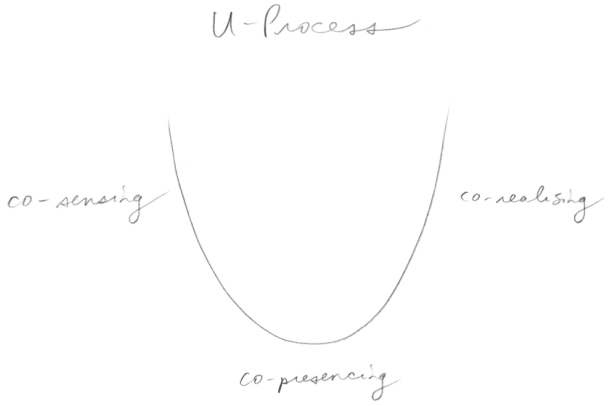
The U-Process:
A Social Technology for Addressing Highly Complex Challenges

I. Introduction and Overview

The U-Process is a methodology for addressing highly complex challenges—for solving complex problems or realizing complex opportunities. It is a "social technology" for effecting the transformation of reality, within and across the worlds of business, government, and civil society.

In using the U-Process, an individual or team undertakes three activities or movements: Sensing the current reality of the system of which they are part, carefully and in depth; Presencing and reflecting to allow their "inner knowing" to emerge, about what is going on and what they have to do; and then Realizing, acting swiftly to bring forth a new reality.



The U-Process has been developed through twenty years of intensive learning-by-doing by Joseph Jaworski and Adam Kahane of Generon Consulting in partnership with Otto Scharmer and Peter Senge of the Massachusetts Institute of Technology and the Society for Organizational Learning. They have done this development in a range of settings around the world, with corporate executives and line managers, politicians and public servants, activists and revolutionaries, scientists and intellectuals.

The U-Process is simultaneously a cutting-edge technology and a distillation of ancient wisdom. It is a process that many creative people—business and social entrepreneurs, inventors, artists—use when they generate breakthroughs. The U-Process takes what has previously been an individual, tacit, intuitive, and largely un-replicable practice, and embodies it in a methodology that can be used collectively and consciously to open up and make visible concrete fields of opportunity.

The U-Process creates shared learning spaces within which teams of highly diverse individuals become capable of operating as a single intelligence. This mode of operation allows them to share what each of them knows, so that together they can see the whole system and their roles in enacting it. This "systems sight" enables extraordinarily effective individual and collective leadership. From this place of greater clarity and connection, the teams are able to co-create breakthrough innovations that address their most complex challenges.

Version 4.1, May 14, 2005.

II. Projects and Results

A large and growing body of basic research on the U-Process has been developed over the last twenty years. The core of this research consists of over 150 interviews with some of the world's leading entrepreneurs, scientists, and artists, from businessman David Marsing to economist Brian Arthur to cognitive scientist Francisco Varela to violinist Miha Pogacnik.[1] The U-Process is the synthesis of these diverse innovation experiences, and therefore resonates across a range of contexts and cultures.

In parallel to this body of basic research, Generon and its partners have been involved in a wide variety of applied problem-solving and systemic transformation projects. They have done this work both in organizational systems, within single business, government, or civil society organizations, and in broader societal systems involving stakeholders from all three sectors.

The work in organizational systems has primarily been in multinational companies associated with the Society for Organizational Learning, in a range of industries, including energy, mining, transportation, fast moving consumer goods, high technology, professional services, and banking. The work in societal systems has been at the local, regional, national and international levels, in and across Africa, Asia, Europe, and North, Central and South America.

The use of the U-Process in these various contexts has produced results at three scales:

- In the capacities—the thinking and acting—of the leaders of these systems,
- In the relationships amongst them, and
- In the performance of the systems.

Examples from three societal U-Process projects follow.

