with the success conditions mentioned above and embodying them in daily practice. This takes mindfulness, practice and commitment.

Secondly, the participants will be learning to have an interconnected view of the world. If the participants can start to feel that caring for the whole is the same as caring for oneself, then they may be motivated to take on the challenges of systemic change and not give up when facing the inevitable pressures and discomfort of the collaboration between diverse people. Finally, a spiritual capacity of listening to the source or as Scharmer calls 'presencing', is important when approaching systemic change with a living systems perspective. The group will learn to tap into new ways of knowing by slowing down and connecting to themselves and others in a deeper way. This is a difficult thing for many people and takes gentleness, practice and safe spaces to bring this skill about in the collaboration. As we are supported in opening to ourselves and others, our capacities and intelligences grow. Correspondingly, our recognition and compassion for these same struggles in those around us increases. Then the whole group benefits and increases the collective ability to act from an open heart. In this way, the collective spiritual intelligence is developed.

3.3 Collaborative Phases, Guidelines and Tools

Picking up the paddles and practicing together

Along the process of the collaboration, seven phases can be identified. Guidelines are listed for each phase, represented by a paddle. Tools are also shared which may be helpful for implementing the guidelines.

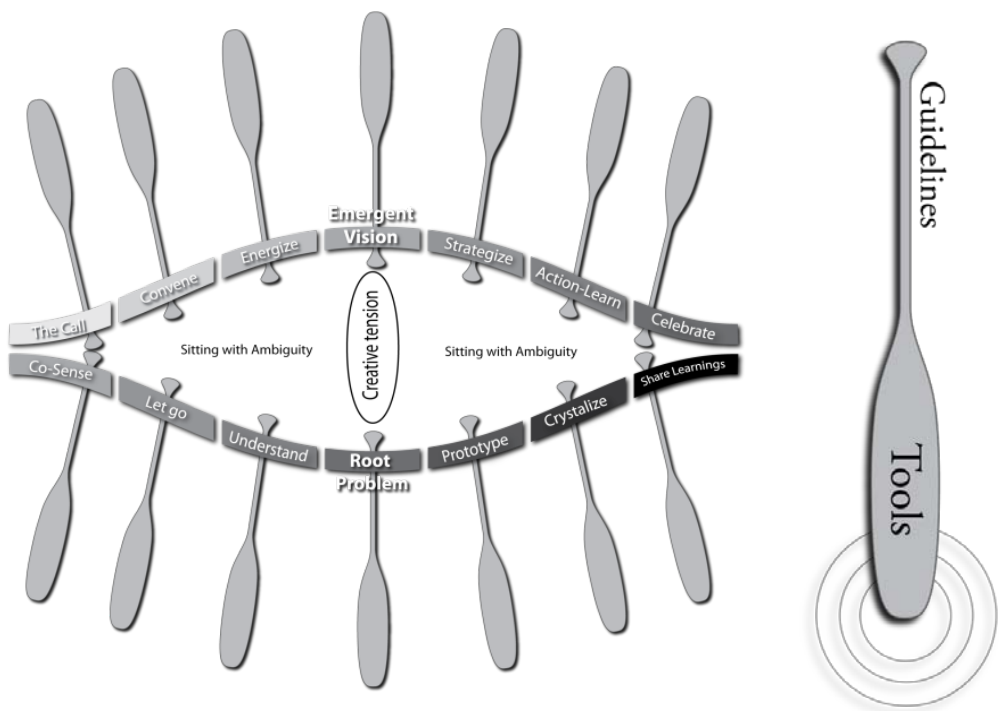


Figure 3.4: Paddles for each phase

Table 3.2 below shows the results for each phase of the collaborative process. First strategic guidelines that apply at all levels of complexity are listed, then guidelines that are unique to each level. Finally, some tools are provided to aid practitioners on the journey. For explanations of the tools, see appendix H.

3.3.1 The Call

“The last ten years have been a continuing pilgrimage with people who are drawn to that same question. How do we do something that makes enough of a difference to make a difference?” (Stilger 2010)

Answering the call is how leaders come to work in the field of collaboration and social evolution. There is a power often perceived as a mysterious calling of something higher that challenges us to embark upon a journey, endure and eventually surrender into the transformation required of us to achieve our purpose (Jaworski 1998). Not everybody was born to be a leader, but anyone who answers the call, inevitably becomes one. The following guidelines were offered to help leaders create a strong core team who will facilitate the emergence of a co-ordinated collaboration process.

Table 3.2 Guidelines and Tools

Phase 1: The Call	For all parts	<ul style="list-style-type: none"> - Form a strong, positive intention for the collaboration - Look for relational chemistry in core team - Invite diversity of skill and perspective in the core team - Continuously develop mindfulness/slowing down - Continuously develop personal and group skills - Commit to practice together with friends
	Indiv.	<ul style="list-style-type: none"> - Believe in your ability to make a difference
	Social Body	<ul style="list-style-type: none"> - Enable the flow of up-to-date data on the current state of the larger system - Encourage leaders to start new initiatives in sustainability challenge areas that need more attention
	Tools	<ul style="list-style-type: none"> - Meditation, time connecting with nature, extended silence, Deep/Authentic listening, ‘Circle’ communication, Leadership Coaching

3.3.2 Convene

“..we have set something in motion with an intention and invitation process ... and then we let it go.. In all my designing, holding that as a key principle has been delightful...There is something beyond you that gets activated in the process.... All these social process technologies are trying to tap into the living systems of our world.. so when you send out an invitation.. that becomes an attractor in the quantum field, in the social body” (Herndon 2010).

The core team draws people into a conversation about how to create events, initiatives and structures to support large scale collaboration in a specific context.

Phase 2: Convene	For all parts	<ul style="list-style-type: none"> - Define and hold a clear intention as a convening invitation - Accept that whoever comes are the right people - Foster diversity, including political, economic and cultural voices - Co-design with participants to create a generative space - Design based on purpose and context - Aim for simplicity and flexibility in process design - Define just enough structure for success - Foster sense of ownership and commitment by participants
	Individual	-Define a personal development design into the process
	Network	-Use existing networks in relevant fields to invite people and invite the most influential people possible to gain credibility
	Community of Practice	-Enable new communities of practice to emerge for the purpose of the group's call
	Social Body	- Bring awareness of the emergent social body and all its participants
	Tools	<ul style="list-style-type: none"> - Face to face meetings, process co-design -Dialogue tools: Open Space, World Cafe, Appreciative Inquiry, Dynamic Facilitation.

3.3.3 Energize

"If I had a choice of living in a community that has a healthy communication style but no sustainability infrastructure, or a community that has zero foot print but the people don't like each other, I would live in the first one every time, because everything becomes possible if you can crack that one" (Dawson 2010).

In order to create a new level of collaboration, a lot of human energy is required. This energy can be obtained by building authentic and true relationships and creating a shared vision.

Phase 3: Energize	For all parts	<ul style="list-style-type: none"> - Build relational trust using authentic communication - Organize community building games and exercises - Name and work with the energy and shadows (buried treasure) of the group - Set governing structures and process to ensure fluid roles and responsibilities to prevent status and power blockages
	Individual	<ul style="list-style-type: none"> - Honour individual purpose apart from group - Support personal development - Give individuals space to commit to being in the group
	Team	<ul style="list-style-type: none"> - Have working groups self select based on locality, interest and friendship - Create rhythm and balance in routine face-to-face / online meetings (agree on periodicity)
	Network	<ul style="list-style-type: none"> - Create a positive culture in the network, by sharing valuable information and interesting articles or videos about the undertaken initiatives
	Community of Practice	<ul style="list-style-type: none"> - Practice being together in line with the vision (Be the change)
	Social Body	<ul style="list-style-type: none"> - Cross pollinate needs, talents and resources - Use tools allowing the whole to be seen (holoptical)
	Tools	<ul style="list-style-type: none"> - Play, Games, Bodywork, Circle communication, workshop on deep listening, agree to communication guidelines, maps to show the process and the energy, learning journey, vision quest

3.3.4 Emergent Vision

“It’s about building the vision, moving [the group/people] out of their comfort zone, moving them into this new place that they usually don’t go by themselves. And then it’s about holding the vision when you go through figuring out the details. Do not diminish the vision in that moment because you can’t really see the entire path” (Rowland 2010).

Once the participants in a collaboration process have a deep understanding of each other and the system, a process of identifying a shared vision is part of building the creative tension of the group to prepare it to move forward.

Phase 4: Emergent Vision	Guidelines	<ul style="list-style-type: none"> - Understand sustainability and collaboration principles - Understand the system and its boundaries - Create a shared vision together with all group members welcome to participate - Make the whole visible by looking at the issue from many angles and by sharing the stories of the people involved in the process. Recognize the interdependence of all pieces - Honour what is, rather than blaming and fighting
	For all parts	
	Individual	-Accept personal responsibly for the current state of the issue
	Team	-Structure/space which supports co-workers to connect and share ideas as part of the daily routine
	Network	<ul style="list-style-type: none"> - Connect on exchanges to fully understand the other parts of the system and other people’s experiences - Networks share what trends and needs are emerging
	Community of Practice	- Share information, knowledge and possibilities of action to build a shared vision
	Social Body	- Co-sense what the larger emerging vision is from all the participants
	Tools	- Multi stakeholder interviews, dialogues, visioning session

3.3.5 Strategize

“It’s not just about being soulful and emergent, it is also about being strategic and disciplined and rigorous - especially when we are operating at scales that affect millions of people. How do we track this kind of stuff? How do we evaluate it? How do we maintain accountability? We need some rigour in this. We can’t just bounce our way through it. It’s not okay to be haphazard when we are dealing with a massive spread of disease.”

(Merry T. 2010)

Once the creative tension is built up, it is time to focus the energy into concrete actions. A complex system, by nature is unpredictable, so it is difficult to plan based on the state of the present or trends from the past. However it can be useful to have a strategy to get people into working teams, moving towards the vision, bounded by principles of success.

Phase 5: Strategize	Guidelines For all parts	<ul style="list-style-type: none"> - Define areas of success and conditions for success - Foster creativity in a group process by diverging (brainstorming) and converging (prioritizing and choosing) - Use backcasting from sustainability principles - Support each other to sit in the discomfort and chaos of the complexity and unknowing - Create a flexible strategy
	Individual	- Value all perspectives and the dissonant voices
	Team	- Form new project teams to create a mission aligned with the group vision
	Network	- Gather organizations and individuals, making themselves visible. Open the space for knowledge exchange.
	Community of Practice	-Have project teams support each other in finding the best strategies
	Social Body	- Create support structures to incubate new projects, their implementation and evolution process
	Tools	- Commitment circle, pro-action cafe, chaordic stepping stones model, ABCD analysis, Framework for Strategic Sustainable Development

3.3.6 Action Learning

“The driver of a community of practice is the domain, the work, don’t get lost wondering; do I trust you or not? Why are we together? Keep bringing that back, and keep evaluating and reflecting on how is the work moving forward. This is the more rigorous clarity, are we getting our [work] done?” (Moeller 2010).

Working groups implement projects and learn about what works and what does not in a certain context, and continue trying new ideas.

