Reflections
The SoL Journal
on Knowledge, Learning, and Change

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While sophisticated technologies have made our world more efficient and productive, they have also made it alarmingly impersonal. Our goal in this issue is to bring to the foreground some of the ways in which connection, interrelatedness, and communication underpin our ability to create, sustain, and protect what we value most as human beings. Each article in this issue makes the case for regaining our natural tendency to engage with each other to solve our common challenges—whether these challenges occur in a family, on a shop floor, or in our communities.

The issue opens with a two-part article focusing on David Kantor’s groundbreaking work on interpersonal effectiveness. In an interview with Reflections contributing editor Deborah Wallace, he explains the essence of how communication in human systems works or doesn’t work, and why he believes “communicative competency” is the lynchpin for creating healthy families and organizations. To illustrate David’s theory in action, Sarah Hill and Tony Melville describe the process of applying his Structural Dynamics model to a difficult client situation.

In “Learning to Learn: Knowledge As a System of Questions,” Michael Ballé, Jacques Chaize, and Daniel Jones look at why the Toyota Production System (TPS) has been so effective in enabling Toyota to consistently achieve high levels of performance. What they discovered is that TPS is a system of interconnected questions rather than a set of best practices. Toyota has also developed a specific set of actions, one of which requires employees to work with a master to help make sense of the system in their own local situation. Thus, problem finding, problem framing, and problem solving are deeply embedded in a process that can only succeed through strong connection and communication with another person.

As described by Jessica Stites in “Is Your Town in Transition?” the driving force behind the Transition Movement is the belief that communities must become more resilient in the face of the threats of peak oil, global warming, and economic instability. The preparations that Transition Towns take are both infrastructural, such as solar energy programs and local economic initiatives, and interpersonal, like the “heart and soul” groups that encourage people to help each other in times of need. This article and accompanying Commentary offer a glimpse into a large-scale experiment in building the “social technologies” required to achieve long-term sustainability.

In an excerpt from their recent book The Triple Focus: A New Approach to Education, Daniel Goleman and Peter Senge examine the cognitive and emotional tools that young children need to thrive in today’s environment. They identify three skill sets essential for navigating a world of increasing distractions and decreasing face-to-face communication: focusing on self, tuning in to other people, and understanding the larger world. This excerpt makes a compelling case for replacing our current pedagogy with a curriculum of systems-based learning.

Finally, in “Reflections on the 2014 SoL Global Forum,” Gitte Larsen, a newcomer to the Global SoL community, and Vicky Schubert, a long-time SoL contributor, share insights from the recent SoL Global Forum. Organized by SoL France, the event invited change leaders to explore, “How can we facilitate and accelerate the metamorphosis of our organizations, firms, and society?”

We would be most interested in receiving your thoughts and comments about the articles in this issue. In our fast-paced, increasingly depersonalized world, how do you find ways to connect with others to accomplish the work you most value?

Frank Schneider, Publisher
Putting Theory into Action: The Evolution and Practice of Structural Dynamics

David Kantor with Deborah Wallace; Sarah Hill and Tony Melville

This article gives a unique glimpse into both the development and the application of a key body of work by one of today’s most important organizational theorists and practitioners. In Part One, David Kantor explains the evolution of his theory of Structural Dynamics, a model of how communication works—or doesn’t work—in human systems. He also details how what he calls “communicative competency” can lead to more effective conversations—a key to creating healthy family and organizational systems. In Part Two, Sarah Hill and Tony Melville describe the application of Structural Dynamics to a client situation. These two complementary perspectives provide a window into the profound possibilities offered by translating Kantor’s theory into practice.

Learning to Learn: Knowledge As a System of Questions

Michael Ballé, Jacques Chaize, and Daniel Jones

What is it about the Toyota Production System (TPS) that has allowed Toyota to achieve high levels of performance over time, despite occasional setbacks? The authors have found that instead of being a system of best practices, the TPS is a system of interconnected questions. As such, in TPS, knowledge does not involve applying a cookie-cutter method to get a desired result but rather posing the right questions to ultimately improve the system as a whole. The authors examine Toyota’s five-step cycle for problem finding, framing, and solving. They show that as employees develop their problem-finding capabilities and problem-solving skills, they individually and then collectively enhance the organization’s judgment in the long run.

Is Your Town in Transition?

Jessica Stites

Over the past decade, more than 1,000 municipalities in 43 countries have chosen to define themselves as “Transition Towns.” Frustrated by the slow pace of change in response to challenges such as peak oil, climate change, and economic instability, people in these places have undertaken grassroots initiatives to build the resilience of their communities to survive sudden shortfalls of necessities such as food, oil, water, or money. These preparations take many forms, some infrastructural—such as establishing solar energy programs—and others interpersonal—like creating groups that encourage people to help each other in times of need. At its core, the Transition Movement seeks to build the “social technologies” required to achieve long-term sustainability.

The Triple Focus: Rethinking Mainstream Education

Daniel Goleman and Peter Senge

In The Triple Focus: A New Approach to Education, Peter Senge and Daniel Goleman examine the cognitive and emotional tools that young children need to navigate and thrive in today’s environment. The authors identify three skill sets essential for navigating this world of increasing distractions and decreasing face-to-face communications: focusing on self, tuning in to other people, and understanding the larger world and how systems interact. This excerpt focuses on the third skill set and makes a strong case for capitalizing on the connections and synergies between Social and Emotional Learning (SEL) and systems thinking. The notion of transforming and replacing the traditional pedagogy that anchors our current curriculum with systems-based learning has already taken hold with impressive results that have surprised even the authors.
Reflections on the 2014 SoL Global Forum

Gitte Larsen and Vicky Schubert

On May 21–23, 2014, 450 participants from around the world gathered in Paris, France, to take part in the SoL Global Forum: “Investing in Emerging Futures: New Players, New Games—Welcoming Metamorphosis.” Organized by SoL France, the event invited change leaders and organizational leaders to explore an urgent question together: “How can we facilitate and accelerate the metamorphosis of our organizations, firms, and society?” In this two-part article, Gitte Larsen, a newcomer to the Global SoL community, and Vicky Schubert, a long-time SoL contributor, share highlights from—and personal reflections on—the event. Their insightful commentary paints a picture of a community of people who are making the internal shifts necessary to lead profound changes in all those external systems that connect us.
Putting Theory into Action
The Evolution and Practice of Structural Dynamics

DAVID KANTOR WITH DEBORAH WALLACE; SARAH HILL AND TONY MELVILLE

This article gives a unique glimpse into both the development and the application of a key body of work by one of today’s most important organizational theorists and practitioners. In Part One, David Kantor explains the evolution of his theory of Structural Dynamics, a model of how communication works—or doesn’t work—in human systems. He also details how what he calls “communicative competency” can lead to more effective conversations—a key to creating healthy family and organizational systems. In Part Two, Sarah Hill and Tony Melville describe the application of Structural Dynamics to a client situation. These two complementary perspectives provide a window into the profound possibilities offered by translating Kantor’s theory into practice.

Part I: Structural Dynamics Theory

DAVID KANTOR WITH DEBORAH WALLACE

DEBORAH WALLACE: You were trained and worked for many years as a psychologist and clinical researcher. How did you get into the field of organizational consulting?

DAVID KANTOR: It happened over a number of years, and there were several key events that led to my interest in it. The first was in 1965 at a gathering of the pioneers of the new theory and practice of family systems therapy. Scores of iconoclasts from psychiatry and psychology were at that gathering. I was fascinated with the leap from individual to family systems therapy, where the emphasis was on systems rather than on individuals.

It was also around that time that I established the Boston Family Institute,* which was a family systems training organization. Interestingly, not only therapists wanted to learn this new technology but also consultants. It was the consultants’ interest that led me to explore the idea that, from a structural perspective, organizational teams were little different from families. Chris Argyris had just read my book Inside the Family, which is an exploration of family organization and behavior, and made the observation that the book was not only about families but also about organizations. That observation clinched the deal for me, and I knew I was on to something.

* Kantor later founded the Family Institute of Cambridge and the Kantor Family Institute.
Structural Dynamics is a theory of how face-to-face communication works—and does not work—in human systems. David Kantor developed the model more than 35 years ago through an empirical study of family communication, and it has evolved and expanded over time to apply to families, couples, teams, and whole organizations.

The Four-Player Model is the core concept of Structural Dynamics and holds that in all interactions between people, there are only four possible “speech acts”—move, follow, oppose, and bystand. Many communication problems occur when individuals become “stuck” in one of the four speech acts or roles—something that undermines group learning and effective decision-making.

Communicative competency—understanding the structure of face-to-face communications in human systems—is key to making sound decisions and creating sustainable results.

The Nature of Structure

KANTOR: In 1990, I was invited to take part in monthly meetings with Chris Argyris, Peter Senge, Don Schön, Ed Schein, and others to discuss our different takes on the nature of structure in human systems. Shortly after that meeting, in 1991, Diana Smith and I led a group of organizational consultants in a year-long seminar that featured her version of Chris Argyris’s Action Science theory and my evolving theory of Structural Dynamics, which focuses on how face-to-face communication works—and does not work—in human systems (see “Tools for Understanding Hidden Dynamics”).

In high-stakes situations and crises, people tend to become one of three hero types: Fixer, Protector, or Survivor.

WALLACE: Please describe the high-stakes, low-stakes phenomenon and how it applies to leadership and organizations.

KANTOR: I first saw this phenomenon in 1970 during my research on families. Trained observers moved in with 21 families and interviewed them in their own homes. They probed and analyzed everything from the locks on the doors to the way family members dealt with crises. We set up tape recorders in every room of the households and taped every verbal utterance, 24 hours a day, over a 30-day period. In analyzing that data, I recognized that the parents in these families, the couples, had distinct communication patterns when they were under great pressure or in “high-stakes” situations.

That study led to a second important piece of research: a study of 21 couples who had come to me in crisis for couples’ therapy. They agreed to let me tape record their sessions for a period of six to twelve months. That research led to another important concept—that in high-stakes situations and crises, people tend to become one of three hero types: Fixer, Protector, or Survivor (see “Heroic Modes”).

Tools for Understanding Hidden Dynamics

Structural Dynamics is a theory of how face-to-face communication works—and does not work—in human systems. David Kantor developed the model more than 35 years ago through an empirical study of family communication, and it has evolved and expanded over time to apply to families, couples, teams, and whole organizations.

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Communicative competency—understanding the structure of face-to-face communications in human systems—is key to making sound decisions and creating sustainable results.
Additional observations of high-level teams in organizations led to the conclusion that these heroic types also apply in organizations. Leaders of high-level teams in organizations are constantly under pressure, not unlike the couples in crisis I studied in my research. Leaders live much of the time in high-stakes decision making, which affects a lot of people in their organizations.

The Importance of Model-Making

WALLACE: In your book Reading the Room, you say that leaders have to have models of their own if they’re going to be successful. Why is this so important?

KANTOR: Leaders, whether in families or organizations, play a crucial part in the lives of their constituents. If they don’t have a model of their own that articulates and guides what they do, they are essentially operating in the dark and very likely making the same mistakes over and over again.

WALLACE: How does this kind of model play out in real life?

Heroic Modes

A Heroic Mode is the internal prototype for how we behave when we are most needed, especially in times of crisis. We each have a dominant Heroic Mode that determines how we cope with anxiety in extreme situations and that dictates what we do to make ourselves and others feel safe in the world.

The Fixer: All Fixers have an indomitable will that drives them to overcome whatever gets in the way of their mission or their message—be it an enemy, rivals, or even cultural norms—but it is physical power that allows fixers to win.