Local Example: the Lahn-Dill Health Care Initiative in Germany[2]

Faced with a healthcare system heading for collapse, a new approach is being constructed in Lahn-Dill, a region of 280,000 inhabitants north of Frankfurt. Led by a grassroots community of innovators, including patients, physicians, and government and other officials, the project has used the U-Process to effect fundamental change in the local healthcare system, bucking trends evident in the rest of the country.

Capacities

The project was initiated in 1999 after a survey of doctors in the region found that 60% felt "inwardly resigned" to the stress of their jobs and 49% had at least once contemplated suicide. Patients were also deeply dissatisfied by their experiences with the health system. This situation changed fundamentally as a result of the project. One doctor said:

"My relationship to patients has become more like a partnership, more a thinking-together. I am more able to elicit and reformulate the thinking of patients—to help them see what they think and to become aware of what they really want."

[1] See *Presence: Human Purpose and the Field of the Future* by Peter Senge, Otto Scharmer, Joseph Jaworski, and Betty Sue Flowers (Cambridge: Society for Organizational Learning, 2004).

[2] See "Breathing Life into a Dying System" by Katrin Kaeufer, Otto Scharmer, and Ursula Versteegen, *Reflections: the Journal of the Society for Organizational Learning*, 2003.

Relationships

The core of the project was a series of sensing and presencing dialogues involving patients and physicians. These led to deep changes in the relationships among them and to structural changes in the health care system:

"Physicians and patients now have the formal structures and shared experience to work differently together. The coordination of care and, more broadly, the communication among physicians across Lahn-Dill have improved. But probably the most subtle change is in how the self connects to the whole system, and what impact the individual can have on that system. Though still overloaded, physicians feel less isolated, more engaged, and more effective."

Performance

"In addition to the joint emergency care center, the physicians created several other initiatives, including agreements for medical groups to share specialized diagnostic equipment; a new format for transferring information between hospitals and outside physicians, and a jointly run office to coordinate care for patients moving between the two systems; quality-improvement groups of physicians and other healthcare providers; and citizen forums to educate patients and support further reforms."

"'The most striking development that I have seen is that the patient complaints from this region dropped virtually to zero,' says Dr. Peter Eckert, the head of the regional supervisory board. 'That is in stark contrast to other regions, where we have many, many complaints and lawsuits.' While quality indicators like complaint rates have improved, many costs have fallen. For instance, ambulance usage has declined slightly (while increasing in comparable regions) and local hospitals now require just half the number of night time emergency physicians deployed under the old system."

National Example: Visión Guatemala[3]

This project was launched in 1998 to envision and contribute to the rebuilding of Guatemala after the end of that country's brutal 36-year civil war, in which 200,000 people were killed and 1 million displaced, out of a total population of only 7 million.

Capacities

The Vision Guatemala team was made up of 34 top leaders from all sectors of Guatemalan society, including businessmen, cabinet ministers, mayors, youth, journalists, university presidents, Mayan leaders, army generals and former guerillas. They started their first meetings with very high levels of fear and mistrust and with extremely divergent and strongly held views about their country's past, present and future. Over the course of their two years of U-Process work together, they opened up, learned, and transformed both their thinking and their acting. Two of them later said:

"We are unaware of the great richness in others. We do not see it. There is a lot, quite a lot, to learn from people who, frankly speaking, one would never have considered as possible sources of learning."

"Very few people have the privilege of collective dreaming, which is intoxicating. The fact that you can sit and begin to converge on a series of issues in which you are not just making it up, but you are actually trying to root it in reality…and also to grasp it up with all of your strength, so that you can in fact envision what you sense. That sensation is very powerful."

---

[3] *Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities* by Adam Kahane (San Francisco: Berrett-Koehler, 2004).