Phase 6: Action Learning	For all parts	<ul style="list-style-type: none"> - Do, dream, dare (in that order). - Rapid prototype and scale up the positive results - Phase out the support of the facilitator of the collaborative process - Assume responsibility to care for ecosystems
	Individual	-Encourage champions and leaders to hold projects and take responsibility
	Team	- Create a tangible mission aligned with the group vision, with a time frame
	Network	<ul style="list-style-type: none"> - Nourish and maintain the network - Define roles and activities
	Community of Practice	- Support each other with aligned principles of success, give constant feedback on the implementation process
	Social Body	<ul style="list-style-type: none"> - Connect skills and resources at a large scale - Create support structures to incubate new project implementation and evolution - Experiment with new wealth systems and governance models at a large scale. Gently dissolve non-functioning structures to free up resources for collaborative approaches. - Coordinate efforts of several projects for maximum impact on the system
	Tools	-Dynamic Governance, Holacracy, Metacurrencies

3.3.7 Celebration, Reflection and Sharing

“Any important work we are doing these days is experimental, and any experiment is next to worthless if we don’t take time to stop and reflect and learn from it.” (Stilger, 2010)

“Let’s change the world while enjoying life at the same time. Sounds trivial, but it’s not. Enjoying life while changing the world is fundamental”(Mota 2010).

Celebrating small wins and making time to learn from failures keeps the process moving forward and growing to be organized at a larger scale.

Phase 7: Celebration, Reflection and Sharing	For all parts	<ul style="list-style-type: none"> - Include sacred, meaningful and joyful ceremony - Plan routine time for reflection and sharing - Track process towards achievable goals - Continuously learn and share publicly - Honour and be prepared for setbacks and ‘failures’
	Network	<ul style="list-style-type: none"> - Communicate successes, learning experience and spread the message
	Community of Practice	<ul style="list-style-type: none"> - Scale to new locations by inspiring and allowing others to apply knowledge to a new context (bottom up)
	Social Body	<ul style="list-style-type: none"> - Scale up impact by having a central sharing place, where all the parts can see what each other are doing (top down)
	Tools	<ul style="list-style-type: none"> - Storytelling, unique and creative celebrations, gifts and gratitude at special occasions. Case study or books about a project. Collaborative online tools as Wiser Earth social networking platform and Gaiasoft Meshworking online tool

The Discovery curve is about the team learning about the issue they are facing. It is adapted from Theory U (Scharmer 2008). We have not gone into detail about the guidelines here as they are well covered in literature on Theory U.

1. Co-sense - Ask people what they sense as trends calling for attention.
2. Understand - Observe as a group, looking at everyone's experience from different angles. Listen with open mind and open heart. Look for where are sustainability principles being violated.
3. Let go - Release assumptions and old mental models of how the world works. Set aside time to connect deeply inside and integrate all the observations and experiences so far.
4. Root Problem - Share insights from the process so far. A clear understanding of the core needs and root problems can emerge.
5. Prototype - test out the ideas in simple models, paper based, found object sculptures or computer simulations.
6. Crystallize - put ideas into real life and test them. Understand what makes and impact, learn how to get things done. Let the intentions set from the beginning come into being.
7. Sharing/Learning - Tell others about successes and failures. Create structures that can hold new initiatives.

3.4 The Journey of the Magic Canoe

“In nature, change never happens as a result of top-down, pre-conceived strategic plans, or from the mandate of any single individual or boss. Change begins as local actions spring up simultaneously in many different areas. If these changes remain disconnected, nothing happens beyond each locale. However, when they become connected, local actions can emerge as a powerful system with influence at a more global or comprehensive level.”

Meg Wheatley

As people learn to collaborate on sustainability issues, they will build the skills and capabilities to co-ordinate actions on more complex and large scale issues. The journey of the magic canoe as illustrated in figure 3.5 shows how complexity and connectivity increases as the number of people and stakeholders grows.

The journey of the magic canoe is the application of the 'Life cycle of Emergence' from the Berkana Institute to the collaborative process of the magic canoe developed in this research. The Journey consists of four phases: name, connect, nourish and illuminate (Wheatley and Frieze 2006).

'Name' refers to the process of bringing visibility to all the stakeholders in a system which may be acting as independent and self organized wholes. The second phase, 'connect', is when similar efforts around the world start to develop relationships and share experiences. This could happen through online platforms and at gatherings around the world. The third phase 'Nourish' is the process in which those groups commit to work together for a common goal, becoming a community of practice to share knowledge, learn together and support each other in the implementation of their own initiatives. Finally, 'Illuminate' is the action of spreading the achievements obtained during the cycle, bringing inspiration to other networks and communities. It is in this phase that the community of practice has the potential to become a system of significant and widespread influence, thus bringing social change to scale.

Groups, organizations, networks, communities of practice and social bodies do not always emerge in a sequential manner, but in the large scheme, there must be a network of people in contact before groups and communities of practice can form and people must practice working together on social change before an intelligent and effective social body emerges. All types of participants can be invited to a social body collaboration (Frieze, Barrett, Merry, Hamilton). Figure 3.5 illustrates how the connections of all these different organizational structures come together over time to create a functioning social body.

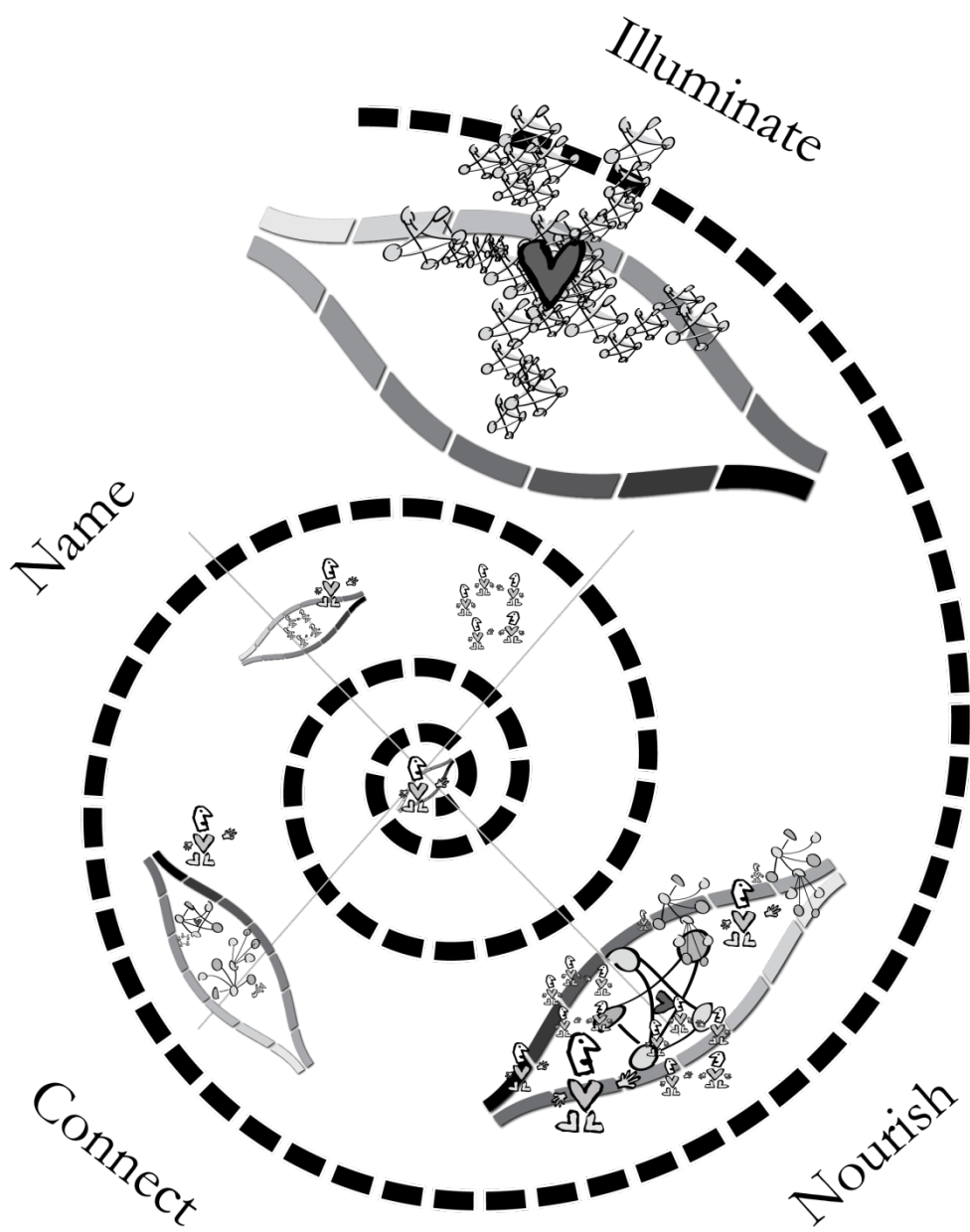


Figure 3.5 Journey of the magic canoe

4 Discussion

4.1 The Magic Canoe: Results as a Whole

As outlined in the introduction, the purpose of this research is to aid practitioners working with complex sustainability problems to successfully use collaboration as a means towards sustainable development.

The collaborative process presented in this thesis is specifically designed to accommodate multiple actors in increasing numbers in an intense learning journey. In the process their capacity to effectively collaborate in complex problems at a large scale is developed.

The metaphor of the magic canoe helps to contain the multitude of elements that successful collaboration operating at this level of complexity entails, thus synthesizing, simplifying and structuring what would otherwise be overwhelming amounts of information.

1. *Conditions for success*
2. *Collaborative process*
3. *Collaborative phases within the process*
4. *Guidelines and actions for each phase*
5. *Journey of the magic canoe*

The Conditions for Success, Collaborative Process, Phases and Guidelines are all contained in the figure 3.1. Their relevance, interconnection and application for collaboration and Strategic Sustainable Development (SSD) are discussed thereafter.

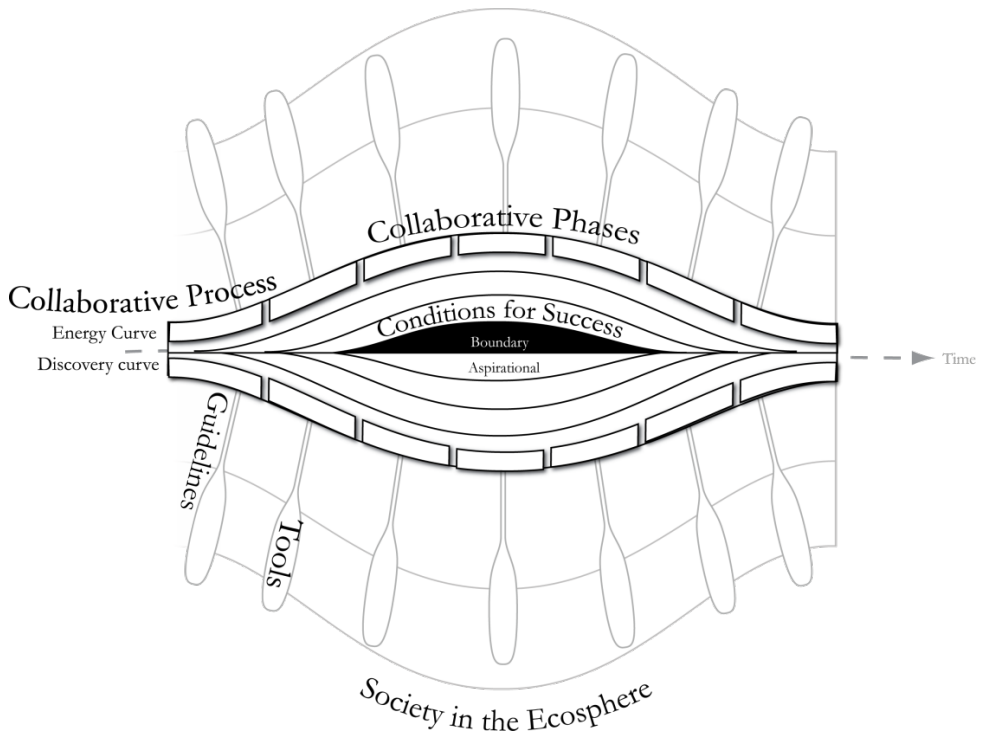


Figure 4.1: Structure of the magic canoe tool

4.2 Conditions for Success

The conditions for success help a practitioner working with collaboration for Strategic Sustainable Development (SSD) to be aware of key aspects of collaboration. By understanding and actively working with these key aspects, the practitioner has a much greater chance for success in the overall initiative.