The Survivor: The Survivor can endure no matter the circumstances. Whereas the Fixer relies on physical power as the source of her strength, the survivor relies more on mental power to survive.

The Protector: Protectors are guardians and caretakers of the sick, the poor, the politically disadvantaged, the ecology/environment, and relationships. Protectors tend to speak the language of feeling and emotion fluently, particularly when they are focused on their missions and causes.
KANTOR: There is a strong link between a leader’s preferred role and the leadership model he or she develops and displays. Thus, a leader whose profile is mover and opposer, that is, someone who initiates and challenges, will build these behaviors into his or her model. Someone whose profile is bystander will develop a different model.

I think leaders in the future will see the necessity of having their own models to prevent them from getting into trouble.

Many leaders simply will not spend the time to develop their own models. I appreciate the rationale but don’t accept the conclusion that it shouldn’t be done. I think leaders in the future will see the necessity of having their own models to prevent them from getting into trouble and will understand the benefit of having their own models rather than relying on the models of consultants and executive coaches.

WALLACE: Do consultants need certain prerequisite skills to be able to support today’s leaders?

KANTOR: A resounding yes! In my opinion, no matter what their practice model, any consultant working with leaders or their teams would benefit from an understanding of how Structural Dynamics equips them to move toward the goal of communicative competency. To develop these skills, consultants must understand their own behavioral profiles and their possibilities and limitations. Structural Dynamics has a detailed practice model for helping consultants develop these capacities.

Communicative Competency

WALLACE: What is communicative competency and why is it so important?

KANTOR: Communicative competency means that each member of the team can “read the room”—that is, diagnose an ongoing dysfunctional sequence and recognize the precise “vocal act” that is missing. For example, a team is stuck because no one is stepping forward to move the conversation. But each individual is responsible for recognizing the “stuckness” and either making a move or calling upon someone whose repertoire better enables him or her do so. The assumption is that when all members of the team are capable of communicative competency, collective intelligence—which is group intelligence greater than the intelligence of any of its individual parts—will occur.

WALLACE: What is the relationship between the Four-Player Model and communicative competency?

KANTOR: In any effective face-to-face interaction, all four vocal acts need to be present. A “move” sets forth a direction, a “follow” validates and completes, an “oppose” challenges and corrects, and a “bystand” provides a perspective on the overall interaction and attempts to reconcile competing acts. What is so noticeable about stuck interactions is that they do not have a balance of these vocal acts. They usually display dominance in one or two particular modes at the expense of the others. A team that possesses communicative competency can recognize and correct imbalances.

Lasting Impact

WALLACE: What aspect of your work do you think has had the greatest impact?

KANTOR: The theory that emerged from my 1970 in situ family study and the subsequent research on high-stakes behavior in couples and then in organizations all strengthened my understanding of Structural Dynamics. The emerging nature of this theory and increasing evidence of its widespread applicability in different systems has been a major source of satisfaction. Concepts like the Four-Player Model have caught the attention of many organizational consultants around the world, and that has been an obvious source of satisfaction.
But I think the biggest impact and the greatest source of satisfaction is yet to come. I am currently undertaking a research project with Kathryn Stanley of the Massachusetts School of Professional Psychology and Gillien Todd of the Harvard Negotiation Project. The project sets out to test the ability of a Structural Dynamics intervention to effect measurable change in organizational teams.

Two features of the research could make a significant impact on all future consulting. First, the research attempts to meet rigorous scientific standards by having an experimental group that receives the designed “treatment” (the experimental variable) and two control groups, one that is introduced to the language of Structural Dynamics but goes no further and a second that receives no treatment at all.

The second unique feature is how we measure change by measuring vocal acts. Vocal acts, which are units of speech, form sequences that eventually become repetitive patterns, some of which are functional and some of which are dysfunctional. We identify the dysfunctional sequences and then apply our metrics to quantify the change in the structure of a communication pattern—that is, the shift from dysfunctional to functional sequences. In later stages of this research, we intend to link such changes to the bottom-line goals of key decision makers in organizations. We also plan to measure how individuals in the study teams expand their repertoires.

**WALLACE:** What else is in store for the future?

**KANTOR:** I see the Kantor Institute doing more groundbreaking work. I see three paths converging—research, training, and instrument development—all aligned toward making measurable change that is sustainable. When the paths converge—in my lifetime or beyond—Structural Dynamics will have changed the fundamental nature of human systems consulting and intervention.

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**ABOUT THE AUTHORS**

**David Kantor** is the founder of the Kantor Institute. Over the past 50 years, he has brought his unique model and counseling expertise to families, couples, organizations, leaders, and interventionists. During his career, David has trained more than a thousand systems interventionists and has written dozens of articles and several books. [http://kantorinstitute.com](http://kantorinstitute.com)

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Part 2: Structural Dynamics in Action

SARAH HILL AND TONY MELVILLE

David Kantor’s theory of Structural Dynamics provides the foundation for the interventionist work that we do in many different organizations and communities in both the public sector and corporate settings. Underpinning our approach to applying David’s theory is the belief that leaders need to stop just leading change and first think carefully about how and what they want to change. Structural Dynamics interventions focus on working with behaviors in order to change the prevailing culture and enable transformational change. It is this kind of fundamental change that has the potential to liberate individuals or organizations from stuck patterns of behavior that can hold them back from realizing their aspirations.

Perturbing the System

Our experience from one of these interventions demonstrates how Structural Dynamics works with some of the challenges presented to interventionists and their clients:

We were mid-way through a day working with a group of 35 senior leaders in an organization. They had come together to discuss business risks and, in particular, a mounting financial crisis. Hundreds of years of experience were gathered in the room, along with specialists from every conceivable field. The CEO’s hope? That by unlocking participants’ collective wisdom, the group could put itself in the best possible position to tackle the challenges ahead.

However, this is not what we were seeing as the day unfolded. The CEO was struck by the circular superficiality of the conversation and was frustrated by a repetitive pattern of behavior that she had observed elsewhere in the organization.

It was not uncommon for meetings of this group to become stuck, paralyzed forums, but somehow this one was different. Prompted by the sheer frustration of not knowing what was going on, the CEO became uncharacteristically blunt. She said: “As senior leaders, I think you are the single biggest risk to this organization because we are unable to effectively work together, interact with one another, or reach decisions together.”

The room was silent. We sensed acknowledgment, agreement, confusion, and denial in the group, but no one said a word. The CEO’s comments were increasingly filled with moral judgment as she blamed the group for the stuck patterns in their interactions. She had not yet fully realized that what was happening could be described in the language of Structural Dynamics, a language that is morally neutral in its perspective, or that an intervention could change the nature of the discourse. She was making an intervention that she hoped would perturb the system, but she was also exhibiting a type of self-righteous behavior.
Seeing the Structural Story

Moving beyond the CEO’s moral story of what was taking place in the room that day, we could see the structural story. We were witnessing a group that had gone into a spiral of “moves,” a situation in which each member of the group was attempting to reconcile the interaction from his or her perspective. Group members had a strong and stuck pattern of random moving. There was no effective opposition (“oppose”), and no members of the group expressed support for any particular stance (“follow”). The speed with which the moves emerged left anyone who might have been able to provide perspective (“bystand”) reeling in their wake. It was an example of the very behavior that was causing chaos and frustrating any kind of change in the organization. But, as with the Structural Dynamics of any conversation, we knew it was possible to change it by identifying the particular stuck pattern of behavior for the group and then outlining what had to happen to change that pattern.

In the weeks that followed, we worked with the CEO to try to interrupt—or “release”—the pattern of behavior that was preventing the group from being able to achieve anything meaningful. We focused on trying to change the discourse so that there was clear and effective opposition and sufficient “following” for an action to be completed, and to make space for people to provide their individual perspectives on what was happening within that forum.

Achieving Fleeting Success

This intervention was initially successful. We saw a behavioral change that the group welcomed and that they could see the benefits of. However, our well-intentioned and well-executed intervention had triggered each team member’s “invisible reality”—or set of hidden assumptions—and as a result, we saw the old pattern of behavior return and intensify.

The group appeared to flounder, and members increasingly looked to the CEO to tell them what to do. At this point, we all knew that we hadn’t yet reached the subterranean levels of the organization, which is where we needed to be. There was a great deal more drilling to do.

As we watched the repetitive behavior, we began to wonder whether the covert opposition we saw in the organization, now replicated in this group, was intentional and part of multiple and hugely complex individual, group, and systemic invisible realities that extended from the shop floor to the

The CEO’s comments were increasingly filled with moral judgment as she blamed the group for the stuck patterns in their interactions.

board room. Had the behavior been set in motion by the established culture to ensure that sustainable change would never be possible?

It is not unusual for an organization to find a way to maintain the status quo. The status quo is comfortable and known, unlike change, which for many of us is synonymous with discomfort and uncertainty. If we assumed that the organizational culture was one that said, “No matter what you do, there will be no change here. We will maintain the status quo and do whatever it takes to guard against all threats from outsiders,” much of the behavior we were experiencing began to make sense.

Had the behavior been set in motion by the established culture to ensure that sustainable change would never be possible?

Members of the group were randomly throwing out move after move as a covert way of opposing any kind of change. In fact, they had developed an astonishing ability to ward off any threat to the status quo with their obstructive patterns of conversation that prevented any change from being achieved. This was mirrored across the organization, which had become so efficient at managing the flow of information to the highest levels that the reality of what was really going on was almost completely hidden from view. When the CEO unilaterally set a course of action, which had so often been the case, senior leaders did what was necessary to give the appearance of change taking place, but in reality they were doing what they could to protect the status quo in their own spheres of influence.

Impact of Transient Leadership
This way of doing things had existed for decades, and it had been set in place precisely to deal with the transient nature of leadership and requirements for change. We had both seen this kind of behavior elsewhere. Policing, for example, was also notorious for transience. Many police officers are repeatedly posted from one role to another throughout their careers, which means that leadership structures are constantly changing. What police officers are charged with delivering is also continually changing. New governments predictably bring with them a wealth of measures and initiatives designed to solve the problems of the ones that preceded them. This makes for a complex and overwhelming degree of change in which only one aspect is certain—it is perpetual.

This transient nature of leadership made it understandable, perhaps even reasonable, that the organization we were working with might see the instigation of obstructive behaviors as one means of protecting itself from the next passing phase or leader. But what was happening here had reached extreme proportions. The organization was now so proficient at protecting the dominant practice model that no matter what changes were made, or where any innovation or pushback came from, the existing system found ways to exert its control to ensure it prevailed. This was nothing short of complete paralysis borne out of a desire to stop all change, regardless of whether or not it was necessary for survival.

Working with Invisible Structures
To stand any chance of effectively identifying and working with invisible structures of this kind, interventionists and leaders need to:

1. **Be creative, resilient, and courageous** as they build their own practice model, which requires that they be knowingly in command of their own story and the invisible realities it creates in themselves and those they serve.

2. **Work with others** to plumb the depths of identity-forming stories that can be the source of so many invisible realities.

3. **Purposefully design and facilitate interventions** that jolt an individual, team, or organization into a position where the possibility for change finally opens up. In the midst of a perturbation, the environment can be visibly
and palpably awash with anxiety. However, this anxiety also creates the potential to transform dysfunctional behaviors into an endless source of positive energy to draw upon in service of the organization.

Our work throughout the organization continued for some time, with many people demonstrating great personal courage as they began to integrate Structural Dynamics practices into their work. However, the CEO left the organization sooner than anticipated and was replaced by a new CEO who has a different agenda and approach. As a result, our work with the organization has been put on hold during this transition period. While many individuals have been able to positively affect decision making within their spheres of influence, the systemic change efforts have stalled.