Relationships

The long civil war had shredded the social fabric of Guatemala, and the country could not be rebuilt until leaders from different organizations, sectors and factions could re-knit their capacity to work together. One participant wrote:

"The most important result of the project—out of which all the other results flowed—was the trusting web of relationships that developed. Team members said that the project was rejuvenating the country's circulatory system, the life-giving blood vessels connecting different parts of the national body. One of the project's conveners said: 'The most important outcome of this project is the buddy system that was established and persists. The network gets activated immediately, for quite daring initiatives. Perspectives are shared without fear. People are bonded, probably for life.'"

Performance

Lars Franklin, the United Nations Development Programme's representative in Guatemala, said that the results the project produced could best be seen in the many seeds it planted and nurtured:

"These seeds included influencing the platforms of three of the major political parties; participating in the vital commissions on Historical Clarification, the monitoring of the Peace Accords, and a new Fiscal Pact; and contributing to a constitutional amendment campaign, a national antipoverty program, several municipal development strategies, and the reform of both primary school and university curricula. Team members launched several influential new cross-boundary national dialogue groups: one among organizations of the highly fragmented left, another among indigenous organizations, and another among politicians from the twenty different political parties. They sponsored 200 municipal dialogues (in two-thirds of all municipalities) to address pressing local challenges."

Global Example: the Sustainable Food Lab[4]

Global food systems are currently producing mixed results: more food is being produced more economically, but food-producing environmental systems are deteriorating and food-related social systems are being disrupted. The purpose of the Sustainable Food Lab, launched in 2003 and still ongoing, is to make global food systems healthier, from the perspectives of consumers, citizens, workers, producers, and food companies.

Many of these players in food systems want to make the systems healthier, and have created examples of more economically, environmentally and socially sustainable food supply chains. But these efforts have been fragmented (even polarized) along organizational, sectoral, and geographic lines, and so have proved to be inadequate to the larger task of creating more sustainable mainstream food supply chains—the systems that deliver the food that ordinary people eat every day.

Capacities

The Food Lab brings together 32 respected and influential leaders of food companies and farmer, civil society, and governmental organizations, from Europe, North America, and Brazil. They are learning to see food systems not only from their own particular perspectives, but as a whole from the multiple perspectives of their teammates. One of them said:

"My surprise is that—given that I've thought a lot about sustainable food systems—my thinking has gotten far beyond where I

[4] See www.glifood.org.

thought before. I didn't expect to move that far."

Relationships

The members of the Food Lab all joined the team because they were committed to creating more sustainable food systems but were frustrated and stuck with what they could accomplish separately within their own organizations and sectors. Through their participation in the U-Process, they are developing the capacity to work together to lead change in the system as a whole. One of them said:

"This project is about tying players together who had been adversarial, and finding a better outcome for everybody."

Performance

The members of the Food Lab have chosen six audacious initiatives that will, if implemented successfully, together, and at scale, improve substantially the sustainability of global food systems:

- The Food for Health, Learning and Livelihoods initiative is improving the quality of the food eaten in schools, hospitals, and other public institutions in Europe and North America, with spin-offs for public health and education and for local food production.
- The Business Coalition for More Sustainable Food is harnessing the buying power of food companies to create more sustainable food supply systems, working to aggregate demand, identify best practices, and improve the social, environmental and financial performance of specific supply chains.
- The Responsible Commodities initiative is building on existing efforts in palm oil, cotton, soy, sugar and coffee to put together a unified, simple, transparent, credible, low cost approach to setting cross-commodity standards for sustainability.
- The Latin American Family Farms initiative is taking a whole-supply-chain approach to increasing the competitiveness and sustainability of family farms in the Dominican Republic, Guatemala, and Brazil.
- The Sustainable Fisheries initiative is working in Chile, the North Atlantic, Asia, and West Africa to help develop and promote best practices for responsible fisheries.
- The Framing Sustainability initiative is developing alternative "frames" or mental structures of food sustainability issues that are connected to core values; these frames will be used to design communication guidelines and tools to influence the behavior of consumers and citizens.

III. Phases and Process

Over the last five years, Generon and its partners have been analyzing and synthesizing their work with the U-Process, developing a structure within which the U-Process could be used most effectively, particularly to work on highly complex global challenges. This structure is called the Change Lab.