As an example, the success condition of **Purpose**, and its relevance and application is illustrated as follows:

By working from a meaningful higher purpose, individuals and the group as a whole feel a sense of meaning, inspiration and commitment. When the group encounters strong disagreements or setbacks, provided the belief in and their commitment to their collective purpose is strong enough, it can inspire them to reach into the highest parts of themselves, push their

boundaries and develop the capacities needed to overcome the challenge. In this case, it may be the emotional and cognitive capacity to dialogue and explore the disagreement, in an open, respectful, and generative way. In the process, the whole begins to be greater than the sum of parts, as new capacities emerge at the collective level.

This new capacity then provides benefits in many other areas of the work – the ability to value and trust each others’ contributions, to think together and explore ideas, to openly voice feelings about an aspect of the work as valuable sources of information. The benefits of these new capacities have an upward spiralling and re-enforcing effect, helping other capacities to develop. In this case we have worked towards the aspiration part of the success condition.

Without this understanding, a practitioner could call a collaborative group into being around a purpose that is not deeply inspiring or foster the necessary belief and commitment in the group. When significant setbacks or internal disagreements occur, the intensity of this discomfort is not counterbalanced by much larger commitment and need to succeed. In this case, individuals may avoid engaging with a difficult issue, let the disagreement fester, which can then overtime lead to distrust, power struggles and in the worst case fissures in the group, where it becomes easier to simply walk away.

The group remains a sum of separate parts, and all its potential emergent capacities (collective thinking and problem solving, collective inspiration and passion, mutual care, support and sharing) remain undeveloped. This illustrates the boundary aspect of the success condition, which expresses what we should avoid doing.

In summary, Aspiration aspects of the conditions for success help us to work with human nature and win the support of its energies and capacities as an ally in our pursuit of the vision. And conversely, by being clear on what activities create resistance and disconnection in people, we avoid having human dynamics turning against us, and undermining the pursuit of the vision.

It is also useful to note, that the conditions for success are a system of interlinked concepts, and thus for example, by working with the success condition of higher purpose, this supports the possibility of the individuals

in the group to emerge as a cohesive whole, and thus positively affects the success condition of ‘wholeness’ and so on.

4.3 Process of Collaboration

The process of collaboration is useful for SSD practitioners and collaboration in general, because it synthesizes several models into a coherent picture.

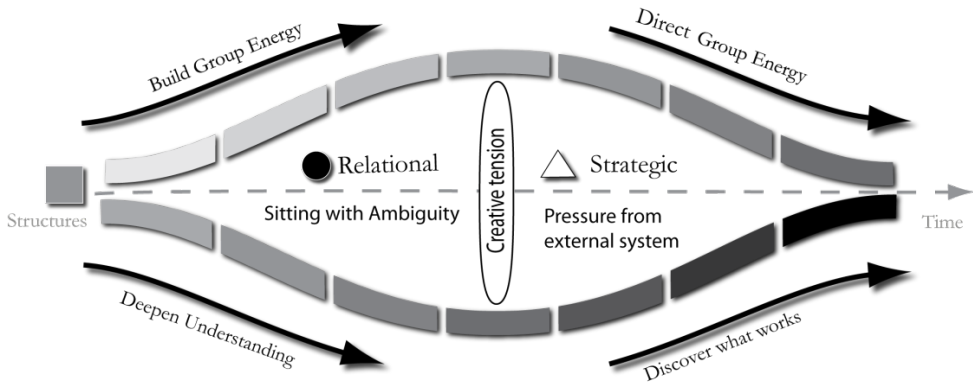


Figure 4.2: Mental model of the magic canoe

The process model helps us to understand in what order various pieces of a collaborative process occur. For example, in the Energy curve, a foundation of strong relationships (left hand side of curve) leads to a cohesive and energized team capable of good strategic work (right hand side of curve). This removes the common temptation to jump straight into strategic work because of our sense of urgency, or because it appears the most logical place to start and strategic intervention (Melnick et al 2006).

Similarly in the Discovery curve, we first need to deeply understanding the system in which we wish to intervene, before we can prototype solutions (Eisenstadt 2009). This safeguards against the common temptation to design interventions based on what we think the problem is, which often is only a symptom of deeper root causes (Senge 1990).

The model also helps us to understand what parts of the process run in parallel, for example, in the discovery curve people intellectually observe or co-sense a problem or emerging trend that needs attention. At the same time, in the energy curve, the core team talks about the issues and develops

friendships necessary to commit to engaging in the issue together. Similarly, as we move into directing group energy to strategy in the energy curve, prototyping in the discovery curve will be required to help make prioritizing decisions. By being aware of the process beforehand, and expecting to learn from the process and start over a few times, the group is less likely to perceive challenges as ‘failures’ and become de-motivated in the process (Barnum 2010).

4.3.1 Phases within the Process of Collaboration

The phases of the magic canoe provide a useful mental model throughout the collaborative process for planning and for ‘seeing the whole’. Facilitators of the process can use the guidance of the phases to plan ahead and enable the conditions for the emergence of a social body that can move towards sustainability. As the facilitator or core group recognizes which phase the group is in, they can follow the relevant guidelines for that phase, organize the enabling structures for the next phase and remember not to miss crucial elements like celebration and reflection. The phases of the magic canoe are useful as a guide but are not a strict prescription of what to do and do not always have to be followed linearly. The goal is to foster emergence allowing innovation to grow, along with a strategy to reach the vision of a successful collaboration.

The second way the phases help with collaboration is that a shared mental model of the process enables the participants to understand the rationale behind the various processes they experience within the and thus helps them be mentally prepared to try new things. By making the invisible process visible, this helps participants feel comfortable and enables them to sit with the ambiguity and magnitude of the undertaking. When playing games or spending time in nature, it can be rationalized as an important part of the growth process of a group. This is important, since many groups are eager to get straight to strategic work, and can perceive such relational and reflective activities as ‘wasting precious time’. Also in the phase of letting go of mental models and trying to understand the complexity of the challenge, there may be a lot of discomfort and confusion. Knowing that this is normal part of the process and that the group will get past it, can help participants to ‘embrace the chaos’ which is necessary to get through to new ways of thinking and acting (Stilger 2010, Barnum 2010).

In relation to strategic sustainable development the third ‘strategize’ phase of the process is a good time to encourage the use of the FSSD sustainability principles and using a backcasting from principles method of planning. These concepts are all well explained well by the FSSD to help people with strategic planning. Also, in the vision phase, sustainability must be incorporated in some way, at least using the sustainability principles to frame the boundaries within which people operate. Systems thinking and recognition of interconnectivity can be encouraged and taught throughout the process as part of a collective, ongoing personal development routine.

The phases of the magic canoe apply in a similar way to all levels of complexity in collaboration, whether we are talking about a small community group doing a project, a regional community of practice working towards a vision or a globalized multi-stakeholder project attempting to move society towards sustainability. As the collaboration reaches higher levels of complexity, more skill will be needed in each phase. This complexity includes the elements of more people involved, more sophisticated technology used and larger challenges with more unknowns being faced.

4.3.2 Guidelines

The guidelines for each phase are useful when a practitioner is ready to engage with a particular phase of the project and deepen the understanding of how to create a successful collaboration. Details are provided for individual, group, network, community of practice and social body levels of complexity so people can find the most relevant information for their situation. For example, if a community of practice is engaged in action/learning, people should try to do lots of prototypes and learn what works and share results with others, but it does not have to consider new governance and wealth structures. If they decide to join a larger collaborative effort with other networks and communities, then they can look more closely at the guidelines at the social body level.

If someone is working as a sustainability consultant, they may be asked to join the effort at the strategize phase or they may be hosting people through the whole process of collaboration. Either way, the goal is to embed sustainability and strategic thinking into the structure of the collaboration

so the consultant is not needed for the group to continue to move towards sustainability.

The tools listed can give the practitioner some ideas about what is available and more information can be found about them in the *Change Handbook* (Holman and Devane 2007) and with online searches. Tools are being created and rediscovered all the time so it is advised to keep looking and share the best experiences with other practitioners.

4.4 Magic Canoe as a Practical Tool

The magic canoe can be used as a design and planning tool, and also as a diagnostic tool to help restore health to a struggling collaborative process. If a problem is occurring, and the symptoms are showing up, for example, as people quitting the effort, a leader could consider the phase the effort is in and if the guidelines for that phase are being followed, or if a previous phase has been skipped or rushed. Also a deeper look at the success conditions can help identify root causes of problems. If the group is in the action/learning phase and running out of energy, the leader might talk to a few people and listen for signs if the trusting relationships appear to need work, if the roles and responsibilities are being respected or if the people still share a vision and are inspired by a higher purpose. The practitioner will learn to look for the most upstream root of the problem to be most effective at addressing issues.

4.5 Limitations of the Magic Canoe as a Tool

“We need to learn to pick up our models when they serve us, as opposed to believing they are the territory.” Barrett Brown, 2010

The mental model contained in our results and magic canoe tool allows us to make sense of a complex process, however it is limited as it gives us an over simplified view of the whole. In reality, people come and go, unforeseen obstacles arise and no process goes as it was planned. Many experts stressed the need to make a plan and then let it go and be flexible in the moment (Rowland 2010, Herndon 2010, Manga 2010).

The magic canoe is simply a lens for intellectually simplifying complexity that has its gifts, but also its limitations. We thus need to hold these maps lightly, and use them in conjunction with other ways of making sense of our systems, in order to continuously move towards an increasingly accurate cognitive and felt understanding of the real situation. Two practitioners working in highly complex collaborative systems shared how they intuitively sensed and felt into a system in order to properly understand its functioning as a whole. They described this as an intuitive process they could not explain, but included the capacity to relax, sit within ambiguity and confusion, experiment and allow a clarity to naturally emerge in its own time (Henen, 2010 and Barnum, 2010).

At higher levels of complexity, an understanding of the whole cannot be grasped nor understood with the logical mind alone. It is suggested that the use of the creative right side of the brain, and the use of multiple intelligences (body, heart, intuition, logic-creative mind, spirit) are all necessary. Collectively, they form an invaluable 'information processing system' allowing us to sense into a system, process multiple information flows and intervene accordingly. This multidimensional way of using intelligences as interveners can then be supplemented by the use of a tool such as the magic canoe (Melnick, 2006).