The organization was now so proficient at protecting the dominant practice model that no matter what changes were made, the existing system found ways to exert its control.

The current situation at this organization highlights the importance of not only the leader’s role in change but also the impact of unforeseen circumstances. We are hopeful that teams within the organization will continue to benefit from applying the practices of Structural Dynamics to improve the work together.
Learning to Learn
Knowledge As a System of Questions

MICHAEL BALLÉ, JACQUES CHAIZE, AND DANIEL JONES

What is it about the Toyota Production System (TPS) that has allowed Toyota to achieve high levels of performance over time, despite occasional setbacks? The authors have found that instead of being a system of best practices, the TPS is a system of interconnected questions. As such, in TPS, knowledge does not involve applying a cookie-cutter method to get a desired result but rather posing the right questions to ultimately improve the system as a whole. The authors examine Toyota’s five-step cycle for problem finding, framing, and solving. They show that as employees develop their problem-finding capabilities and problem-solving skills, they individually and then collectively enhance the organization’s judgment in the long run.

We have spent 20 years studying and practicing organizational improvement and learning systems. Based on our experience with a range of lean approaches, we would like to suggest that the Toyota Production System (TPS) is a tool for learning how to learn that has introduced a radical shift in the handling of knowledge. Its unique features separate it from its many copycats and explain its effectiveness and longevity. This system has had an impact far beyond the automotive industry and manufacturing sectors, reaching into healthcare and service industries. But often when it has been applied in different settings, the results have been disappointing. Why is this the case? We have found that, instead of being a system of best practices (which is the kind of learning one seeks if one already knows what to learn), the TPS is a system of interconnected questions. As such, in TPS, knowledge does not involve applying a cookie-cutter method to get a desired result but rather posing the right question to ultimately improve the system as a whole.
What Knowledge?
Before we make the case for the value of questions, bear with us as we backtrack and establish what we mean by “knowledge” in this context. We look at knowledge as a fundamental source of productivity: It is what enables us to make robust decisions and carry them out in the best way in order to reach our goals. From this point of view, knowledge has three main features:

First, the most common way of describing knowledge has been with us since the Greek philosophers. Plato and those who followed him saw knowledge as “justified true beliefs.” To be counted as knowledge, the beliefs we have about the world must be considered true. If a long-held belief is discovered to be wrong, it cannot have been known. Therefore, if I discover that the human brain remains plastic and trainable throughout its lifespan, then my deeply held belief that it’s unchangeable after the age of 20 is not knowledge but a fallacy. A belief is not knowledge unless I can justify or prove it.

Second, we tend to organize our beliefs as lists of positive statements. These may be general statements such as “heavy rainfall causes flooding” or more conditional ones such as “heavy rainfall in coastal areas causes flooding if it coincides with high tides.” But in any case, most of what we consider knowledge comes in the form of active, positive statements that “this is so.”

Third, according to Michael Polanyi, we all “know more than we can tell”; that is, much of what we know is tacit rather than explicit knowledge. It’s futile to try to codify all knowledge because so much of it is situational, context dependent, and potentially subject to obsolescence. Roger Martin recently suggested that learning is a process of moving from mystery (exploration of the problem) to heuristic (creation of a rule of thumb to narrow the field of inquiry) to algorithm (documentation of an explicit formula) (see “The Knowledge Funnel” on p. 12). For instance, most executives would find it hard to assess the value of their companies. They rely on professionals who are familiar with the buying and selling of companies and have rule-of-thumb heuristics, such as a multiplier of earnings according to the industry or a multiplier of EBITDA (earnings before interest, taxes, depreciation, and amortization) minus capital expenditure. Equity firms whose job it is to purchase and sell companies have sophisticated valuation spreadsheets that take into account the various parameters of due diligence. Yet in many cases, our attempts to generate an algorithm fall short because conditions rapidly change. For this reason, leaders have to be ready to continuously question their assumptions and redesign their organizations.

Inquiry and Knowledge
Inquiry has always been an important part of learning and knowledge, predating Socrates as our ancestors sought to understand their world. We generally find questions at the frontier between the known and the unknown, either as a method of exploration or a teaching device to
Questions typically probe the three parts of knowledge:

- How do we believe what we believe?
- Is this belief true?
- What is our method for justifying this belief?

In his action learning formula, Reginald Revans provides a good description of how knowledge and questioning intuitively interact:

\[
\text{Learning} = \text{Programmed Knowledge} + \text{Insight Questioning}
\]

First, there are a certain number of rote-learning facts to know (constituting an established body of explicit knowledge/experience). Second, these facts are assimilated or accommodated by questioning, which triggers insights in what you see, hear, or feel.

The human mind naturally thinks in terms of questions and answers, problems and solutions, with a strong bias toward single, over-generalized responses.
responses. The brain evolved to organize thoughts, through language, into statements about what things are, whether they are good or bad, how they can be handled, and what consequences different actions may have. The questioning process is essential to counteract our tendency to form stereotyped descriptions and schemata. It also helps us better apprehend reality through the realization that there is no single narrative: What we experience is a matter of perspective, and consequences change from one situation to the next.

We can’t avoid instinctively feeling that knowledge is a list of what we know in terms of how to describe things, solve specific problems, or anticipate how situations will evolve. Nowhere is this set of assumptions more at play than in organizations. Arie de Geus, co-founder of SoL, stated a few decades ago, “The ability to learn faster than your competitors may be the only sustainable competitive advantage.” Many executives accept that learning is an important source of value and therefore they seek best practices: They want to identify “better” knowledge on the market to replace the “obsolete” knowledge in their own organizations. Companies recognized as having superior track records are studied and copied endlessly, none more so than Toyota, whose practices have permeated the automobile industry over the last three decades and have spread to fields such as healthcare and banking. Yet although the spillover of Toyota’s approach has as a whole been spectacular, the road hasn’t been smooth, and failures and misunderstandings have been far more frequent than clear-cut success stories.

Learning How to Learn
What, How, Where, and When

Many organizations seeking to improve will latch on to what they recognize is a Toyota-like practice and then try to apply it in-house. This process is made easier by the fact that Toyota itself has provided an explicit description of its system, the “what, how, where, and when” of its own learning how to learn approach, which involves:

- Customer satisfaction (quality, cost, lead-time) and employee satisfaction (safety, morale)
- Just-in-time (what is needed, when it is needed, in the quantity needed) and Jidoka (stop at first defect)
- Standardized work and kaizen (continuous improvement)
- Employee engagement and mutual trust

Based on this model, a large number of corporations have come up with their own production systems, drawing on what they see as Toyota’s essential best practices to achieving high performance. Unfortunately, for a number of structural reasons, the effects of such efforts are far from clear. First, the ecological validity problem is very real: Why would automotive practices apply outside the company or, even further, the industry? Second, identifying Toyota’s best practices is not easy. The company’s plants—and thus practices—differ greatly from one other, according to their local context and specific history. Having studied Toyota’s use of its own system within its plants and at suppliers, we have come to realize that the real value for other organizations lies in the specific set of instructions for how to learn it (as we have described in “The Lean Leap”). They are:

1. **Go and see firsthand** at the real place (genchi genbutsu). The TPS is not supposed to operate in absolutes but rather as a guide to observation and discussion in real, contextualized situations.
2. **Work with a master**—a sensei, coordinator, or trainer whose job is to help you make sense of the system in your own local situation.
3. **Apply kaizen**, or small-step improvement, before making large-scale changes.

Best practices clearly exist within TPS, as do libraries of local standards (detailed descriptions of the best-known way of doing an operation at the time), but within Toyota, these are used for inspiration not rote application. The basic instruction is to copy and apply kaizen: Gain inspiration from an idea but improve it to meet your own local conditions.

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**Best practices clearly exist within TPS, but within Toyota, these are used for inspiration not rote application.**

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**A System of Questions to Produce Knowledge**

The founders of TPS had a clear idea of the kind of knowledge they were seeking. Taiichi Ohno, considered the founder of the methodology, taught members of his group to “look with your feet and think with your hands.” His aim was to teach his direct reports to realize their “misconceptions”—wasteful errors in thinking—through hands-on learning activities. For TPS practitioners, the most common answer to any direct question is “it depends.” Generic answers are discouraged, as the system is aimed toward helping every person develop tacit understanding of specific situations.

In this sense, the TPS is not a system of best practices but rather a structured system of questions that, once you master it, will allow you to correctly learn about any given situation. The knowledge is in the questions themselves, not in the answers. For instance:

- What is your current level of customer satisfaction in terms of quality, cost, and lead-time and how can you improve it? What is your current level of employee satisfaction in terms of safety and morale and how can you improve it?
- What is your current level of just-in-time production in terms of whether you can deliver exactly what was ordered within the month, week, day, hour, minute, etc. and how can you improve it?
- What is your current level of Jidoka in terms of spotting defects at customer delivery, at final inspection, at line inspection, within the line, at each technical operation, during the operation, etc. and how can you improve it?
- What is your current level of employee engagement in terms of “presentism,” improvement ideas, suggestions, and mutual trust and how can you improve it?

It’s a system because each of these questions leads to a Russian doll-like architecture of further questions. For instance, “How can I improve my level of just-in-time production?” leads to the following questions:

- How close is the production pace to the sales pace?
- How leveled is production loading?
- How continuous is the production flow?
- How good is logistics at pulling?

Each of these questions can in turn drive further questions. For example, “How leveled is production loading?” leads to:

- How fractioned are production batches?
- How mixed is the production sequence?
- How flexible are the production lines?
  In volume? In mix?

All of these questions are interrelated. For instance, the question of better production flow leads to the question of spotting defects within the flow, which links to the question of correctly following work instructions, and so on. The point of these questions is not to find immediate answers but to steer you to discovering what you need to learn. Once what you need to learn emerges, actual learning then occurs through learning-by-doing: Try and see, try and see (In Toyota’s language, this process is called the Plan-Do-Check-Act cycle).
Socratic inquiry involves asking mostly high-level questions to help students clarify their thinking, state their evidence, and follow through on the potential consequences of their thoughts. There is clearly an element of this process in TPS questioning, something that western observers pick up on right away. Our contention, however, is that TPS questions seek far more specific knowledge about technical processes than a more general inquiry would provide. These questions guide observation and discovery far more than they serve to clarify previously held knowledge. In essence, they are applied to a situation to produce knowledge as opposed to clarifying existing knowledge. The knowledge starts with the questions themselves.

The Role of the Institution

If we pursue Roger Martin's knowledge lifecycle, what happens when knowledge has matured to the algorithmic—or formulaic—stage? If it's algorithmic, it can be reproduced (that's the whole point). Typically at this stage, an institution will in some way maintain and protect this knowledge (see "From Learning to Institutions"). For instance, Renaissance thinkers invented the double-entry accounting "rule of thumb" in the fifteenth century, and by the 1800s, professional organizations for accountants started to appear. Accountancy practices are now established, maintained, and expanded by a number of official bodies. But as the lean accounting movement has shown, many

![Figure 2: From Learning to Institutions](image)

When knowledge has matured to the algorithmic—or formulaic—stage, an institution will in some way maintain and protect this knowledge.
current accounting rules misrepresent today's business realities. The most obvious example is the view of inventory as an asset rather than as waste. This “zombie knowledge” (long dead, still walking around and attacking people) is profoundly built into the system and defended by the accounting profession. When people commit themselves to preserving algorithmic knowledge through institutions, those algorithms become dogma.