In a Change Lab, a diverse group of leaders from different parts of a poorly-performing societal system work together to shift the system —to generate breakthrough innovations that create a new and better reality. Their work occurs in four phases: Convening the Lab, and then using a collective version of the U-Process to undertake Co-Sensing, Co-Presencing, and Co-Realizing.

These phases are outlined below. Examples are taken from the work to date of the Sustainable Food Lab. (The Food Lab is the first of ten global Change Labs being launched by the Synergos Institute in collaboration with Generon.[5])

Phase 0: Convening

A Change Lab is convened when one or several formal and informal leaders of a system decide—know—that change is needed, and that they cannot effect that change alone. These leaders talk with other leaders in different parts of the system, first one at a time and then in small meetings, about what is happening and what is needed. These thoughtful and heartful conversations serve both to crystallize the purpose of the Change Lab and also the players—who needs to be involved in the Change Lab in order to achieve its purpose.

The primary result of the Convening Phase is a Lab Team. A Lab Team is a group of 25 or so leaders of a system who together are a microcosm of that system and who are committed to changing it—and, critically, who are open to changing themselves.

The Food Lab was convened, starting in 2003, by a group of leaders from two multinational food companies (SYSCO, the world's largest food services company, and Unilever, the second largest food manufacturing company), two non-governmental organizations (the Society for Organizational Learning and the Sustainability Institute), and the King Badouin and W.K. Kellogg Foundations. By June 2004 they had put together a Lab Team which included leaders from these organizations and from Nutreco, the largest fish farming company; Carrefour, the second largest food retailer; Sadia, one of Brazil's only multinational food companies; and General Mills, Rabobank, and several smaller food companies and farm cooperatives. Senior government officials from Europe and South America were involved, along with leaders from global NGOs including Oxfam, World Wildlife Fund, Consumers International, and The Nature Conservancy, and local NGOs from Suriname, Brazil, the US, the Netherlands, Italy and Germany.

One of the convenors reported: "I spoke with a Vice-President of the World Bank about our plans for the Food Lab and he said, 'Impossible. It can't be done. The fights over food are the most polarized and stuck of all of the fights over globalization. You won't be able to get a group of stakeholders to work together on this.'"

Later one of the Lab Team members said: "There is a possibility of creating an almost alchemical reaction in this group, so that we can interact differently and configure food value chains differently."

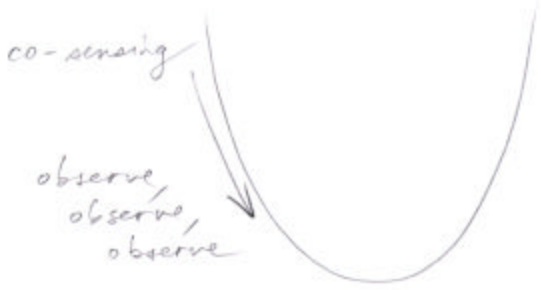
---

[5] See www.synergos.org.

Phase I: Co-Sensing— Uncovering Current Reality

It is impossible to address a complex challenge by tinkering with it piece-by-piece. In this phase of the Change Lab, the Lab Team learns to see the system as a whole.

Most efforts at creating change fail because we fail to see reality. All too often our expertise, our training or our paradigm blind us from seeing the



system as it is. Instead we see what we want or expect to see. Our lenses act as barriers to innovation. The Sensing Phase aims to breach these barriers. The Lab Team works together to see not just the whole of the system at hand but to also become conscious of their own lenses, through "suspending judgment" and "redirecting," that is seeing from multiple vantage points and from within the emerging whole.