4.6 Feedback and Validity of Results

This section evaluates the validity of the results of the research. For the success conditions, the raw data has a fairly good validity because it comes from many highly experienced and thoughtful experts in the related field, however they all belong to the same network with similar worldviews, so their consensus of opinion, was somewhat predetermined. The success conditions were chosen with the lens of theories of complex living systems being developed by physicists and respected scientists, which makes each condition valid in its own right. There is high confidence that treating the collaboration process as a living systems is more accurate than viewing it as a mechanical process. This confidence comes from logic, that humans are in fact part of living systems and reducing them to mechanical abstractions, is no longer helpful at higher levels of complexity. It cannot be confirmed that the choice of which success conditions to use for the magic canoe are correct or exhaustive. Some success conditions currently overlap, which

indicates the need for more refinement, most likely in dialogue with many more practitioners, theorists and practical tests.

The process of collaboration is validated by robust and widely accepted models of psychology and collaboration. The accuracy to which the synthesis of these models accurately describes a true collaborative process, needs further testing. The feedback from experts so far has been positive but the model has not yet been used in practice. The phases of collaboration are built from specific case studies and interviews. They would need more verification before they can be deemed a general model. If the processes and parts of other large scale collaborative social movements like Transition Towns, Elios, and the 350 movement also matched these findings then it would gain more validity as a general model.

The guidelines actions and tools are only collected by the specific researchers and experts of our study. There could be many more guidelines and tools which are useful in different contexts. This is why a collaborative database is suggested in the structure of the tool to help practitioners gather and share information in the field.

The journey of the magic canoe is the application of Berkana's life cycle of emergence to the process of collaboration. The Berkana model is about scaling up innovation and the journey of the magic canoe is about scaling up collaboration. These concepts are very closely linked because the collaborators are innovating towards sustainability. The validity is based on the success of the Berkana model since 1994, in its ability to connect people around the world in meaningful efforts. For example the Art of Hosting community have been supported by the Berkana Institute and have grown in five years to have 100 gatherings in 20 countries (Berkana Institute 2008). The hypothesis of using the Berkana model as applied to collaboration, however, would need testing and refinement as it is brought into practice.

4.6.1 Validity of the methods

Having previous contacts with the interviewees allowed for an openness of sharing, yet also introduced a bias of similar experience, worldview and values. The effects of the bias were reduced by interviewing practitioners from many different cultures and continents, who work with many sectors and fields. Even though a large range was attempted, there was a bias in the interviewees towards integral theory, spiral dynamics and the U-theory.

This is most likely because these ideas have been found useful in the work of collaboration towards sustainability. The case study methods were designed to be casual and unobtrusive to the groups we were studying. However, at times it was difficult or impossible to stay outside the process as an observer. Thus, a more participatory approach was undertaken to dive deeper into the experience of the Hub and the Meshwork. The objectivity of being an observer was exchanged for a deeper understanding and feeling for the context. This means that some of the results come from an intuitive feeling of being immersed in the context as well as being validated by experts in interviews and literature.

The experts were invited to give feedback on the results in online discussions and over email. Several points were incorporated into the work. For example, Jeff Barnum pointed out the importance of embracing ambiguity in a large scale change effort. This point was also expressed strongly by Bob Stigler and others in the interviews. That aspect was added as an important part of the whole process. Deborah Frieze helped to clarify the use of the concept of emergence when discussing the journey of the magic canoe. Most experts were pleased by the work and expressed that it was helpful to see how their various models and work relate to each other.

5 Conclusion

5.1 Key Findings

The magic canoe is a mental model to help change agents understand collaborative bodies as complex living systems. Understanding the concepts of Higher Purpose, Awareness, Wholeness, Interior/Exterior, Power/Love, Chaos/Order, and Rhythm, and how to foster those conditions will equip the change agent with the confidence and attitude required for the task.

A general process of collaboration towards sustainability has been described as having seven phases: The Call, Convene, Energize, Vision, Strategize, Action-Learn and Celebrate. Guidelines for each phase are listed along with helpful tools. Some guidelines were relevant to all the participants in a social body and some were specific to the individual, group, network or community of practice. Having awareness of the invisible energies of the group and practical advice from experts will help facilitators avoid pitfalls and diagnose problems in the collaboration. The magic canoe map can hold all the information for easy reference.

The journey of the magic canoe describes how collaboration can continue to scale up to have global reach. The four steps in the lifecycle of emergence; name, connect, nourish and illuminate are proposed as a model for scaling up the impacts of collaboration.

5.1.1 The Magic Canoe and SSD

Looking at the big picture, the magic canoe helps people move strategically towards sustainability by providing a blueprint of how to foster greater collaboration. This is essential for system wide implementation of strategic sustainable development.

Practitioners working from the Framework for Strategic Sustainable Development could use the magic canoe as a tool when trying to understand the system they are working in and when developing a strategy for collaboration. Once an organization or community have been working

on their own sustainable vision and strategies and are starting to think systemically, they will most likely recognize the need to collaborate with their web of influence. Equipped with a systems understanding of successful collaboration, sustainability consultants, organizations and community leaders can navigate the waters in their own context.

5.2 Future Applications

The various discoveries and insights along our journey made it clear that writing a thesis on our findings was only the first step of a larger body of work. This inspirational journey has opened up various possibilities and ideas for the deepening explorations and creating practical applications of the findings. Some of these include:

On-line Collaborative Platform: A recurring petition from many experts who were interviewed, was that an online platform should be created where all the information that was gathered could be shared and evolve as a space for co-creative exploration. This would support experts, practitioners and the general public to share knowledge, best practices, experiences and burning questions around collaboration at this level of complexity. This could provide a place to bring visibility to new approaches and a community space to learn and co-create.

This platform can be linked to the leading websites of practitioners in the field like the Society for Organizational Learning, Berkana Institute, The Centre for Human Emergence, The Art of Hosting, The Transitioner, Co-intelligence Institute, WiserEarth, just to mention a sample of possibilities.

The online information sharing tool is envisioned using the model of the magic canoe as an organizational structure. In this case another piece of the paddle will be added after tools, called resources. Here information can be collected about good websites that can give more specific information about tools and concepts useful for that particular 'paddle'. Also practitioners and consultants who have mastered particular skills can list their services there. The structure of a tool has been outlined as in figure 5.1.

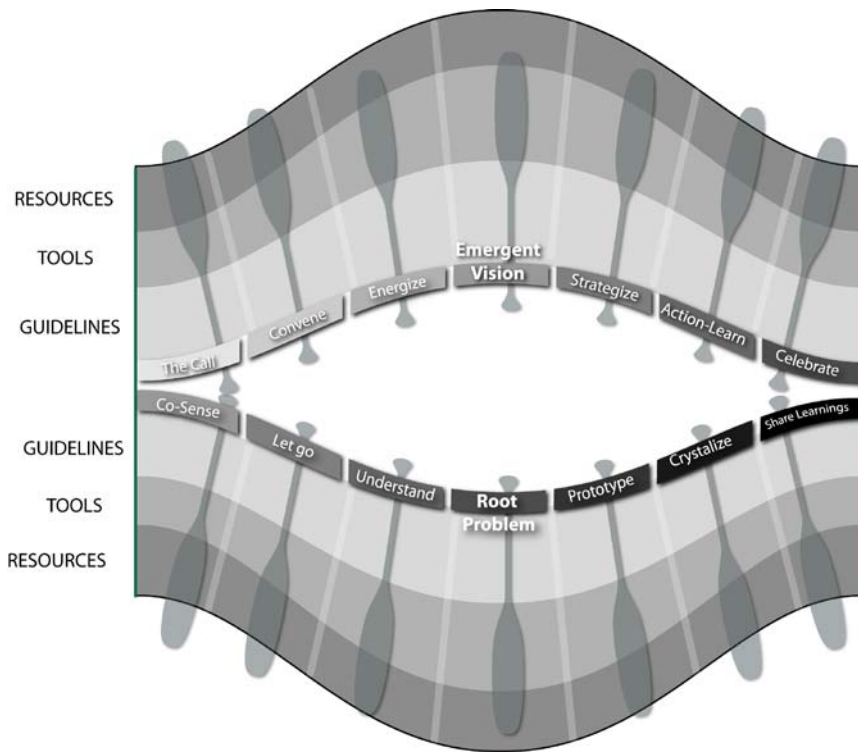


Figure 5.1: Magic canoe as an online resource

Book on Effective Collaboration on Complex Societal Issues. The researchers may decide to write a book in which certain concepts and avenues can be deepened which were beyond the scope of the thesis. This could be written to have a greater applicability to practitioners in the field with more case studies and examples of good work currently happening.

Creating a Workshop and/or a Game. We have considered creating a learning experience to help people understand the concepts of the magic canoe. Workshops, stories and games that tap into multiple intelligences would be proposed and tested to find what works well. This would explore the use of the artistic elements such as sound, music, imagery and play.

5.3 Further Research

The scope in this thesis was focused mainly on complex collaborative processes to enable intelligence in our collective social bodies. In this process, several areas for further research emerged:

Emergence through On-line / On-life collaborative processes towards sustainability: As the lifecycle of emergence (Wheatley et al 2006) shares the importance of weaving critical connections to bring social change to scale, the role of online technologies has become a determining element to foster effective collaboration through networks, communities of practice, and complex collaborative processes.

During our research interviews, several experts shared the perspective that we still have to learn to integrate the full potential of online collaborative platforms. It is important to balance on-line / on-life interactions in a way that keeps the energy of the group moving. It was suggested that a real quantum leap in collaboration capacities for social justice, environmental rights and community development would be seen once we learn to generatively weave our online technologies into our collaborative processes (Herndon,2010).

Widespread Change and Collaboration through Art and Culture: One of the dominant theories for social change is the Ripple Out effect, in which leaders attempt social change by searching for leverage points and intervening with key players in business and community. They then observe to see if the change starts to affect other businesses and communities. This is essentially an intellectual, top down approach to social systems change. However, there is a second theory of change that suggests that mass social change can be achieved through, artistic and cultural methods where many small changes rise simultaneously to form a massive shift in the culture (Barnum 2010).

It would be intriguing to examine the approach of the former mayor of Bogotá in Colombia, Antanas Mokcus and the former mayor of Tirana in Albania, Edi Rama. They have realized that direct intervention in society by introducing artistic and cultural elements, not as seducing propaganda but as stimulating impulses, can bring new thoughts, mindsets and behaviours. They have applied this in a systematic and strategic manner achieving great success in their countries. The core premise of these theories is that there is

an untapped power in people that one can harness for change through these artistic and cultural elements. This is a new field that needs to be explored with further detail and can be an effective way of fostering massive change and social collaboration towards sustainability. The golden question for this study is: How we can help governments, society and organizations to use these methods to orient and harness their collective cultural power for positive social change?

5.4 Catching the Wave

Society is transiting through turbulent storms and aims to find safe refuge. However, there is still a tsunami of changes and transformation coming our way. In order to face the oncoming challenges we evoke the spirit of Eric Young's magic canoe to describe society's need for building a large collaborative system that can hold our collective dreams, and united action. It is imperative that society learn to act collectively in order to masterfully ride through the wave of global challenges and transformation.