**When people commit themselves to preserving algorithmic knowledge through institutions, those algorithms become dogma.**

Even in science, which is designed to be the fastest evolving field of knowledge, progress is said to happen one funeral at a time.

Institutional knowledge generally forms around solutions. Leaders fixate on those solutions and then create bodies of people to support others in adopting these solutions, whether Taylorist expert groups to train individual workers or power lobbies to impose certain norms. Solutions, in this sense, are “applied” to people, irrespective of local context, and compliance becomes more important than competence (or even performance).

On the other hand, the idea of knowledge as a system of questions has the huge advantage that although questions can be set and context-free, their answers are local and thus context-adapted. The expectation that you shouldn’t just apply existing practices but rather take inspiration from them to improve the local situation (what in TPS terms is called yokoten) creates a flexible learning environment that is both tight in that no one needs to reinvent the wheel and loose in that each person is asked to seek a better fit-to-fact answer to the given question.

In this scenario, the institution’s role is no longer to preserve a solution but to explore and collect all variants of solutions according to context. This approach leads to a fundamental and little-known aspect of knowledge capture within TPS known as the “trade-off curve”—a graph that illustrates, instance by instance, what happens to the performance of one variable when another variable changes (see “Sample Trade-off Curve”). Toyota technical experts are far more interested in capturing boundary conditions—that is, exploring the boundaries of knowledge when known facts become uncertain—than justifying dogma by finding striking illustrations of what is already known. By institutionally capturing knowledge in the form of trade-off curves, the speed of collective learning is vastly increased, as the institution follows step-by-step innovation rather than defends zombie knowledge.

**Figure 3 Sample Trade-off Curve**

The trade-off curve is a graph that illustrates what happens to the performance of one variable when another variable changes.
Conclusion: Problem Finding, Framing, and Solving

Seeing knowledge as a system of questions solves yet another vexing puzzle in researching Toyota’s approach to knowledge and performance. To be certain, Toyota trains vast numbers of its employees in problem solving, but in reality the old-time TPS masters seemed less interested in how you solved the problem than in whether or not you saw it. You were supposed to look at a situation for hours (stand in the infamous “chalk circle” on the shop floor) until you could explain the problem to your master. He would then task you to solve it, but to the immense frustration of many learners, he would never show much interest in the actual solution, instead moving on to the next issue. To the TPS masters, true productivity lay in effectiveness—solving the right problem—rather than in efficiency—solving a problem the right way.

Indeed, the founders of the TPS insisted that higher efficiency did not necessarily lead to lower costs. Problem solving may be about efficiency, but problem finding is the key to effectiveness. In any given situation, problem finding determines how goals are set, how the problem is framed and visualized, how progress will be evaluated, and what is an acceptable solution as opposed to what is not (see “Problem Finding, Framing, and Solving). Basically:

- If you feel you already know what to do, then go straight to the action plan.
- If you feel you need to learn something and you know what that is, then identify the best practice and learn to apply it.

Figure 4: Problem Finding, Framing, and Solving

Toyota’s approach to knowledge and performance involves an ongoing five-step cycle.
To the TPS masters, true productivity lay in **effectiveness**—solving the right problem—rather than in **efficiency**—solving a problem the right way.

- If you feel you need to learn what is important to learn, then ask the right questions to discover what is important to know, investigate and experiment in order to explore, and produce specific knowledge in doing so.

Thus, the overall aim of a system of questions is to develop employees’ problem-finding capabilities and problem-solving skills, which individually and then collectively enhance the organization’s good sense and better judgment. We suggest then that the true value of the Toyota Production System is that it shows us another way to see knowledge in a world with plentiful information but a dearth of meaning.

What is the system of questions that corresponds to your field? Can you put those questions in a hierarchy and link them in a coherent way that steers the eye of the questioner to focus on high pay-off problems and so truly learn?

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**Glossary**

*Genchi genbutsu*: the real place  
*Kaizen*: small-step improvement  
*Jidoka*: stop at first defect  
*Sensei*: coordinator, trainer, master  
*TPS*: Toyota Production System  
*Yokoten*: copy and improve

**Resources**


**End Notes**

4. The double-entry accounting system was described in 1494 by Fra Luca Pacioli in “Summa de arithmetica, geometria, proportioni et proportionalitā.”

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Is Your Town in Transition?

JESSICA STITES

Over the past decade, more than 1,000 municipalities in 43 countries have chosen to define themselves as “Transition Towns.” Frustrated by the slow pace of change in response to challenges such as peak oil, climate change, and economic instability, people in these places have undertaken grassroots initiatives to build the resilience of their communities to survive sudden shortfalls of necessities such as food, oil, water, or money. These preparations take many forms, some infrastructural—such as establishing solar energy programs—and others interpersonal—like creating groups that encourage people to help each other in times of need. At its core, the Transition Movement seeks to build the “social technologies” required to achieve long-term sustainability.

When I set out to investigate the appeal of Transition, a sustainability movement that has spread to 1,105 towns in 43 countries over the past eight years, I started with what I thought was a basic question: What are “Transition Towns” transitioning to?

“Resilience,” I was told. “What does that mean?” I asked, thinking vaguely of steel. “The ability to absorb shocks to a system!” was the reply. Well, yes, but …? Pressed for details, Nina Winn, who runs a Transition initiative at the Institute of Cultural Affairs in Chicago, said, “I don’t think there’s a conclusion. Like when a person’s trying to self improve, it’s a constant growth. Our communities would grow to be a lot more intimate. We wouldn’t be hesitant to ask for that cup of sugar or tomato. The streets would be narrower instead of expanding; there would be fresh produce on every corner that was grown just down the street. You would see people on the street because of that because where there’s food, there’s people.”

Such bucolic but fuzzy visions are typical of Transition, which is more about shifting paradigms than prescribing solutions. With an it’ll-take-shape-as-we-go ethos, most Transition Town websites sport a “cheerful disclaimer:” “Just in case you were under the impression that Transition is a process defined by people who have all the answers, you need to be aware of a key fact…. Transition is a social experiment on a massive scale.”

Transition seeks to address a source of frustration in the environmental movement: Personal action feels like a drop in the bucket, while governments often move at a glacial pace.

On a basic level, however, the experiment seeks to address what founder Rob Hopkins sees as a source of frustration in the environmental movement: Personal action feels like a drop in the bucket, while governments often move at a glacial pace.
“Until now, there’s been the things you can do at home on your own—changing your lightbulbs and sharing your lofts and things—and then there’s everything else that someone else is meant to do: the sort of mythical ‘they,’” says Hopkins. “Transition is what’s in the middle, what you can do with the people on your street.”

If the Transition movement has a sine qua non, it is the belief that communities must become more resilient in the face of three catastrophic threats: peak oil, global warming and economic instability.

The seed for Transition came in 2004 when Hopkins, a young teacher with a degree in environmental quality and resource management, encountered the concept of peak oil: the theory that easy-to-reach oil will run out at a specific date—some say 2020 precipitating a rapid decline in oil availability followed by the collapse of civilization as we know it. At the time, Hopkins was teaching a permaculture course at the Kinsale College of Further Education, an alternative school on Ireland’s southern coast. Permaculture is another one of these concepts that, as Hopkins notes, is “notoriously difficult to explain in two minutes in the pub,” but it’s most commonly described as an ecological design movement that sees nature in terms of interlocking systems. Alarmed by peak oil, Hopkins assigned his students to apply the principles of permaculture to the problem.

The result was a concrete plan to make Kinsale dramatically less fossil-fuel dependent, with recommendations such as a green buildings officer and a horse-and-cart taxi. The Kinsale Town Council enthusiastically adopted the plan, and the principles underlying it became the precepts of Transition, as outlined in Hopkins’ 2008 Transition Handbook: From Oil Dependency to Local Resilience and as adopted by Transition Towns worldwide.
But it would be a mistake to think that becoming a Transition Town means setting off on a clear-cut path to energy independence. From permaculture, the movement has inherited a non-linear, bottom-up approach—even the original 12 “steps” outlined in Hopkins’ handbook have been renamed “ingredients.” If the Transition movement has a sine qua non, however, it is the belief that communities must become more resilient in the face of three catastrophic threats: peak oil, global warming and economic instability. Whether the movement means to avert or adapt to future disasters is ambiguous; when I ask, Transition members tend to respond, “Both!” as though I have just recited their favorite koan.

Practically, this means preparing towns to better survive sudden shortfalls of such necessities as food, oil, water or money. These preparations take many forms, some infrastructural—such as solar energy programs and local economic initiatives—others interpersonal, like the “heart and soul” groups that encourage people to help each other in times of need and open their minds to new solutions.

Totnes, England, declared the first official Transition Town in 2006, offers perhaps the most fully realized example. The town, with a population of 7,400, boasts nearly 30 Transition projects and sub-projects. Some are small-scale, like nut-tree planting and a free “bike doctor,” while others are more ambitious, like an incubator for sustainable businesses and a 305-page Energy Descent Action Plan to cut the town’s energy usage in half by 2030. The movement is enthusiastically backed by the city mayor and the town councilors, one of whom attests that “the [Energy Descent Action Plan] has filtered into everyone’s plans for everything, so that’s had a major impact.” A much-heralded neighborhood-level project has been Transition Streets, which brought residents together, block by block, to support each other in decreasing their home energy use through improvements like insulation and solar panels. On average, each of the 550 participating households cut its annual carbon use by 1.3 tons and its annual energy bill by £570 (about $883).

Hopkins stresses, however, that the Transition movement is not in the business of stamping out cookie-cutter copies of Totnes. Transition spreads primarily through serendipity. One member likens it to a mycelium network, a fungus with underground roots that can sprout new shoots miles away. In effect, this means that someone—often with a background in sustainability—stumbles across Transition online or in print and decides to start a local chapter.

While guidance is available from umbrella support groups such as Transition U.S. and the U.K.-based Transition Network, the movement is intended to mutate as it grows. “We designed it with a simple set of principles and tools and sort of set it off, and it keeps popping up in the most incredible, surprising places, in the most incredible, surprising ways,” says Hopkins. “When there’s Transition...
happening in Brazil, it feels like a Brazilian thing, it doesn't feel like an English imported thing."

Indeed, the organizers of Brazil’s Transition movement say that two of the three core principles—peak oil and climate change—don’t resonate strongly with the Brazilian public, so Transition trainings focus more on “assuring education and health for all, protecting biodiversity and enhancing autonomy of traditional (indigenous or not) local communities.” In Brasilândia, one of the slums of São Paulo, Transition primarily fosters social enterprise projects; it has given birth to a community bakery and a business turning old advertising banners into bags.

In parts of Europe, Transition has had to respond to the pressing needs of communities decimated by the ongoing Eurozone crisis. When the city of Coin, Spain, went bankrupt and decided to privatize the water, *Coin En Transicion* gathered 3,000 signatures to convince the city to squash the plan. Now the movement is working with the city government to design a regional water plan grounded in principles of sustainability and resilience.

In Portugal, where unemployment is at 16.9 percent and climbing, the Transition Town of Portalegre has drawn inspiration from *ajujeda*, an ancient rural practice of trading chores in the fields. This month, *Portalegre em Transição* will meet to figure out how to translate the principle of *ajujeda* into a functioning gift economy, allowing those whose skills are not being used (for instance, the unemployed) to share them with those whose needs are not being met.