During the Co-Sensing Phase, the Lab Team undertakes two broad activities: a series of foundation workshops that introduce them to the process and to each other and start the work of building their capacities with regards to the U-Process. The foundation workshops are situated and designed to give team members an initial experience of the U-Process, upon which training is provided. The team begins to construct a shared map of the reality of the system, and decide on which aspects of the system they need to learn more about (their learning agenda). The foundation workshops also build the capacity of the team to work together effectively through this challenging, stretching process.

The Lab Team then embarks on a series of Learning Journeys, undertaken in order to immerse the team in the reality of the whole system. A Learning Journey is a trip, organized around a part of the learning agenda, that is designed to help the participants learn more about the system that they are trying to understand and change, by observing it (and other relevant systems) and by conducting dialogue interviews with people who have alternative, insightful perspectives on it. The Learning Journeys also deepen the Lab Team's consciousness of their own lenses.

The primary result of the Sensing Phase is a deep, shared understanding among the Lab Team of the current reality of the whole system.

The Food Lab Team developed their shared understanding of the current reality of the food system by talking and listening to one another; from their diverse perspectives they could see most of the key dimensions of the system. They also took three Learning Journeys to different regions of Brazil, where they visited and spoke with peasant and industrial farmers, intellectuals, activists, company executives, and government officials.

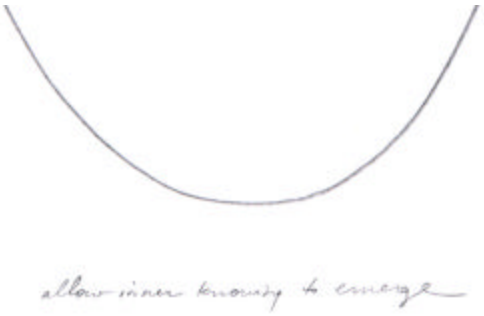
One team member said: "I have been surprised by the fact that some sort of shared understanding has emerged despite us coming from very very different backgrounds. Part of the reason for this is that there has been among the team a very high level of willingness to learn and listen to other people. That is quite impressive."

Phase II: Co-Presencing– Retreating and Reflecting

In the Co-Sensing Phase the Lab Team uncovers the current reality of the system as a whole. In the Co-Presencing

Phase they go further and uncover their deeper knowing about what is going on in the system, their role in it, and what they, individually and collectively, are being called upon to do.

Most of us are trained to objectify problems and systems as something separate and distinct from ourselves. In doing so we forget that we are very much an active part of the systems we're trying to change. We are in deep relationship with the whole system. We learn to work within systems and systems learn to work within us. It is impossible to grasp the system as a whole without a consideration of our own relationships to it, and opening ourselves up to the question of what this whole is demanding of us.



This engagement is normally difficult to practice within our day-to-day lives because we live in mediated environments. These are environments where much of our stimuli are filtered through man-made structures, from architecture to television, all of which have been designed to provoke very specific responses and feelings within us. These responses serve to overwhelm our inner landscape and dilute our inner knowing. The core of the Co-Presencing Phase is a wilderness solo designed to allow us to connect with what is going on in the system as a whole and to uncover our own vocation or calling in relation to that system.

The solo is based on the principle that nature does not overwhelm our inner knowing with engineered responses, but rather works to give space to our deepest and quietest voices, which are in turn connected intimately to the whole. Experiences in and with nature can foster a sense of deep knowing that leads us to be clear in our purpose and so to innovation and social change. This is the most reliable way we have discovered for opening up the hearts and minds of the Lab Team, enabling them to tap into their innate ability to sense the emerging future. In the book *Presence*, the authors explain that, "This experience has been termed presencing because it is about becoming totally present–to the larger space or field around us, to an expanded sense of self, and, ultimately, to what is emerging through us. Once we have achieved that stance, as individuals and as a team, moving up the U involves acting in service of bringing that emerging reality into being."

This phase of the process, which corresponds to the bottom of the U, is the "eye of the needle" in the U-Process. Passing through it, the acquired knowledge of the previous phase emerges in an inner clarity, which can then be applied in the projects and activities of the third phase. The primary result of the Presencing Phase is this deep clarity and commitment among the Lab Team as to what they must do to create a new reality.