The maps, processes and tools developed in this thesis are a contribution to the set of navigation tools needed to steer such a 'canoe' of collaboration. Global change can only be achieved by the collective efforts of society. No single person or organization can do it by themselves. The journey of the magic canoe is a journey of healing, restoration and trust amongst people from all nations. It is a journey of learning to care for one another as we design the new world infrastructure and learn to act as a cohesive, generative and graceful whole.

References

350.org. 2009. *5,248 Rallies in 181 Countries: Most Widespread Day of Political Action in History*. Press releases (25 October). Available from <http://www.350.org/media/pressreleases> (accessed 20 May 2010).

Archer, Alice Marie, Rong Fei and Rebecca Petzel. 2009. *Collaboration for Sustainability in a Networked World*. Master's Thesis. Blekinge Institute of Technology.

Art of Hosting Community of Practice. *The Practice, 5 Breaths: A pattern that works*. Available from <http://www.artofhosting.org/thepractice/5breaths/> (accessed 28 April 2010).

Assadourian, Erik. 2010. *The Rise and Fall of Consumer Cultures*. In: State of the World Report 2010: Transforming Cultures from Consumerism to Sustainability. Washington, USA: The World Watch Institute. Available from <http://blogs.worldwatch.org/transformingcultures/wp-content/uploads/2009/04/Chapter-1.pdf> (accessed 29 May 2010).

Barnum, Jeff. Interview by authors, 22 April 2010. San Fransisco, USA. Internet Voice Recording.

Berkana Institute. 2008. Annual Report .Available from http://berkana.org/pdf/Berkana_Annual_Report_2008.pdf (accessed 4 May 2010)

Black, Richard. 2009. *Why did Copenhagen fail to deliver a climate deal?* BBC News site. <http://news.bbc.co.uk/2/hi/science/nature/8426835.stm> (accessed 15 April 2010).

Brown, Barrett C. 2006. *The Four Worlds of Sustainability: Drawing upon Four Universal Perspectives to support Sustainability Initiatives*. Louisville, Colorado: Integral Institute.

Capra, Fritjof. 1982. *The Turning Point: Science, Society, and the Rising Culture*, ' Chapter 8: The Systems view of life'. USA: Simon and Schuster.

Capra, Fritjof. 2003. *The Hidden Connections*. Great Britain: Harper Collins Publishers.

Cooperrider, David L and Diana Whitney. 2005. *Appreciative Inquiry: A Positive Revolution in Change*, 1st ed. Berrett-Koehler Publishers.

Corrigan, Chris and Art of Hosting Community of Practice. *Chaordic Stepping Stones: Planning just the right amount of form for invitation, gathering, harvest and wise action*. Available from http://www.interchange.dk/download/Chaordic_stepping_stones_615.pdf (Accessed 28 April 2010).

Covey, Steven. 1989 *The Seven Habits of Highly Effective People*. USA: Free Press.

Covey, Steven. 2004. *The 8th Habit: From Effectiveness to Greatness*. Great Britain: Simon & Schuster Ltd.

De Jong, Arthur J. 1990. *Reclaiming a Mission: New Direction for the Church-Related College*. Grand Rapids, MI: William B. Eerdmans.

Degenhart, Benjamin. Interview by authors, 26 March 2010, Århus, Denmark. Internet Voice Recording.

Deutsch, Claudia. 2007. *A threat so big, academics try collaboration*. The New York Times Online. 25 December. Available from http://www.nytimes.com/2007/12/25/business/25sustain.html?_r=2&oref=slogin (accessed 1 May 2010)

Eisenstadt, Mia. 2009. *Sustainable Food Lab: A Case Study*. Available from <http://www.reospartners.com/publications/Case%20Studies> (accessed 18 January 2010)

Elgin, Duane. 1997. *Collective Consciousness and Cultural Healing*. Fezter Institute. Available from http://www.awakeningearth.org/PDF/collective_consciousness.pdf (accessed 9 May 2010)

Frieze, Deborah. Interview by authors, 23 February 2010, Boston, USA. Internet Voice Recording.

Fromm, Erich. 1956. *The Art of Loving*. USA: Harper & Row.

- Gardner, Howard. 1983. *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- Gestalt International Study Centre. 2010. *About Us: What is Gestalt?* Available from <http://www.gisc.org/about/index.php> (accessed 26 May 2010).
- Goleman, Daniel. 2009. *Ecological Intelligence*. Broadway Books. Available from <http://www.ecoliteracy.org/essays/ecological-intelligence>, (accessed 14 February 2010).
- Hamilton, Marilyn. 2009. *Integral City: Evolutionary Intelligences for the Human Hive*. Canada: New Society Publishers.
- Hawken, Paul. 2007. *Blessed Unrest: How the Largest Movement in the World Came into Being and Why No One Saw It Coming*. USA: Viking Press.
- Henen, Craig. Interview by authors, 4 April 2010, Cape Town, South Africa. Internet Voice Recording.
- Herndon, Sheri. Interview by authors, 15 February 2010, Seattle, USA. Internet Voice Recording.
- Hock, Dee and Visa International. 1999, *Birth of the chaordic age*. San Francisco: Berrett-Koehler.
- Holacracy One, 2010. *Organization Evolved: Introducing Holacracy*. Available from <http://holacracy.org/resources/organization-evolved> (accessed 20 May 2010).
- Holman, Peggy and Tom Devane. 2007. *The Change Handbook: The Definitive Resource to Today's Best Methods for Engaging Whole Systems*. Berrett-Koehler.
- Holmberg, J. and Robèrt, K-H. 2000. *Backcasting from non-overlapping sustainability principles – a framework for strategic planning*. International Journal of Sustainable Development and World, Ecology 7:291-308.

- Hood J.N., Logsdon J. & Thompson J. 1993. *Collaboration for Social Problem-Solving: A process Model*. New Mexico: University of New Mexico.
- Houston, Tracy. 2007. *Inside-Out: Stories and Methods for Generating Collective Will to Create the Future We Want*. Cambridge, Massachusetts: Society for Organizational Learning.
- Hubbard, Barbara 1998. *Conscious Evolution: Awakening Our Social Potential*. New World Library
- Jaworski, Joseph. 1998. *Synchronicity: The Inner Path of Leadership*. San Francisco: Berret-Koeler Publishers.
- Kahane, Adam. 2010. *Power and Love: A theory and Practice of Social Change*. San Francisco: Berrett-Koehler Publishers.
- Kimble, Chris Feng Li and Alexis Barlow. 2000. *Effective Virtual Teams through Communities of Practice*. (Department of Management Science Research Paper Series, 00/9), University of Strathclyde, Strathclyde, UK.
- Kriegman, Orion. 2007. *Global citizens movement*. Encyclopaedia of Earth. Available from http://www.eoearth.org/article/Global_citizens_movement (Accessed 29 May 2010)
- Kuhn, Thomas. 1996. *The Structure of Scientific Revolutions*. Chicago: University Of Chicago Press.
- Lave, Jean and Etienne Wenger, 1991. *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Mandela, Nelson. 1995. *Long Walk to Freedom*. South Africa: Macdonald Purnell.
- Max-Neef , Manfred. 1991. *Human Scale Development: Conception, Application and Further Reflections*. New York: The Apex Press.
- Maxwell, Joseph A. 2005. *Qualitative Research Design: An Interactive Approach*. 2. ed. Applied Social Research Methods Series, 41. Thousand Oaks, CA: Sage Publications.

McKibben, Bill. 2010. *350.org site*. <http://www.350.org> (accessed 15 April 2010)

The Mechanistic Paradigm and Dilemma 2005. The Global Curriculum site. Available from http://www.e-changesolutions.com/Global/Free_course/np1_1.html (accessed 15 April 2010)

Melnick, Joseph, Sonia March Nevis, and Edwin C. Nevis. 2006. *Organizational Change through Powerful Micro-Level Interventions: The Cape Cod Model*. Cape Cod: Gestalt International Study Center.

Merry, Peter, Anne-Marie Voorhoeve, and Morel Fourman. 2009. *Developing a roadmap and meshwork for reducing Brazil's CO2 emissions by 80% by 2020*. Netherlands: Centre for Human Emergence.

Merry, Peter. 2009. *Evolutionary Leadership*. USA: Integral Publishers.

Merry, Peter. 2010. *2020 Climate Solutions Meshwork operating in Copenhagen: Which Piece of the Puzzle do You hold?* Netherlands: Centre for Human Emergence.

Merry, Tim. Interview by authors, 24 March 2010, Nova Scotia, Canada. Internet Voice Recording.

Meshwork Design Workshop, 30, 31 March – 1 April 2010, Utrecht, Netherlands.

Moeller, Toke. Interview by authors, 20 February 2010. Karlskrona, Sweden. Voice Recording.

Mota, Carlos. Interview by authors, 16 February 2010, Mexico City, Mexico. Internet Voice Recording.

Noubel, Jean-Francois. 2003. *What Is Collective Intelligence?* Masternewmedia.org site. Available from http://www.masternewmedia.org/2003/05/27/what_is_collective_intelligence.htm#ixzz0nERRBIEr (accessed 2 February 2010).

Noubel, Jean-Francois. 2007. *The Invisible Revolution*. Available from <http://www.yudu.com/item/details/14391/Collective-Intelligence-----The-Invisible-revolution-----?refid=5522> (accessed 2 January 2010).

Noubel, Jean-Francois. 2008. *Collective Bodhisattvas*. Kosmos Journal, (Spring-Summer): Volume VII Number 2.

The Pachamama Alliance. 2008. *Awakening the Dreamer Symposium*. Produced by the Pachamama Alliance.

Pór, George. 2010. *What is Collective Intelligence?* Community Intelligence site. Available from <http://www.community-intelligence.com/blogs/public/>. (accessed 10 February 2010).

Rifkin, Jeremy. 2009. *Professor Jeremy Rifkin on the Economy of Energy for Cities Global Urban Summit, Rotterdam, 4 December 4th 2009*. <http://www.youtube.com/user/climateinitiative> (accessed 1 May 2010).

Rifkin, Jeremy. 2010. *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis*. USA: Penguin.

Robèrt, Karl-Henrik. 2002. *The Natural Step Story: Seeding a Quiet Revolution*. Gabriola Island, BC: New Society Publishers.

Robèrt, K-H, G Broman, D Walron, H Ny, S Byggeth, D Cook, L Johansson, J Oldmark, G Basile, H Haraldsson, J Macdonald. 2007. *Strategic Leadership Towards Sustainability*. Karlskrona: Blekinge Institute of Technology.

Russell, Peter. 2008. *The Global Brain: The Awakening Earth in a New Century*. Edinburgh: Floris Books.

Sachs, Jeffrey. 2005. *The End of Poverty: Economic Possibilities for Our Time*. USA: Penguin Press.

Sahtouris, Elisabet. 2000. *Living Systems, the Internet and the Human Future*. Talk presented at Planetnetwork, Global Ecology and Information Technology, San Francisco, 13 May 2000. Available from: <http://www.ratical.org/LifeWeb/Articles/LSinetHF.pdf> (accessed 30 April 2010).

Sahtouris, Elizabet. 2006. Lead article in Soka Gakkai International Quarterly (Spring).

Scharmer, Claus Otto. 2007. *Theory U: Leading from the Future as it Emerges : the Social Technology of Presencing*. Cambridge, Massachusetts: Society for Organizational Learning.

Scott Peck, M. 1987. *The Different Drum: Community Making and Peace*. Touchstone: New York:

Senge, Peter. 1990. *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday.