**Across the Pond**

In making the leap across the Atlantic to the United States, where more than 139 Transition Towns and 200 unofficial “mullers” have sprouted, Transition has also taken its own, distinct path. Most of the Transition towns in the United States have popped up in places one might expect: relatively moneyed, green, hippie enclaves like Boulder, Colo. (the first official U.S. Transition Town); Sebastopol, Calif.; Northampton, Mass.; and Woodstock, N.Y. None have taken root so far in any conservative strongholds, although there are a number of urban initiatives, in Boston, Houston, Los Angeles and Cleveland, to name a few.

As in the United Kingdom, members of the U.S. Transition movement tend to split up into working groups around specific projects. A common one is an “emergency preparedness” group, which devises things like phone trees and alternative heating sources for use in the event of disaster. “Yard share” working groups match would-be gardeners to landowners willing to lend a patch of fertile ground. “Heart and soul” or “inner transition” working groups stress psychological and spiritual transformation, drawing on the teachings of thinkers such as Buddhist deep ecologist Joanna Macy. “Reskilling” working groups offer trainings in all manner of practical pre-industrial skills, from cheesemaking to animal husbandry to knot-tying to knitting.

Of course, Transition is not the only sustainability game in town. Wherever it goes, and especially in cities, it enters a terrain thick with environmental non-profits and local government initiatives. More than 1,060 mayors have signed the U.S. Conference of Mayors Climate Protection Agreement, a pledge to meet the goal of the Kyoto Protocol (the United States was one of only four countries not to join) to reduce carbon emissions below 1990 levels. Some cities have gone beyond that: Last year, Chicago drafted a sustainability plan for the year 2015 that reads something like Totnes’s Energy Descent Action Plan—a laundry list of goals such as improving citywide energy efficiency by 5 percent and decreasing water use by 2 percent (14 million gallons a day). To get there, the city has launched numerous projects, such as eco-friendly overhauls of city buses, a “rails-to-trails conversion” of a disused train line into a park (modeled on New York City’s High Line), and a Sustainable Backyards Program that urges residents to install compost bins and rainwater collectors.

Given this abundance of initiatives, many Transition movements, especially in cities, take on a network-
Transition’s freewheeling structure, however, does mean that certain problems—or “challenges”—seem to crop up frequently. As with any volunteer-driven movement, members describe burnout and lack of accountability. After a stage of initial enthusiasm, projects can fall dormant. More successful Transition Towns often have paid staff. After observing that most initiatives “were struggling with an all-volunteer leadership team,” Transition Sarasota founder Don Hall decided to raise the money to pay himself as a full-time organizer, cobbling together his salary from “a mix of event...
and workshop fees, donations, local business sponsorships and grants." In many cities, Transition has been adopted by non-profits that provide paid staff, like Chicago’s Institute of Cultural Affairs, a 50-year-old organization dedicated to sustainability and social change, and Jamaica Plain’s Institute for Policy Studies, the Boston branch of a progressive, multi-issue D.C. think tank.

The Transition movement grapples with the challenges of non-hierarchical, collective leadership.

The Transition movement also grapples with the challenges of non-hierarchical, collective leadership. When I contacted Transition Sebastopol, in California, a longstanding, apparently thriving Transition town with a busy events calendar, I was surprised to learn that all was not well. A dispute in September had put the central Working Group Council on hold, although several working groups—an elders salon, the “heart and soul” group—are chugging along independently. Former working group member Julia Bystrova ascribes the blow-up to a lack of conflict-resolution mechanisms. She hopes that a fresh team will take over and resuscitate the group.

Hopkins is quick to cop to these pitfalls, and Transition is good at tapping into existing knowledge bases to fix problems. Transition U.S. has partnered with an organization called The Art of Hosting to offer facilitation trainings and will begin hosting regional courses on “effective groups” starting in September. Transition U.K. offers Thrive workshops for the same purpose, and ecofeminist and spiritual activist Starhawk gave a workshop in Totnes last month about clear communication and constructive critique in collective decision-making.

Another common concern about Transition, levied from both within and without, is that it is a movement of “white hippies.” While the definition of “hippie” is open to debate, each of the half dozen Transition towns I surveyed in the U.S. indeed lamented a lack of diversity. In addition to being predominantly white, participants in several towns mentioned that their initiative was made up primarily of older women.

While many in the Transition movement said they were working to increase diversity, by far the most impressive effort I encountered is being staged by the Boston branch of IPS’ Jamaica Plain New Economy Transition (JP NET), which has hired an organizer to help meet this challenge. Carlos Espinoza-Toro, a Peruvian immigrant with a master’s in city planning from MIT, aims to identify spaces where different demographics intersect—farmers’ markets, festivals—as well as to find people like himself who enjoy serving as cross-cultural bridges. But he’s going beyond mixed-race spaces to foster Transition in the heart of Jamaica Plain’s Latino community. A series of IPA-hosted meetings in Spanish (with simultaneous English translation) encourages residents to talk about how they are weathering environmental and economic crises. Espinoza-Toro’s bilingual fliers for the first meeting read:

Us Latinos have adapted to economic crises in our countries and in the US for many years. And we have always prevailed! We are creative, resourceful and entrepreneurial. Currently in the US, MA and JP we are experiencing a crisis that challenges our capacity of adaptation. Work opportunities are scarce, rent keeps going up, it becomes more difficult to afford a healthy diet and take the T, the quality of education in our public schools diminishes. … We invite you to share how you are adapting to this crisis or how you have adapted to previous crises. Tell us your stories of adaptation. We could transform your effort into a neighborhood effort with great impact in JP.

Espinoza-Toro anticipates that the needs of Jamaica Plain’s Latino immigrant community may be very different from the white, middle-class needs that have prompted JP NET’s existing programs, such as garden shares and urban orchards. “Folks in the
Latino community may say, ‘Well, we cannot do our own gardening if we are getting evicted from our homes,’ ” he says. JP NET has one program underway to address housing issues, a community land trust called Pueblo, but Espinoza-Toro estimates that it is years from fruition thanks to high property costs in the rapidly gentrifying neighborhood. He hopes other ideas will emerge from the meetings.

Outside of urban areas, the barriers that limit the reach of Transition can be subtler than ethnicity. In New York state’s Hudson Valley and other agricultural areas around the United States, Transition is one of many sustainability initiatives to run up against a cultural divide between traditional farmers and those who practice newer, more sustainable methods like organic, permacultural and biodynamic farming.

“You have organic farmers who are pretty disdainful and smug, and traditional farmers who are kind of threatened,” says Maria Reidelbach, an artist and member of Transition Marbletown, N.Y., who partnered with a 177-year-old local farm to create a mini-golf course featuring entirely edible plants (along with the world’s third-largest garden gnome, “Gnome Chomsky”). “When the traditional farmers adopted machinery and pesticides in the 20th century, the yield increased incredibly, and all of a sudden they were able to feed so many more people with the same amount of land and less help,” says Reidelbach. “To them, that’s great. And then we come along 30 years later and start telling them that they are feeding people poison.”

Reidelbach thinks Transition Marbletown has gone some way toward bridging this divide. The movement, she says, managed to “rope in” the local
growers’ association to cosponsor a “Common Ground Celebration” last fall. At a farmers’ market, growers mingled and tasted each other’s crops, and farmers of all stripes were recognized with “Signs of Sustainability Awards.”

“There’s a value to the farmers listening to each other, humanizing each other,” says Reidelbach. “Then they are much less likely to dis each others’ methods, modus operandi and motives. I think everybody’s got to get down off their high horses. That’s one of the things that Transition enables.”

“I don’t know if we’re going to solve the world’s problems. [But] the underlying ethos is that the process needs to be fun enough to be worth doing anyway.” —Maria Reidelbach

**Modest Expectations, High Spirits**

Asked if he eventually envisions Transition scaling up and being adopted by regional or national governments, Hopkins asserts cautiously, explaining that the goal would be for government to better enable local projects (for instance, by making laws more friendly to small-scale farming). He also hopes that Transition will hit a tipping point at which new solutions seem possible—where, for instance, local governments don’t feel that the only solution to economic hardship is to try to attract large corporations in a deregulatory race to the bottom.

Espinoza-Toro says that he chooses Transition over other forms of organizing because he is inspired by the movement’s tangibility. “What I find most fruitful and rewarding about my work here is that I’m dealing with folks face-to-face in order to tackle some of these issues,” he says.

Again and again, for Transitioners, it seems to come back to that social aspect. “Between you and me, I don’t know if we’re going to solve the world’s problems,” says Reidelbach. “[But] the underlying ethos is that the process needs to be fun enough to be worth doing anyway. I love that about it. There’s a bit of anarchy, which is wonderful. People who are attracted to it tend to be upbeat, optimistic, joyous people.

“I don’t see anything meaningful happening at the top, with governments and multinational corporations,” Reidelbach continues. “Whether or not we win, Transition is the only group offering a model where I can deal with fossil fuel depletion and climate change myself.”

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Our world needs innovative approaches created and supported by people everywhere. As we see from Jessica Stites’s stories of Transition initiatives from around the world, what’s essential now is a social architecture to support passionate citizen activists in their efforts.

To support the development of that kind of cohesion and participatory framework, we served as members of two teams that offered three-day Art of Hosting trainings for 160 Transition leaders and people from other like-minded organizations. The first two took place near Petaluma, CA, in June 2013 and March 2014, and the third near Portland, ME, in April 2014. Our experience in these trainings as well as our other work have lead us to several reflections important to the Transition Movement and other local and trans-local undertakings.

The Art of Hosting

Whether in response to peak oil, climate change, environmental racism, or other crises, this is an age that requires participation. Most of us observe that while resilience leaders are driven by passion, many have also become exhausted. While some communities have social resources to draw upon, there is a need for processes to help groups be inspired together, see together what can’t be seen alone, and create together what can’t be created alone. The Art of Hosting provides frameworks to help these things happen.

The Art of Hosting (AoH) is a way of harnessing the collective wisdom and self-organizing capacity of groups of any size. Based on the assumption that people give their energy and lend their resources to what matters most to them, it blends a suite of powerful conversational processes to invite people to step in and take responsibility for the challenges facing them. As such, AoH is a kind of operating system for networks of impassioned, experimenting people. By connecting individuals working on things that matter in constructive ways, it helps them to be smart, thoughtful, and heart-full together.
Through the Art of Hosting, people:
1. Learn and sense together
2. Build and strengthen lasting relationships
3. Roll their sleeves up to work with the experiments, offerings, and practices needed now

**Essential Frameworks**

**Two Loops of Change**

One essential framework we use—which we learned through association with our colleagues Meg Wheatley and Deborah Frieze at The Berkana Institute—is called “Two Loops of Change.” This model proves helpful to citizen activists in two ways. First, it helps them locate their current work and strategy in the context of what others in the movement are doing. It invites a systemic view, to make possible more collaboration among people with different roles and in different phases of networked change. Second, “Two Loops” invites people to see their work from a living systems perspective, to witness the decline of old systems and the birth and emergence of new ones, and to notice what leadership acts help in working with the natural dynamics of emerging systems.

According to Saira Austin, a participant in one of the Transition trainings, “The biggest spark of learning was the life cycles of systems—physically placing myself in the two loops map, and then viewing and listening to others around me, all of us simultaneously interrelated but in very different places along the path of emerging and dying.”

**Dynamics of Chaos, Order, and Control**

A second key framework in the Art of Hosting is exploring the dynamics of chaos, order, and control. Most Transition leaders are familiar with chaotic environments. What is less familiar is how to orient ourselves with the dynamic energy or inherent order found within chaos. When a messy, complex situation disrupts our sense of order—when funding doesn’t come through, when policy thwarts an intended innovation, or when people aren’t listening to our well-crafted plans—many of us habitually attempt to regain control.