In November 2004, the Food Lab Team came together in Arizona for a seven-day Innovation Retreat, to synthesize the conclusions from their Brazilian Learning Journeys and to choose the innovation initiatives through which they could shift the food system onto a more sustainable path. They made their choice of initiatives after undertaking a 48-hour wilderness solo which allowed them to connect more deeply with each other, with the work they were doing, and with their individual and collectives senses of purpose and commitment.

One of them said: "I looked inwards. It takes courage to visit your self from within. Who am I? What is needed of me?"

Another said: "I think that because of the trust that has been building, it's been much easier for me to truly understand the intric acies of this project and the body of good will that is forming. My belief is that that good will and that trust is not only strong but is up for the challenge."

Phase III: Co-Realizing–Enacting a New Reality

The final phase of the Change Lab, Co-Realizing, is both familiar and unfamiliar. In this phase we make concrete what we have learned in the first two phases by building prototypes and then pilots that begin to enact a new reality–to change the system from what it was to what it will be.

We are familiar with the activities of this phase because they are typically what we do in our working lives–we create projects, policies, processes, and products. But the route that the Lab Team has taken to Co-Realizing is a-typical. By this phase the team has gone through a deep process of Co-Sensing and Co-Presencing, which means that they arrive at the point of execution with a unique level of preparedness. Their execution work is different because all the outputs from this phase are the realization of a single intelligence, and not simply the accumulation of many individual ideas. The emphasis in this phase of the work is on hands-on, rapid-cycle creation and evaluation of multiple alternative ways of addressing the challenge at hand.

The Lab Team starts by identifying and choosing a few innovation initiatives that they believe, based on their Co-Sensing and Co-Presencing, have the potential to change the whole system—that is, to be high leverage interventions in the evolution of the system. They then break up into Initiative Teams around each of these innovations, in order to create prototypes and then pilots—seeds of breakthrough solutions—that they and others can learn from, reproduce, and grow.

The process used in the Co-Realizing Phase borrows from the fields of industrial design and venture incubation. They don't spend months making careful and complete plans. Instead, they launch and learn, building and testing models in the real world, in a cycle of quick iteration from one version to the next. Throughout this process the Initiative Teams share their learnings and coach each other. During this phase, they recruit new players who bring with them missing competencies, resources, and relationships, to help the Initiative Teams enact their innovations. This augmentation beyond the original Lab Team enlarges the work of creating a new reality.

The primary result of this phase is a set of functioning pilot projects that have been tested and proven—living examples of systemic solutions. These are not simply recommendations for something that someone else ought to do; they are ventures being led by committed leaders, ready to be scaled up and institutionalized. These ventures stand as something new on the ground—something living and breathing—that

signal the end of the old reality and the beginning of the new. This is the primary product of the Change Lab.

In April 2005 the Food Lab Team held a Design Studio in Salzburg. The original 32 members of the team had by now recruited another 25 leaders from other business, governmental, and non-governmental organizations, to help them develop and implement their six Innovation Initiatives. They also invited top executives from their own various organizations to learn about and help with the initiatives. At this meeting they designed, got feedback on, and redesigned their initiatives, and then made plans for the 15 months of piloting that they now had in front of them, in order to produce concrete results to present at their Venture Meeting in New York in June 2006. The energy and commitment of the Lab Team were palpable:

"I was very concerned, up until a couple of days ago, that we wouldn't make it; and then when it happened, it happened, in my mind, rather quickly. I mean, things just started popping and we got to this point pretty quickly, and that was just amazing."

"This project now has the potential for a breakthrough like we've never seen before, creating such compelling and successful prototypes that they attract more attention, more resources, and more energy than any of us can imagine. The people in this room and the process that we have in front of us makes that possible."

The methodology of the U-Process and its application in the Change Lab are tools that enable us to address our most complex, vital challenges.