Stafford, Edwin R., Polonsky Michael Jay, and Cathy L. Hartman. 2000. *Environmental NGO-business collaboration and strategic bridging: a case analysis of the Greenpeace-Foron Alliance*. Business Strategy and the Environment 9, no. 2:122-135.

Wheatley, Margaret and Deborah Freize. 2006. *The Lifecycle of Emergence*. Canada: Berkana Institute. Available from <http://www.berkana.org/articles/lifecycle.htm> (accessed 15 February 2010).

Vaughan, Adam and David Adam. 2009. *Copenhagen climate deal: Spectacular failure - or a few important steps?* Guardian website. Available from <http://www.guardian.co.uk/environment/2009/dec/22/copenhagen-climate-deal-expert-view> (accessed 15 April 2010).

Vaughan, Frances. 2002. Journal of Humanistic Psychology, Vol. 42, No. 2, 16-33.

Wilson, Colin. 1989. *Access to Inner Worlds: The Story of Brad Absetz*. Guernsey: Guernsey press.

Wyley, Chantelle. 1996. *Briefing paper on the Gestalt Approach to Organization and Systems Development*. South Africa: Baobab Consulting.

Wyley, Chantelle. Interview by authors, 22 March 2010. Cape Town, South Africa. Internet Voice Recording.

Young, Eric. 2007. *The Magic Canoe*. Opening Remarks at Toronto City Summit Alliance(February).

Appendix A: Expert Interviews

Name	Field of Expertise	Sector	Country
Tom Atlee	Collective Intelligence and democracy	Academic, Government	USA
Alice-Marie Archer	Distance Collaboration	Academic, Government	UK
Mohan Bhawandas	Business and Government Consultant	Corporate and High Level Government	Switzerland
Benjamin Aaron Degenhart	Systems Dynamics	Academic, Youth	Denmark
Jonathan Dawson	Community Currency	Eco Village movement	International, Scotland
Debora Frieze	Social Systems, Emergence	Community	USA
Marilyn Hamilton	Integral Cities	Municipal Government	Canada
Craig Henen	Executive Coaching, Integral Emergence	Corporate	South Africa
Sheri Herndon	Social Architect, artist	Global Community, NGOs	USA
Fernanda Ibarra	Collective Intelligence, Meta Currencies	Global Community	Mexico
Dumisani Magadlelea	Ubuntu Intelligence Facilitation, Coaching	Government, Development	South Africa
Manuel Manga	Organizational Learning & Evolutionary	Corporate	South America

	Leadership		
Tim Merry	Dialogue, Facilitation and Large Scale Systems Collaboration	Regional Government	Canada
Carlos Mota	Sustainability and Organizational Consulting	Corporate, Academic	South America
Toke Paludan Møller	Dialogue Facilitation	Community, Governmental	America, Africa
James Reader	Organizational Development	Corporate and Community	South Africa
Juan Pablo Rico	Integral Consulting	Corporate and Government	Mexico
Regina Rowland	Sustainability Consultant	Corporate	USA
Elliott Saxby	Sociocracy	Eco Village movement	International, Scotland
Bob Stilger	Social Systems, Emergence	Berkana Community	Latin American, USA
Bridget Woods	Communities of Practice, Education	NGO, community	South Africa
Chantelle Wyley	Gestalt Organizational and Systems Development, Emotional Intelligence, Leadership Coaching	National Government	South Africa

Appendix B: Interview Outline

15	Discover Elements What has been your best personal experience of people collaborating together? Why? What was good about this experience? Why? What factors made it possible? Why? How do you think these factors can be created?
15	Shadow / Barriers What has been your experience of a collaborative group project that was not able to realise its goals? What barrier/s lead to this outcome? What patterns and repeated challenges have you seen come up in these processes? What burning questions do you have related to this work that you have not been able to find an answer for yet?
1	Quiet Space We've reflected on the elements of success as well as barriers to successful group projects. I'd like to suggest we take a minute of silence to quiet the mind and invite you into a dreaming space.
15	Dreaming Design Scenario You have been asked to submit a proposal to design and facilitate a global climate event whose desired outcome is to set clear goals, and then implement them via collective action. What kind of process would you design to best ensure this outcome? Who would you invite? What tools and resources would you use?
4	Resources How can this research serve you? Are you aware of any models or frameworks that have already been created in this area? Are there any other people or organizations who you would recommend we speak to in our research process? THANK YOU.

Appendix C: Sample interview transcript

Tim Merry, Nova Scotia Canada, 24 March 2010.

Interviewer: Juan Carlos Kaiten, note taker: Kara Stonehouse, transcriber, Sonja Niederhumer.

Time	Key words	Summary
TM1 07:45	called to this work	Strong calling to work with my local language, and the land - Nova Scotia - it called itself the Shire. From working on individuals, to groups, to now entire systems. Last two years gone next level, to entire regions - youth and educations systems, food systems. It happened to me - a little surprising and overwhelming and I just do my best.
TM1 10:50	slowing down, spaciousness	there is a meditation I have learned, and I also spend 30min - 2hrs everyday in the forest just sitting and watching - that keeps me sane, it slows everything down. The quality of work I do I can see the difference when I have spent time in the forest. There is something there in it for me.
TM1 11:35	Constantly host ourselves	Constantly be in the practice of hosting ourselves is a baseline from which we work.
TM1 12:00	Being in nature: tap wisdom	No question for me - being in nature is a spiritual practice, enormous wisdom I can tap into when I am standing in those types of environments that just isn't available to me when I am locked up in my house.
TM1 14:43	experimentation period	There have been many little successes on the way. But on the bigger level, the jury is out - we don't know if the methodologies and technologies we are using work - and I won't trust anyone who says they do.
TM1 15:45	Collective design	Whole stakeholder groups across Canada have been able to feed into the design of the public health system in Nova Scotia
TM1 16:05	will & commitment solos	Multi-stakeholder processes: small successes with working with 3 day retreats where 5 hours are solos in forest (e.g change lab method), where they are really in the hinge of the project, where they have gone out and engaged with stakeholders for over a year and a half to understand what would be most helpful, and then to be in the question ' Do i have the personal will and commitment for this? Does my personal will and passion align with what is being asked? If not, I should step back now'.
TM1 17:00	Dissolve old: space for new	Had success dissolving things - work with Youth Sexual Health - provincial round table existing for 12 years - dissolve itself and make space for something new that was more representative of the people they were serving. Took 1.5 days to come to this conclusion. 'OK we need to hospice this, help it die'
TM1 17:45	Know when to let things	'OK we need to hospice this, help it die' .dissolve itself and make space for something new that was more representative of the

	die	people they were serving. Took 1.5 days to come to the conclusion
TM1 18:18	Youth work - emerging paradigm	Pioneering - new initiatives being born and connected together - Ontario - looking at changing and transforming infrastructure and processes in youth work across the province. Very massive population and very diverse. Many youth work initiatives popping up - an emerging paradigm of working with kids. Bringing together multiple and diverse stakeholders to make decisions together in how to move forward. They are already doing the work we are talking about, paradigm shifting, and now all that needs to be done is to connect them together.
TM1 19:45	Many courageous new world builders	Many stories of people who are working within current systems and are creating the conditions for new things to happen. Senior leadership of very beaurocratic systems stepping up and saying 'enough', saying 'we are going to create the conditions for new work to happen and we are going to protect it and we are going to interface between the old world and the new world. There is a lot of heroism out there. Taking the initiative and leadership in very hostile environments - handling enormously toxic situations, people taking up leadership, and others helping things die.
TM1 21:30	see 'what is': basis to work from	Getting to recognition of the need to dissolve: Something really critical with working with 'what is' - good ideals and visions of how we want the world to be, which can be just as paralyzing and leave us overwhelmed with how the world is. There is something important - did interview with everyone, brought it back (had two young people on team), brought it back, and here is what you said 'this is completely dysfunctional' - things they never said to each other, but were happy to say in one to one interviews. Then upon that basis, we were able to start having really good conversations.
TM1 23:30	Possibility=quality of relationships	Need relationships that can handle great discomfort. Then anything becomes possible. Then it doesn't matter what you put in the middle. Seeing and understanding what is the reality now, as well as having the quality relationships with each other that can handle that. That's how we get to the place where a decision can be made to let something die, and something else to emerge.
TM1 23:45	Quality relationships =results	"The quality of our relationships directly impacts our results". The more we focus on just getting results, the more we compromise our relationships, the less quality we get into our results. Root of it is shifting our attention to 'how are we together' and then 'what could we get done with this quality of relationship that wouldn't be possible otherwise'.
TM1 24:45	Appreciative Inquiry	Sense of positive psychology: Seeking out, amplifying and building on strengths I believe that on an individual and systemic level - but not enough on its own.
TM1 24:50	Surfacing Shadow	I also fundamentally believe in surfacing shadow - surfacing 'what is really hurting' and having that be part of the conversation
TM1 24:50	Wisdom in dissenting voice	I also have enormous faith that there is wisdom in the dissenting voice - not about just moving ahead because the majority is excited, its making sure all the wisdom and different voices in the room are heard and then figuring out what it would take for people to come along.

TM1 26:20	Quality relationships =disagree=growth	That is the quality of relationship I have with all my friends. If there isn't that quality of relationship, and there is a disagreement, then the whole thing folds. If they haven't put that attention into 'how do we need to be with each other'
TM1 26:50	Democracy vs consensus	Failure of democracy - ignores the dissenting voices. Eg minority group, First nations groups - democracy favours the dominant culture. It is not inherently supporting of emerging cultures - all disenfranchised or marginalised cultures. Many of the places that are most disenfranchised, have gone through the most heat, most adversity, and I have a massive belief that adversity breeds wisdom
TM1 27:20	Wisdom in minority voices	To not tap into that feels very dangerous.
TM1 29:20	Hosting myself	"I am earning my stripes to host others by hosting myself ". AoH community has done a lot of work around the personal practices of the host - having a personal practice where I am
TM1 29:40	collective wisdom	Some methodologies that create listening and collective wisdom
TM1 29:55	Working with friends	Not doing it alone - we need to be doing this stuff as friends
TM1 30:20	Big gap at moment	The big question for me is around infrastructure - once we have the quality of relationship in place that we want, and we have some sense of shared purpose and we have some agreements around principles, we've engaged stakeholders and done lots of dialogues and understand what is needed. The big question for me is, what is the infrastructure that we put in place that supports that that is not rooted, solely, in command and control - which the majority of infrastructures that are available to us now are. How are we building infrastructure that supports relational achievement? This for me is the big gap at the moment
TM1 30:50	Infrastruct: control, command	what is the infrastructure that we put in place that supports that that is not rooted, solely, in command and control - which the majority of infrastructures that are available to us now are.
TM1 31:30	Infrastruct: Rigour & discipline	Its not just about being soulful and emergent, it is also about being strategic and disciplined and rigorous - especially when we are operating at scales that affect millions of people. How do we track this kind of stuff? How do we evaluate it? How do we maintain accountability? We need some rigour in this. We can't just bounce our way through it. Its not okay to be haphazard when we are dealing with a massive spread of disease.
TM1 32:10	Infrastruct: support emergence	What are infrastructures that support emergence? How do we pack it so that we can be continually supporting what is emerging, and how can we be continually helping things to die? What does it look like when this way of working becomes the culture of how we do things? Becomes the norm? What is that?
TM1 32:10	Infrastruct: help things die	how can we be continually helping things to die?
TM1 32:30	Infrastruct: as mainstream	Emergent/hospicing infrastruct. What does it look like when this way of working becomes the culture of how we do things?
TM1 33:00	Infrastruct: neg. associations	Use of language: I think its edgy, because we have traditionally experienced infrastructure as something negative - as something hierarchical, involves abuse of power, we have experience