An alternative is to shift toward a skillful dance with chaos—for example, by inviting even more diverse voices and perspectives into the conversation. When

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**Two Loops of Change**

As one system culminates and starts to collapse, isolated alternatives slowly begin to arise and give way to the new. Large-scale change emerges when local actions get connected globally while preserving their deeply local culture, flavor, and form.
well hosted, this can lead to a new, emergent sense of order that is more robust and resilient. Learning to trust these dynamics, to welcome emergence, takes practice and is a core competency in Transition leadership.

Jesse Watson, a participant from Midcoast Permaculture Design, comments, “When an organization gets stuck in a rut, the thing that might help is to introduce chaos into the situation. This chaos may take the shape of a participatory meeting with no set agenda beforehand.”

Development of Core Teams
A third key framework in these trainings is the development of core teams. Movements don’t begin as movements; they begin with small groups of individuals that begin to name the work and connect with others. If well tended, core teams may grow into networks and begin to connect with allied networks. And then they may grow into communities of practice—in the case of Transition and allies, cultivating the emergence of new approaches to energy, food, economy, community, and resilience.

Transition US Communications Manager Marissa Mommaerts reflects, “Strong core teams, built on trust, are vital to the success of our work. Strong, dynamic core teams can alleviate burnout, build a more robust and diverse vision, and are a much more resilient model than having a single leader.”

Core teams have a hidden role; they are not just for hands-on action projects like gray water systems and education campaigns. They are also a practice ground for developing essential personal and interpersonal capacities.

In AoH, we speak of a four-fold practice:
• Engaging in self care to be more fully present for the work
• Practicing generative conversation by cultivating curiosity rather than judgment
• Hosting conversations among others, at varying scales
• Co-creating a community of practice and learning

Social change is thus rooted in fundamental practices of democracy—good conversation and learning together inside core teams, among core teams, in allied and diverse networks, and in broader public conversations around our shared future in our communities.

Added Capacity
Participant Angelo Silva noted that the Art of Hosting trainings reflected the permaculture principle of “stacking functions,” in that people could simultaneously have deep conversations about issues, learn a new meeting method, practice their own capacities of hosting, and deepen their connections with one another for ongoing work.

Movements don’t begin as movements; they begin with small groups of individuals that begin to name the work and connect with others.

Through experiential learning, participants left with several portable principles. In her blog, participant Beth Tener eloquently summarizes some of them:
• Circle. We began the event sitting in a circle and returned to this circle multiple times. The emphasis was that the learning is in the center, and we all have something to contribute to that learning.
• Story. “The shortest distance between two people is a story.” This quote from Meg Wheatley kept resonating with me through the weekend as I saw how the opportunity for people to share stories created a growing sense of trust and camaraderie among the group.
• Hosting. Participants were invited to help “host” various parts of the gathering—an opportunity for people to share their skills and creativity, embodying the idea that we all have something to offer, we can all contribute to the gathering, and we can show up in various roles in a group at various times.
**Commentary 14.1**

- **Space.** When meetings are tight on time and strictly wedded to a fixed agenda, there is little space for the serendipity that enables new things to emerge. We used a variety of engagement processes, including Open Space. By the afternoon of the second day, it felt like all of our interweaving had created a quality of space that was humming with good will, appreciation, inspiration, ideas and deeper understanding, and a sense of possibility.

- **Wisdom.** People had profound insights, powerful stories, and so much wisdom. In most gatherings, this is latent, yet with this format, so much more of this could be accessed, by creating the space to have real conversations and listen to each other.

**Thriving Movements Through Simple Practices**

We are learning that, as our friend Meg Wheatley shares, three practices are key to the emergence of movements like Transition:

- **Stay awake.** Fortunately, by definition, most people involved in movements like Transition are people who are awake. They are not asleep or numb to the frightening trends and frailties of our current world. They are willing to face facts and fears together, and to stay present and curious to what is unfolding.

- **Dwell in complexity.** It’s not always easy to lean into uncertainty or dwell in complexity. The job for most of us is to resist our tendencies to oversimplify—to impose solutions that satisfy our need to reduce anxiety but don’t create lasting solutions.

- **Pay exquisite attention to relations.** It is not our blaming and judging of one another that will pull us through uncertainty. When situations are complex, many stories are true. To be able to be in a multiplicity of truths, a plurality inherent in democracy, we must continue to develop our relationships together.

**It’s Time to Be Inspired Together**

“I am inspired to reach out to non-like-minded individuals, build connections, and support a resilient, earth-friendly future with ‘unlikely candidates.’”

—Lesley Heyl, participant

Like Transition, The Art of Hosting is a commitment to working individually and together at scale on behalf of a world in significant change. It is a participative process to catalyze shared perspective and action. It is large- and small-group methodologies that bring people into deeper relationship and commitment together. It is a set of models and worldviews to reclaim democratic process and action. Emergence, self-organization, and living systems inspire the work. Passionate local and trans-local responses—like that of the Transition movement—can only help us respond to the key issues of our times.

*More can be found at www.transitionus.org and www.artofhosting.org.*

**About the Authors**

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In *The Triple Focus: A New Approach to Education*, Peter Senge and Daniel Goleman examine the cognitive and emotional tools that young children need to navigate and thrive in today’s environment. The authors identify three skill sets essential for navigating this world of increasing distractions and decreasing face-to-face communications: focusing on self, tuning in to other people, and understanding the larger world and how systems interact. This excerpt focuses on the third skill set and makes a strong case for capitalizing on the connections and synergies between Social and Emotional Learning (SEL) and systems thinking. The notion of transforming and replacing the traditional pedagogy that anchors our current curriculum with systems-based learning has already taken hold with impressive results that have surprised even the authors.

We believe we are at the very beginning of rethinking our views of human development in a more integrative way: cognitive (frontal brain/lobes), emotional (mammalian brain and limbic system), spiritual and energetic (which could be embedded in the whole mind-body system functioning rather than particular circuits). Again and again, we find one of the most powerful experiences of Social and Emotional Learning (SEL) and systems educators everywhere is seeing that the genuine potential of students far exceeds what the current mainstream education system, with its emphases on cognitive development and analysis over synthesis, is designed to produce (see “Social and Emotional Learning Defined”, p. 32). In that sense, it is a system of “dumbing down” these innate capabilities.

It is useful to remember that the factory model we have inherited through the Industrial Age School was never about tapping and cultivating this innate potential. It was never about growing human beings—it was designed to train factory workers en masse. Though almost everything has changed in the reality for our students since this model was implemented almost 200 years ago, the basic design of school has only been
Social and Emotional Learning Defined

Social and Emotional Learning (SEL) is an approach to learning in which children develop the knowledge, attitudes, and skills necessary to manage their emotions, demonstrate caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations constructively. For children to succeed in developing these life skills, SEL must be taught in the context of safe and supportive school, family, and community learning environments where they feel valued and respected.

For more information, go to The Collaborative for Academic, Social, and Emotional Learning (CASEL).

adjusted incrementally, not fundamentally. We still have fixed grades (Grade 1, Grade 2, and so on right to Grade 12) that most students move through en masse, with rigid curricula guidelines and expert teachers who are supposed to endorse them. We are now standing at the edge of . . . a fundamental innovation, and through the combined lenses of the SEL and systems work, seeing how this innovation could occur.

[An] important synergy between SEL and systems thinking has to do with transforming pedagogy and the culture of school. For example, a key to making such a spiral view of cognitive-emotional development practical in real educational settings is profound respect. You don’t try to teach kids something that has no meaning to them, something that does not connect in any way with their lives. But unfortunately, that’s still the modus operandi for 80–90% of school curricula. In contrast, students at every level find SEL compelling because it helps them deal directly with the issues that matter most to them: bullying, friendships, getting along, and the like. . . .

The factory model we have inherited through the Industrial Age School was never about growing human beings—it was designed to train factory workers en masse.

A common discovery is that neither effective SEL nor effective systems education can be accomplished by traditional pedagogy, where teachers stand in front of classes and deliver information. When either is done well, there is a natural emphasis on experience-based lessons and on project-based learning, action learning, and cooperative learning, with students getting deeply engaged in matters that are important in their lives and taking responsibility for their own learning. These are all familiar instructional strategies to most educators, and can be effective across ages and diverse academic content. Yet, they are still the exception rather than the norm, in large part because educators know the concepts but are not adept at their practice, or because the constraints of most school cultures inhibit them in building these capacities.

We believe a wonderful joint project would be for leaders in SEL and systems education innovation to work on a common set of pedagogical principles, like:

• Respect the learner’s reality and processes of understanding.
• Focus on issues that are real to the learner.
• Allow students to build their own models, construct and test their own ways of making sense of problems.
• Work and learn together.
• Keep the focus on action and thinking, how I or we need to act or behave differently, not just think differently.
• Build students’ ability to be responsible for their own learning.
• Encourage peer dynamics where students help one another learn.
• Recognize teachers as designers, facilitators, and decision-makers (more than “curriculum deliverers”). This requires that teachers have strong content knowledge, continually being advanced through robust peer-learning networks.

Focusing on real innovation in pedagogy does not preclude attention to skills, curriculum, or standards. Rather, it builds more effective strategies for accomplishing overarching educational goals. . .

But these pedagogical principles are only half the story. Though commendable, they won’t be followed widely and effectively until they are paired with implementation principles.

Roger Weissberg, the founding director of the Collaborative for Academic, Social and Emotional Learning (CASEL), has often said that the most important—but also most neglected—aspect of SEL is its implementation. In the United Kingdom, the Ministry of Education ordered that a program called SEAL (“Social and Emotional Aspects of Learning”) be started in schools there in 2003. This was a top-down mandate, and not every
head of school or teaching staff was necessarily keen on the program, nor was there a standard curriculum. Perhaps no surprise, a study of the program’s effectiveness found that on average, SEAL didn’t really help kids that much. However, there was a great deal of variation in outcomes, with some schools having very positive results, even though others had poor outcomes.

And a major factor in the program’s success seemed to be how it was implemented. It’s not just having an outstanding curriculum that makes SEL succeed, but having all those involved understand, embody, and teach it effectively. It’s changing the culture of the school.

Beyond the programs themselves, bringing SEL into a school requires helping teachers prepare well, so they can embody what it is they’re going to teach. We should also involve parents to the greatest extent we can—the best SEL programs all have a component for parents.

There’s a natural two-way flow between classroom and home. Children who learn a technique for, say, self-management, will often bring the school lesson home to the family, as in, “Mommy, you’re starting to get upset, why you don’t take some deep breaths.” Such reports from home are common because the wall between school and home is somewhat of a fiction. A child lives in her whole world, not in walled-off parts. And what she learns in one place she brings to the other naturally whenever and wherever it applies.

One of the best practices in SEL is involving parents as much as possible. That way what children learn in school gets reinforced and supported by the people who matter to them the most: their families.

A simple rule-of-thumb is the more you’re really innovating, the more you’re stretching the norm, the more you must involve parents.

A simple rule-of-thumb is the more you’re really innovating, the more you’re stretching the norm, the more you must involve parents—two fundamental reasons. One is that parents can either get very threatened or they can become really engaged. The second is that kids don’t live in school. To be really respectful of the world of the child, you must reach out. Whether or not you realize it, you are really not educating kids, you are educating families.