		evaluation as something that hinders processes as opposed to help them, gone into micro-management, we go into accountability as a way to punish people, we experience tracking as a way to keep tabs on people and so its dangerous to use these words. But I think the intention behind each of these words is to help us do our work better. How do we create infrastructure not rooted in power and control and in service of the whole system, or the whole community or region and what do those infrastructures look like?
TM1 33:40	Infrastrct: helps do our work better	But I think the intention behind each of these words is to help us do our work better. How do we create infrastructure not rooted in power and control and is in service of the whole system, or the whole community or region and what do those infrastructures look like?
TM1 36:00	Infrastrct: reflects new mindset	Traditionally we have had things like knowledge management systems, performance management systems, evaluation systems - I think we still need systems to manage. Right now we have new paradigm emerging organizations - they are happening. What are the systems we are building into those organizations that are actually reflective of the view of the mindset of actually working in fundamentally participative ways?
TM1 36:20	Emerging relational infrastructur es	What does social / relational infrastructure look like? I think the Hub is in that question, massively, world wide - how do we create a global infrastructure that actually honours the perspective the paradigm from which the Hub was created.
TM1 38:20	Life cycle of emergence	The life cycle of Emergence is one of the basic models I use in all of my work. Berkana is very close to my heart, I am very familiar with it, am on the board.
TM1 39:20	Amplifying emerging paradigms	Many people disagree with me on this - I don't think we create the paradigm shift - they are happening and we get to amplify them or accelerate them. E.g the youth work across Ontario - there was already a shift happening in the culture of youth work across the province and then some folks noticed it and then said 'we need put some money in this and start investing in this' so a group of funders got together and started pumping money into it, and then that really began to generate a lot of energy around it, and then it was 'oh my goodness, what do we do now?' so then we need to start connecting it together so they starting bringing these groups in small gatherings and large gatherings. And a lot of this work was beginning to understand 'what are the real drivers behind this type of work?'. What are the principles, and the behaviours that define this new paradigm so that we can better understand it and then be more skilful in how we support it? That is part of the early work
TM1 39:20	Shift happening :notice it & value it	there was already a shift happening in the culture of youth work across the province and then some folks noticed it
TM1 39:20	Understand value of shift	noticed the shift and then said 'we need put some money in this and start investing in this'

TM1 39:20	Fueling shift growth=energy building	so a group of funders got together and started pumping money into it, and then that really began to generate a lot of energy around it, and then it was 'oh my goodness, what do we do now?'
TM1 40:00	Dialogue=Understanding system	'what are the real drivers behind this type of work?'. What are the principles, and the behaviours that define this new paradigm so that we can better understand it and then be more skilful in how we support it?
TM1 40:25	early work: amplifying emergence	Noticing a shift, investing in it, connecting all the energy that built (people working in the shift field), dialogue to understand the new paradigm and how to best support it in how we work
TM1 40:35	Amplify capacity:particip. Leadership	doing some training in participatory leadership that further amplifies the skills that are already there - I think there is also the part about building capacity into these groups a lot of these groups come up and kind of just pick things up along the way so there something about doing some training in participatory leadership that further amplifies the skills that are already there
TM1 40:50	Community through conversation	I think another key piece of it is forming teams - not only connecting people, but connecting people over time, that we form community through conversation , so the Aoh world calls it 'core teams' Berkana calls it 'Communities of Practice' - Community of practice is formed by being together with each other over a period of time that then builds the relationships we need to sustain the work that then allows us to take actions together, and risks together that we would never take alone. The methodologies are out there for this = participatory methods, open space, world cafe etc.
TM1 42:15	CoP:reg face-to-face	Regularity of face to face meeting which is essential
TM1 42:15	CoP:online technologies	A lot of online technology that we 're experimenting and working with (in Ontario we are using something called 'Community Zero' which is an online tool we often use ning as an online tool, using some of the webinar technologies like GoToMeeting There is a lot of technology out there and that begins to support non-local teams begin to work together when they are not face to face. So that is key.
		Gaps: spaces of mass experimentation - infrastructures that support emergence /relational achievement, online technologies that help CoP's stay connected

TM1 44:20	Choice: to make a difference	for me is what the model from Berkana allows me to say is 'large scale change is on the way right now - that is inevitable. But, we can either be victims of circumstance, or we can be actively involved in how and what that change is. So this work for me is...I am not open man...I want to see something in particular - I do not want to see systems that are oppressive, dominant cultures of command and control - I think it is damaging both ourselves and our communities and others. So for me, if the emerging paradigm ends up being one of deeper command and control - if that is the next emerging system of influence then its doomed! I am actively engaged in amplifying one piece of emergence right now. You know, there is also a pretty strong emergence of very far right thinking, and fundamentalism in the world right now. That is just not where I choose to put my attention, because I don't think that is the best way for humans to go. I am making a choice I am putting my energy somewhere. It is following my heart, but it is also strategic.
	Infrastruct: help ppl fulfill destiny	We need to create infrastructures in which people can fulfil their personal destiny
	Inner dev = outer development	Outer mirrors the inner: People need to really understand that the level of success and clarity they will achieve on the outside is directly related to the personal development and clarity on the inside - hence the work of personal development is crucial for this work.
	Overall host + coaches	It is too much if I as the larger process facilitator/host am trying to support the personal development of individuals as well. Thus, we have started to use coaching teams for this purpose within larger processes.
	Coaching teams: personal dev	Personal development is a key piece. We are starting to use coaching teams within our process designs to help support people in their personal development while they are working. Coaching can help track personal development.
	each group different needs & tools	Every group is different and will have different needs. I use what ever tools are needed to best support them - journaling, Byron Katie, Movement work, Nature solos, Deep Democracy, Aikido, Conversations, Calligraphy - many different things for different groups.
	Patience w. ppl = change = time	Personal transformation and development and change takes time. Many small things build up and over the course of a year, for instance, you can track changes. This is the importance of just staying in the work, being relational and believing in people's fundamental goodness.
	Ppl growing: stay relational	This is the importance of just staying in the work, being relational and believing in people's fundamental goodness. Personal transformation and development and change takes time.
	personal dev: Precondition	I make it clear to leaders that if they want to work with me that it will require personal change. If they are prepared to do that work, then I am prepared to work with them. It's a precondition of working with any leader in a system.

	Time	People with the capacity and influence to create shifts in these systems live in a very fast paced reality. Often A-types that like to be busy. Need to be able to slow down and care for themselves. Also when you open to the possibilities as well as the pain they are massively motivating and it is easy to get burned out. So we need to find ways to self care, and to slow down.
	Self care	Avoiding burnout: So we need to find ways to self care, and to slow down. Who is hosting and nourishing the change agents?
	Every event is a small trigger	Gatherings: Every event is a trigger, not just 'big ones' like COP16. No single event will create the change
	New system ppl+ dying system	Gatherings: Bring the people who are pioneering the new systems together with those who are hospicing the old systems
	Connecting infrastructure	After gatherings: Create infrastructure that helps people be connected
	Participant driven+provocators	Gatherings: In processes, it needs to be fundamentally participant driven, but have provocators there to ask provoking questions and get the crucial conversations and thinking happening.
	Tap: Indigenous wisdom	Gatherings: We need to connect more with indigenous wisdom - there is massive wealth there that we are not tapping into
	Body work	Gatherings: Physical body work in events - yoga, martial arts is important
	connection to Nature	Gatherings: essential element is connection to nature
	Physically build something together	Gatherings: build something together - e.g in the forest, do some physical work
	music, singing, dancing, eating	Gatherings: music, singing, dancing, eating together
	Connect trans-local work	Work translocally - help connect people in their efforts to do local work. Connect people together to improve their local work
	Silo breakers become silos	merging patterns/processes: Aoh, Change Lab, Deep Democracy, Spiral Dynamics - all designed to break down silos but become silo's of their own, practitioners start to see them as 'the way' and negate other processes. Fair amount of these kinds of turf wars going on, at the cost of new and emerging mental models. There is no one way,
	Synthesizing, integrating work NB	Critical piece of work in our generation, 25 - 40yrs - synthesizing and integrating - otherwise we are just creating more silos, separation and enemies. There is no one way,
	Harvesting across fields: connect us	I am really excited about your work in that it is surfacing patterns across the whole field - it is a level of harvesting that brings us together

Appendix D: Categorizing Interview Transcripts

Categories	Description of Category
Design team	The people who facilitate the collaboration and hold the overall vision and goals.
Design	The process chosen to bring people together and move to action
Convene	Who do we bring together for the collaboration, how to choose and invite
Individual dynamics	The personal development process of the individual within the system
Group dynamics	What happens when people try to work together
Implementation	How do ideas become reality in a collaboration
Measurement and feedback	What happens after we act
System Dynamics	How are all the elements related

Sample of categorized transcript

[illegible]

group dynamics incl. facilitation		Implementation Online tech. & network, governance, leadership,		Monitor, Measure, Feedback & Learning		System Dynamics	
Keywords	Summary	Key words	Summary	Key words	Summary	Key words	Summary
CoP as solid container	Community TMI 33:00	Infrastruct. reg. associations with & commitment solos	Use of long. Multistake.		TMI 39:20	Silo breaker merging patterns processes	
CoP take risks can't take	Community TMI 35:05	Infrastruct. help ppl fulfill destiny	We need to create infrastructures in which peop		TMI 34:49	Shift happen there was already a shift h	
CoP reg face-to-face meet Regularly		Concrete structures	Invisible an			Invisible an (IC) Invisible architectures:	
build relationship btw ppl Getting to r	TMI 35:40	Connecting infrastructure	After gate		TMI 14:43	Infrastruct. H We need to create infrastr.	
Appreciative Inquiry Sense of		Infrastructure not facilitation	There's a lot of that wisdom out there (building		TMI 15:00	D: experience There have been many mil	
Participant driven-provoked Gatherings:	TMI 30:00	Relational achievement: infrastr	How are we building infrastructures that support		TMI 21:30	Need new s We know that the way we l	
Container relationships- Building co	TMI 31:50	Quality TMI 32:20	Big Gap: Support infrastructure		TMI 39:20	What is 'getting to recognition of in	
Quality relationships- That is the	TMI 31:35	Infrastruct: experimental stages	Lots of exp.			connect to work translocally- help co	
Wisdom in minority voice I have a m	TMI 31:30	Infrastruct: Rigour & discipline	It's not just		TMI 07:45	connected to the Strong calling to work with	
music, singing, dancing: Gatherings:	TMI 32:10	Emergent hospacious infrastruct	How do we		TMI 43:23	Heroes' Hum (JC-A paradigm shift is hap	
Surfacing Shadow I also funds	TMI 32:10	Infrastruct: support emergence	What are in		TMI 43:23	It happen! The evolutionary impu	
Wisdom in dissenting vo I also have	TMI 32:10	Infrastruct: help things die	How can we		TMI 44:20	choice to i I think that is kind of par	
Possibility=quality of rel. Need relat	TMI 32:30	Infrastruct: as mainstream	Emergent h		TMI 18:18	Work place Pioneering- new initiatives	
Patience w ppl=change Personal tr	TMI 33:40	Infrastruct: helps do our work b	But I think i		TMI 19:00	Connecting They are already doing the	
Takes time-stay in the w Personal tr	TMI 36:00	Infrastruct: reflects new mind-set	Traditiona		TMI 19:45	Many com- Many stories of people wh	
Ppl growing: stay relation This is the	TMI 36:20	Emerging relational infrastruct	What does		TMI 39:20	Amplifying Many people disagree wit	
each group different new Every group	TMI 38:20	Life cycle of emergence	The life cy			Fueling shi so a group of funders got	
consistently disa							

Appendix E: Case Study Partners

Case Study Collaborators	Field of expertise	Sector	Country
Jeff Barnum	Multi-stakeholder collaboration, Artist	Government Corporate Community	USA
Tatiana Glad	Social Entrepreneurship	Business	Netherlands
Peter Merry	Meshworking	Community Government	Netherlands

The Social Innovation Hub. The Hub is a global community of people from every profession, background and culture working at 'new frontiers' of enterprising initiatives to tackle social, cultural and environmental challenges. This case looks specifically at the Amsterdam HUB which also includes and shared office space where social entrepreneurs can work at a low cost and have support from peers.