ABOUT THE AUTHORS

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Reflections on the 2014 SoL Global Forum

GITTE LARSEN AND VICKY SCHUBERT

On May 21–23, 2014, 450 participants from around the world gathered in Paris, France, to take part in the SoL Global Forum: “Investing in Emerging Futures: New Players, New Games—Welcoming Metamorphosis.” Organized by SoL France, the event invited change leaders and organizational leaders to explore an urgent question together: “How can we facilitate and accelerate the metamorphosis of our organizations, firms, and society?” In this two-part article, Gitte Larsen, a newcomer to the Global SoL community, and Vicky Schubert, a long-time SoL contributor, share highlights from—and personal reflections on—the event. Their insightful commentary paints a picture of a community of people who are making the internal shifts necessary to lead profound changes in all those external systems that connect us.

Part I: My SoL Global Forum Moments

GITTE LARSEN

I was looking forward to participating in the SoL Global Forum in Paris this spring, not least because I’ve been invited to take part in the upcoming Danish SoL community by Steen Buchreitz, who’s a new member of the Board of the Global Association of SoL Communities (GASC) (see “Global Association of SoL Communities”). I was curious about the event, the content and form, and the international participants, and I was eager to learn more about what it means to be a member of SoL. I’m a first-timer to the SoL Global Forum, so you might consider me an outsider, an intruder, or just a traveler sharing some of my personal highlights and reflections from this event.

The purpose of SoL, which is to “discover, integrate and implement theories and practices of organizational learning for systemic change and to progress towards the vision of a living system in order to co-create a more sustainable world” perfectly fits my areas of interest. Being a futurist for almost 20 years has given me a holistic, interdisciplinary approach to thinking about transformational change. My work within the fields of sustainability and leadership during the last years has only confirmed that we need our minds and our hearts, our doing and our being, and a systemic as well as a personal approach if we are to create a future worth living.

We need our minds and our hearts, our doing and our being, and a systemic as well as a personal approach if we are to create a future worth living.
New Humans, New Structures
In the opening session of the Global Forum, we heard different voices from the two panels on stage, the first representing what you might call “the elders” and after them the next generation of leaders. Besides setting the tone, these voices together touched upon many of the most important aspects of where we are today and where we need to go tomorrow. (Recordings of the sessions can be found on the SoL Global Forum website).

Alain de Vulpian, social anthropologist and co-founder of Cofremca, stated that one of the most important changes since WW2 is that people have become increasingly individualistic, independent, and open-minded, including in the emotional dimension of life. “This is the first time in the history of mankind where we nourish both the rational and the irrational, and this has a huge impact on our society,” he said, noting that we use our rationality to deal with the irrational. “We discover something new and move forward, and we constantly have the impression that we can go that extra mile. Little by little, we become smarter, the scenarios look better, and we fine-tune our strategies on how to interact with other people to reach our goals. We find identity and meaning when we succeed in optimizing ourselves, and this fulfillment is one of the big things about our period compared to earlier stages of civilization.”

Another core aspect of transformative change that de Vulpian mentioned is communication technology, which allows people to establish links and relationships that will help them fulfill themselves and others. He concluded, “A new society is emerging, and there is a resistance among the former powers, for example, due to the traditional hierarchy, bureaucracy, and financial economy. These powers are out of sync with this new society—a society that is running better and better. Metamorphosis is underway.”

Arie de Geus, former vice president of Royal Dutch Shell, co-founder of SoL, and author of The Living Company, spoke next. “This forum’s program—the speakers, the title, and the focus on fundamental change—reminds me of the beginning of SoL. I was working for Shell, and when we began to look at our decision-making processes like a learning process, it opened a way to a whole new world for us. We found out that we had two kinds of learning processes. Assimilation was one where all the Shell leaders sat at a table and resolved the problems. They used knowledge that was already there. The other process is much more difficult, that is learning by accommodation. Something around you in the world is changing in a way that demands internal structures to change as well. When we started these processes, the answer wasn’t known. We had to learn to apply [them]. That brought us to the idea that organizations learn and to MIT, where we met Peter [Senge],” he said.

“A lot has changed [since then] in business and governmental institutions. Basically, people have changed, as Alain said…. We moved away from command and control, and the decision-making process should thereby have become much more visible, but in many companies this is not the case. We still see command-and-control companies
today. The decision-making process in the company still has an old structure, which is furthermore based in the law of most of our countries. Corporate law advocates for one particular party, namely the capital supplier, the shareholders who have the absolute power. This is built into the power structure of the company and the decision-making process. We have built this up since WW2, but the economic game has changed considerably. . . . We need to find ways to practice new internal structures of business and governmental institutions. They must be much more in harmony with the values that have emerged, that is, with our evolution as humans,' concluded de Geus.

Peter Senge, senior lecturer at MIT, co-founder of Sol, author of The Fifth Discipline, and co-author of The Necessary Revolution and Presence, spoke next. “I would like to ask what it means to be a coordinated global society. Alain talked about the ‘western-centrism’ of our thinking. We have a classic western dualism: Rationality versus emotions, and the versus part is really the heart of our western culture. The deepest level of change is cultural, not biological.”

Peter mentioned the three divides we need to bridge that Otto Scharmer and Katrin Kaufer defined in their book Leading from the Emerging Future: The ecological divide (between self and nature), the social divide (between self and other), and the spiritual divide (between self and self). “The separation of human and nature has been unfolding for many thousands of years, and the agricultural revolution was where it happened rather than the industrial age. We lost our connection with the living world. It has been a long journey of separation, and it will take us generations to re-establish, but it’s important to understand this journey ahead,” said Senge.

Next-Generation Leaders
Three next-generation leaders on a panel then talked about doing more with less, community power, happiness, values, and attitudes. Some of their comments were:

“We should treat life as an experiment. It’s too late to be pessimistic!”
—Next-generation panel participant

“We will be the first ones to do more with much less. Inequality is spreading, and we have no illusion of progress as we have known it so far. We have to reinvent it. But young people are optimistic about the future. We should not be afraid, but really enjoy and appreciate learning by doing. Failure is a key to success.”

“We should treat life as an experiment. It’s too late to be pessimistic! Technology, computers, social networks haven’t scaled the wealth, but we grew up with [them], and we have to find the right balance between technology and humanity.”

“Ideas have no value until they are tested and implemented. We believe in the circular, where we work, implement, and learn, and then start over.
again. We believe in being open to the outcome and not attached to a specific result.”

And finally, “What brings all these things together? Happiness is something that everyone strives for—let’s take it seriously! Today the educational system only prepares us for financial success.”

**A Sneak Peak into Other Plenum Sessions**

Here are highlights from three other talks that profoundly affected me:

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### Marie-Eve Marchand

Marie-Eve Marchand is a professional coach and founder of two programs at the University of Laval. She helps leaders to lead in creativity, from the heart as well as the mind, and she led the plenum meditations during the Global Forum. Title of presentation: “Self Transformation: A Prerequisite for Transforming the World.”

In her talk, Marchand said, “What does it mean to transform consciousness? There is no certainty, but it includes a need to be mindful in a world where we do not know the answers and where there’s no right solution. We need to be open-minded and use the intelligence of the heart or the brain cells at the heart level. I remember back in 2000, I was leading a group meditation and someone looked through the windows in the doors and said, ‘They all sit there looking totally spaced out!’ There wasn’t a lot of research about the effect of meditation back then. Today, articles are published daily, and we are a lot more familiar with the vocabulary.”

Marchand also touched upon the development of consciousness as a dynamic process, change within the same order of consciousness versus transformation of the order itself, orders of consciousness in adulthood, and intentional transformation. “Can we transform intentionally when we are not in crisis?” she asked. Her answer was, “Yes, if we want to.”

Marchand explained that in the higher orders of consciousness comes a simplicity, and that certain qualities are then inherent to the order itself, e.g., openness of heart linked to evolution. She also stated the convergence of many theories happening at this moment, including Spiral Dynamics and Kegan’s fifth order, which is labeled “we-consciousness.” The practices for intentional self-transformation toward this fifth order are meditation; yoga; a community of persons sharing; inspiring books, films, or presentations; spending time with wise persons; volunteer work; time in nature; and time.

The inner dispositions that support transformation are a firm intention, deep listening, humility,
self compassion, self observation, and the courage to face our own resistance.

After her talk, Marchand invited us to share with a person next to us our response to the question: “What is transforming in me at this time of my life, and which challenges do I face?”

Adam Kahane is a partner with Reos Partners in Canada, and he advocates storytelling to initiate social change. Title of presentation: “Power and Love to Manage Complexity.”

Kahane began, “I help people move forward on the most important issues—health, food, development—on all continents and with multiple actors (activists, academic, etc.). This is trial and error, and the social transformation of Power and Love is the essence of what I have learned from the last 20 years of work. We sometimes get stuck when trying to move things, and as Peter Senge and Otto Scharmer talk about, this is the nature of complex systems: These are systems we cannot change alone, but where we have to work with strangers and opponents. I have asked myself, How can we deal with this situation? When I observe myself and the people I work with, there are two basic ways or cycles of social transformation, and that is Power and Love. Both of them have two flip sides, a generative and a degenerative action.”

After Kahane had explained the two sides of Power and Love, he stated that there is symmetry between Power and Love. “Remember Martin Luther King. Power without Love is recklessness and abusive, and Love without Power is sentimental. And this is the central crisis of our time, and it’s about our capacity to act. Power and Love are primarily associated in their generative aspect, and they are only generative when they are combined—that is the guiding formula,” he said.

The success lies in moving between Power and Love before going into the generative action of either one or the other. Adam said, “It’s like walking on two feet, and we need both the left and the right. Both Power and Love are required. They are not the same, but at an abstract level they are two faces of the same thing, and we need to learn to work with both of these social transformation drivers. We should not try to weaken the one that is stronger, and we should not try to achieve a static balance, as there is only the dynamic relation—like walking. Only in this way, by learning to work with both these drives or aspects, can we achieve mastery in dealing with a complex challenge—and thereby get un-struck,” he said.

“Can we transform intentionally when we are not in crisis?”
—Marie-Eve Marchand

Lord David Owen, member of the House of Lords in the UK and former secretary of State for Foreign and Commonwealth Affairs, studies the “hubris syndrome” and its impact on decision-making. The title of his presentation: “The hubris syndrome, an obstacle to the transformation of organizations.”

Lord Owen, who has a medical education as background, talked about mental illness among US presidents and went through the symptoms of the hubris syndrome. He raised the important question of the health of any leader in politics and business. “How can the boards of companies check this?” he asked. In many cases, illness, including mental illness, is kept confidential between a personal doctor and the patient, partly due to the fear of the press. Lord Owen stated that when it concerns crucial decision makers like presidents, we should have independent doctors to make public statements.

The hubris syndrome shows that someone’s mental stability changes when he or she is in power. “Power is a heavy drug,” Lord Owen said and referred to a classic General Motors study that showed how powerful people distance themselves from reality and how the decision makers no longer live in the same world as the organization they lead.
The Symptoms of the Hubris Syndrome

Proposed criteria for hubris syndrome and their correspondence to features of cluster B personality disorders in DSM-IV.