Change Lab. The change lab brings together leaders from diverse stakeholder perspectives within a system to work collaboratively on complex problems. Their collaboration process is based on systems thinking and a social innovation technology called the U-theory.

Reos Partners conduct multi-stakeholder Change Labs around the world like the 'Sustainable food lab'. The mission of the Sustainable food lab' is to accelerate the shift of sustainable food production into the mainstream. Globally renowned systems thinker, Peter Senge called the Sustainable Food Lab "The largest and most promising systemic change initiative I know of."

The facilitators of the change lab have a thorough convening strategy where influential people in the system are interviewed and invited into the process, aiming for good chemistry in the group. The group looks deeply into the system, learns to let go of old mental models and preconceptions about each other, spend time alone in nature to sense their internal knowing

of the system, and participate in innovation retreats to create ventures that will make a difference towards sustainability or solving a complex problem. (Eisenstadt 2010)

Meshwork. In his observation of social development levels and its parallels with increasing levels of collaboration and complexity, researcher-author Don Beck coined the term ‘meshwork’ as a way to describe a newly emerging level of collaboration complexity (Meshwork Design Workshop 2010). Meshworks weave together multiple organizing systems, from self organizing networks to hierarchies, from multiple sectors. This weaving of diversity of capacity brings the strengths of each to the greater woven whole (Hamilton 2009, 222). The Meshwork is thus a higher level of complexity in the social collaboration process, that helps us access our whole system capacities in the social body.

Meshworking structures coordinate different capacities, functions and locations so that alignment and coherence result in an integrated operating strategy and/or emergency response. Meshworks unite data and people for effective action and outcomes (Hamilton 2009, 173).

An example of a current project: the Meshwork is in the pilot phases of their ‘2020 Climate Campaign’ which seeks to support various countries, including Brazil and the Netherlands, to develop and implement roadmaps for 80% CO₂ reductions by 2020 (Merry, P. 2010).

Appendix F: The HUB data

Example: What makes the HUB special to me?

Emotional/Relational	Strategic	Enabling Structure
I feel welcomed and supported as it is not easy to find the way through alone in this competitive world.	Fosters collaboration	Flexible office environment with like minded people
Is easy to be in and meeting people in different fields and have interactions	It is host driven	It's got a self-organized, energetic quality
Easy way to connect, learn and participate with other people Place to dream and get inspired	It is focused on question making us comfortable to live in the question.	It is more humane and less mechanical than traditional structures.
It's a community of people...more about people than the space. It's like returning to a village life style and being-working at home. Invitation are inclusive,	Action Learning Creates possibilities to be able to respond in the here and now to what is emerging and present. Dreamers create reality,	It's an embodiment of the new. Part of the bigger collective working on the new paradigms Allows you to participate to the extent that you like.
Energy vortex of inspiration. Awareness of hope		Experimental and playful Culture of openness It's our natural space.
I fall in love with the HUB everyday.	It is a magnifying glass for opportunities, possibilities, needs, talents, gifts. Discovering treasure	Celebrates my talents and full potentials instead of squeezing them into a box.
	Lot's of offerings, (workshops, meetings, etc.)	Enabling conditions instead of disabling them.
		It is a magnet where you do good, help, and have fun consciously.
		Useful virtual space

Appendix G: Sample of Meshwork data

Network		
Function	Creation	Maintenance
Connecting people	Clarify identity - what is the identity of the network	Hosting members
Creating value	Identify members and identify shared interest	Invite contributions from members
	Invite members	Facilitating belonging - that you belong to something
	Enabling connection	Nourishing of the network
	Defining a code of conduct	Creating visibility
	Enable exploration	

Community of Practice			
Function	Creation	Maintenance	
Enables learning	Invite commitment & fun	Facilitate meetings, event, feedback, alignment	
Share knowledge	Drive convergence - meet all the different codes	Initiate research	
Share goals	Maintain network conditions	Organize knowledge	
Share vision		Support application - help people to apply the knowledge	
Drive convergence - meet all the different codes			
Identify research			
Organize knowledge			
Make knowledge available			
Harvest opportunities / sourcing			
Develop new (best) practice			

Meshwork			
	Function	Creation	Maintenance
	What does <i>it do</i> ?	What do you do to create it?	What do you do to maintain it?
	Enable the flow of action	Define needs	
	Enable the flow of information	Select participants and invite participants	
	Managing lifecycles	Co-create the space for and with the content (the habitat)	
	Enable the flow of matter	Sense futures	
	Enable the flow of energy	Define boundaries - scope it	
	Evolve capacities	Cultivate the vision - keep it up to date	
	Align contributions	Develop the process to achieve the vision	Systems review - see the system as a whole
		Develop the areas of success	Broadcasting vision
		Develop the requisite conditions - what needs to be fully mature in order to have the vision achieved	Inviting discovery - part of the learning, continues improvement
		Develop a monitoring template - how are those conditions today?	Steer system
		Cultivate existing knowledge - not reinvent the wheel	Monitor system
		Systems review - see the system as a whole	Tell stories
		Develop communities of practice needed	Decoding information - taking it in
		Define specific functions (could be roles)	Encoding information - preparing it for sharing it
		Match people to functions	Translation information - between levels, languages

	Create prototypes - rapid, see the positive and scale up	Managing knowledge - capture, store, organize, share
	Create infrastructure	Maintain infrastructures
	Track progress	Manage resources
	Get resources	Redirect unused resources
	Identify resources needed	Monitor Prototypes
		Monitor Vital Signs
		Stimulate contributions
		Make decisions - what part of the meshwork needs to be activated in order to realize the vision
		Recalibrate Vision
Increase efficiency	Properly explain: Develop process to achieve vision	(we need to bring people with quality management competencies to do that)
Reduce cost, time, risk		
Increase output		
Deliver system transformation		

Appendix H: Explanation of Tools

ABCD analysis. This is a strategic planning process with four steps, Awareness, Baseline, Compelling Measures and Down to action. First people learn about the issue they are dealing with and create a vision of success. Then today's current (baseline) state is assessed in a way which compares it to the success. Thinking from the vision, creative ideas (compelling measures) are brainstormed to move towards the vision. Finally, the ideas are prioritized and an action plan is created. This process is a useful tool for backcasting from sustainability principles. For more information read Backcasting from non-overlapping sustainability principles (Holmberg and Robert 2000).

Appreciative Inquiry. An approach or philosophy to organizational development focusing on the positive aspects of the people, feelings and possibilities. The assumption is that organizations will grow in the direction where they spend time inquiring (Cooperrider and Whitney 2005.)

Body Work. In a group, getting everyone moving around the room and using their bodies in a game or in an exercise that helps in the understanding of the work. Many people are kinaesthetic learners and including the body in the process raises energy levels and makes the process fun.

Chaordic Stepping Stone. A process model for hosting group work where each step builds on the previous. The stepping stones are Need, Purpose, Principles, People, Concept, Beliefs, Structure and Practice and repeats in an upward spiral. More information is available at: http://www.interchange.dk/download/Chaordic_stepping_stones_615.pdf

Circle Communication. An authentic communication space where the chairs are arranged in a circle without a table in the middle and people take turns speaking. Often a talking piece is held so only one person may speak at a time. This method helps people feel unified, equal and open.

Connect with Nature. Going for a walk or sitting in nature with the intention of personal rejuvenation and finding answers from the stillness and wisdom that is there. This slows down the mind's chatter and allows calmness and insights to emerge.

Deep listening. The practice of listening with full attention and without judgement. This can be to another person, or to the small still voice within that represents one's highest potential.

Dynamic Facilitation. A group facilitation technique where the host uses the energy and feelings in the room to help a group work through a tough problem. The host mostly listens to and reflects what is being said.

Dynamic Governance. An organizational operating philosophy, which uses 'consent' in decision making, not consensus or command and control, structured verbal elections for roles and responsibilities. Circles of workers rather than departments with bosses, and a 'double linking' hierarchical structure that ensures voices from below are not lost between layers of organization.

Extended Silence. Taking a few day away from a difficult situation helps people to gain some perspective. A solo retreat in nature, or just some days away from the project.

Five Breaths Model. A model of collaborative processes developed by the Art of Hosting community. There are five 'breaths':

1. Name the issue
2. Create Collective Clarity of Purpose
3. Design and Invitation process
4. Meeting and Hosting the group questions and purpose
5. Follow up, continued learning and leading from the field.

FSSD. A systems thinking Framework for Strategic Sustainable Development which includes a five level framework for structuring thinking into System, Success, Strategy, Action and Tools. It also includes the concepts of systemic resource constraints visualized as a funnel of

decreasing opportunity moving into the future, backcasting from non-overlapping sustainability principles, visioning and prioritizing questions to help make an action plan towards sustainability.

Gaiasoft Meshworking. An online software that helps connect people who have been in a face to face networking meeting. People map out the needs each person is addressing and look how the needs of the whole picture are being met. The online platform can then be used for ongoing discussions, sharing documents and resources and keeping up friendships over distance.

Learning Journey. Travelling to other people's places of life and work to understand the different perspectives of the system.

Meditation. The emptying of the mind of thoughts, or the concentration of the mind on one thing, in order to aid mental or spiritual development, contemplation, or relaxation (Encarta 2010).

Metacurrencies. Enabling structures for peer to peer wealth exchanges. People can trade with each other using virtual currencies based on reputation or attention.

Open Space. A social technology where the participants of a conference set the agenda and share information in smaller groups.

Pro-action Cafe. A social technology where individuals are encouraged to champion a project. Their peers ask them a set of questions to help clarify the ideas and available resources.

Vision Quest. A journey out in nature where a group performs some ceremony and then individual participants go into nature alone for several days before rejoining the group and discussing the insights from the experience.

Wiser Earth. An online social network of people and organizations working for social and environmental justice.

World Cafe. A social technology where a 'burning question' is posed to a large group of people who are seated around small tables. The same question is asked again after participants move to new tables. In the process the wisdom in the room begins to emerge.