1. A narcissistic propensity to see their world primarily as an arena in which to exercise power and seek glory (NPD.6)
2. A predisposition to take actions which seem likely to cast the individual in a good light—i.e., in order to enhance image (NPD.1)
3. A disproportionate concern with image and presentation (NPD.3)
4. A messianic manner of talking about current activities and a tendency to exaltation (NPD.2)
5. An identification with the nation or organization to the extent that the individual regards his/her outlook and interests as identical (Unique)
6. A tendency to speak in the third person or use the royal “we” (Unique)
7. Excessive confidence in the individual’s own judgment and contempt for the advice or criticism of others (NPD.9)
8. Exaggerated self-belief, bordering on a sense of omnipotence, in what they personally can achieve (NPD.1 and 2 combined)
9. A belief that rather than being accountable to the mundane court of colleagues or public opinion, the court to which they answer is: History or God (NPD.3)
10. An unshakable belief that in that court they will be vindicated (Unique)
11. Loss of contact with reality; often associated with progressive isolation (APD 3 and 5)
12. Restlessness, recklessness, and impulsiveness (Unique)
13. A tendency to allow their “broad vision,” about the moral rectitude of a proposed course, to obviate the need to consider practicality, cost, or outcomes (Unique)
14. Hubristic incompetence, where things go wrong because too much self-confidence has led the leader not to worry about the nuts and bolts of policy (HPD.5)

APD = Anti-Social Personality Disorder
HPD = Histrionic Personality Disorder
NPD = Narcissistic Personality Disorder

© Lord David Owen

Silence, Space, and Leadership

Wrapping up the three days happened over a couple of hours, including a last meeting up in basecamps (small groups of 3–5 people that met a couple of times each day), a silent walk around the graphic facilitation posters, more questions, some reflections from the participants, plus closing words from Peter Senge (see “Take Aways”). The closing session also including well-deserved applause for all the organizers and helpers.

“Silence is an untapped potential. Even though we all have a lot to say, let us sit in silence for some minutes,” said Senge. After the silence, he continued, “I realized that I enjoyed the pauses and the meditations the most, and that this is a new awareness in my life, which is so filled with doing at the expense of being. The space for change is not created through our actions.”

Closing the Global Forum, Peter also said, “There is an ambiguity about being present. When we share our story, have conversations, turn together, something happens. It starts by two dancers that are having a conversation, and then 10 are. At some point, something shifted. Yesterday, in the middle of the day, when we sat in the circle, what was that? You talk and you talk and talk until the talk starts. This could be at any time in your life. It arises naturally and is spontaneous among us. Notice when the talk starts.”

Less Is More: A Personal Reflection

At the Global Forum I once again confirmed that Mother Earth needs our care and collaboration now if we—the people, the human race—are to have a home in the future. It’s the only place for us to live and thrive, but we seem to be somehow out of tune with the universal tone, internally as well as externally.

It’s not only people or our internal world that has changed a lot during the last century and decades. In particular, population growth and exponential economic growth has had an enormous impact on societal development. To illustrate the scale of this change, almost 80% of total global
economic output over the last 2,000 years has been produced since 1900, and a quarter of this output has taken place since the year 2000 (source: Angus Maddison; UN; *The Economist*). World population has risen from 1.822 billion in 1910 to more than 7 billion now, and the estimates are for 10 billion people in 2100. Given these projections, some scientists think that there is only a 50% chance that the human species will survive the 21st century.

For many of us, it is hard to believe in this “fastest, best, cheapest” society. Every morning, we “put on” the rationality of a growth-oriented capitalism invented in and for the past. It is so well established that we don’t even think about it; we just accept that this is the way the world is and works. It’s not only how we act; it is who we are. And yet, as Alain de Vulpian spoke about, new economies and more enlightened human beings are emerging all over the world. But emancipation isn’t enough. We also need to take the step to the next level of consciousness, as Marie-Eve Marchand spoke about. Too few leaders know what they want to do with their leadership besides improve Key Performance Indicators. Many more leaders need to personally make a new choice to serve not only the past and present, but also the future, the next generations, the whole.

I’ve always been inspired by Buckminster Fuller, a visionary madman and a futurist, who was born in the last century (1895–1983). He went to Harvard and was expelled twice, first for spending all his money partying, and then for his irresponsibility and lack of interest. By his own appraisal, he was a non-conforming misfit, and he lived a poor and unhappy life. But in 1927, at the age of 32, he decided to do his “own thinking.” What gave him the courage was that he believed he’d been right about the unsustainable state of society even when society didn’t know it yet. By coining the term “Spaceship Earth,” he invented a new perspective, long before we all saw the Blue Planet from the moon. He was able to go beyond the thinking of his time and declared that we are called to be architects of our own future, not

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**Take Aways**

Peter Senge led the forum’s closing session by hearing from different people, and he said: “The goal is to start to get a feeling of moving collectively. So, what do you take away from this forum?” Here is a selection of the one-liners from the floor:

- Knowing that I’m not alone.
- Position of gratitude.
- I think I only want to share my breath [*sound of breath*].
- Cannot stop thinking about people who are not here and the fact than I’m here.
- Came with big problems and go back with solutions. Thank you, it was nice and loving.
- Feel the power of this community, and it takes time and energy to create a better world, so we need to know we’re together.
- Talking about the things that could go wrong, I found a lot of goodness here.
- The metaphor about the caterpillar becoming a butterfly showed up at any stage of the journey.
- There are 30-40 people that I would like to meet again and work together with.
- I lost my iPhone, but this is me here in touch, in my own space, and I’ll enjoy the silence for a while.
- We are building a common structure for humanity.
- Deep emotions currently, three days of connection.
- Many names come to mind, embodying presence and warmth.
- Missed talking about the shadow side and the critical feedback.
- I was challenged by a friend to start from the inside, and during these days I experienced what that is.
- I trust life now.
- Very grateful to be part of something bigger, and I leave feeling more powerful, daring to care, taking this energy back into my everyday life.
- Met my light and my shadow, both part of the life.
Samsoe, the renewable energy island in Denmark, is a great example of a community-based transformation to renewable energy, including wind power, solar plants, bio-fuel, and energy reductions. The lesson learned, both from Samsoe and similar projects all over the world, is that what makes the difference is local ownership (e.g., 90% of the windmills are owned by the local islanders), the involvement of local citizens in the decision-making processes (including addressing the “what’s in it for me” question), and the joining together around a common goal, or “commonity” (community+common=commonity). Samsoe’s present vision is to become independent from fossil fuels by 2030. Citizens around the world have to make new paths to reach these kinds of goals. The challenges ahead are massive. And the changes in the external environment demand changes in our internal environment as well. We cannot change the outside world without also changing our inside world, our worldview, our mindset. We have learned that becoming materially richer (after a certain level) does not make us happier. What we are about to learn is how we can do more with less. How can we become humans of the future? Are we resilient enough to survive, and if we are, what is the future we want?

We can and we do create the future every day—and the future must always be with us in the present.

its victims. “Bucky,” as he was called, believed in humanity’s ability to create a future worth living.

More and more people are seeking and longing for a more coherent and sustainable lifestyle, personally and professionally. A growing percentage of the world’s population also experiences a more or less desperate need for resilience in the short run due to lack of income, water, food, medicine, and energy, or due to natural disasters. Our common challenges are many—and there are no experts. More and more people are realizing that the necessary and fundamental change, the metamorphosis, cannot be done by individuals but only in co-creative circles, networks, and communities. We need a whole new perspective, not only on decision making and institutional organizing, but on what it means to be human.

ABOUT THE AUTHOR

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Part 2: Inside the Cocoon—Witnessing the Metamorphosis of a Global Learning Community

VICKY SCHUBERT

While Gitte Larsen may be new to SoL, she expresses in her reflection two beliefs that give her instant membership in this global learning community. The first is that “we can and do create the future every day,” and the second is that the transformation called for in this evolutionary moment can only be realized in “co-creative circles, networks, and communities.”

It was with equal conviction in those two ideas that I attended the Global Forum in Paris not as a newcomer like Gitte, but as a returner, eager to contribute and to see what Global SoL had become in the decade since I had helped organize the first two Global Forums in Helsinki and Vienna. What I found was a community actively welcoming metamorphosis, as suggested in the theme of the meeting—focusing not so much on what we have become as on what we are becoming—and pulsing with life as seen in the many action research initiatives its members are pursuing.

In the Nutritive Soup

Like the organizations and institutions whose learning practices SoL seeks to transform, the Global Association of SoL Communities (GASC) is, of course, subject to the same prevailing conditions of uncertainty and discontinuity described by Alain de Vulpian, Arie de Gues, and Peter Senge in the Forum’s opening session.

The transformation called for in this evolutionary moment can only be realized in co-creative circles, networks, and communities.
It is interesting to note that when Senge published *The Fifth Discipline* in 1990, the World Wide Web was just in its infancy, having been proposed in a memo by Tim Berners Lee the previous year. As SoL has grown up alongside it, the Web has catalyzed a new era of individual empowerment and networked connectivity that has irrevocably eliminated the notion of “business as usual” for every kind of organization. The resulting environment is ripe for the kind of innovation and experimentation that SoL has represented from the start. The community’s commitment to self-organization and chaordic principles now seems strikingly ahead of its time and perfectly suited to the present moment.

**The SoL community’s commitment to self-organization and chaordic principles now seems strikingly ahead of its time and perfectly suited to the present moment.**

But that’s not to say those principles don’t pose challenges for those who have taken the lead in crafting minimum sustainable structures for the organization. In iterative conversations and agreements that began as early as 1997, aspirational community stewards have nurtured SoL’s sometimes tumultuous progression from an academic center at MIT, to a nonprofit organization based in Cambridge, Massachusetts, to an international network of networks with a shared vision of organizational and planetary well-being. Members of the current General Assembly report that their meeting just prior to the Global Forum was particularly productive and, at the same time, raised continuing questions. When enthusiastic change agents in Mainland China are legally precluded from incorporating as an official member of GASC, community leaders must reach beyond familiar frames of reference and stay oriented to inquiry: “How do we adapt to this different way of thinking about organization?” “How do we accommodate the legitimate co-existence of formal and informal alliances?” And so, the soup continues to bubble.

By its nature, GASC is an experiment, a concoction of becoming whose members have already done enormous good and that—now with 31 established and emerging communities active on six continents—holds the promise of exponential impact.

**Some Bright Imaginal Cells**

What do we know about the butterfly wings that have been taking shape in the midst of this nutritive soup? The Forum in Paris offered lots of evidence that, at the cellular level, GASC is gaining strength in ways that will lead to sustained flight.
**Vibrant Communities: SoL France As Role Model**

SoL France, our host community for this Global Forum, is one of the most enduring and generative communities in the global SoL network. Successfully blending practice and research, they have demonstrated a commitment to documented action learning that serves as a model for other existing and emerging SoL communities (see, for example, the 2011 special edition of *Reflections* in which they captured the lessons from their first 10 years).

Many of SoL France’s strengths were embedded in the Forum design. In plenary sessions, we heard stories reflective of an integrated local/global perspective, from La Poste’s reimagining of the role of the mail carrier to the World Bank’s efforts to scale up innovative sanitation practices. With plenty of time devoted to “basecamp” meet-ups and learning story sessions, peer sharing and reflection was given an equal footing with expert presentations as a context for learning. Whole-person awareness was honored throughout the event, with lots of opportunities for multiple-learning modalities, mindfulness, and movement. And the final day, devoted to cross-fertilization among participant-led projects, reinforced the place of applied research at the center of SoL’s identity.

**An Instinct for Knowledge Sharing**

Another encouraging sign of GASC’s cellular health was the generosity and curiosity of individual Forum participants. I had the privilege of offering a workshop on the Butterfly Framework of Complex Human Systems—a visual tool that serves as a kind of Global Positioning System for helping people see and navigate their systemic environ-
ments (see “The Butterfly Framework”). The Butterfly Framework is itself a product of the SoL learning community. It was developed by a small group of SoL consultants, several of them now my partners, who through exploratory conversation in 2009 discovered that they had each, in varying ways, integrated the notion of a systems perspective into their coaching practice. Compelled to advance the field by sharing their learning back to the global community, they designed a course called Coaching from a Systems Perspective, which has since been offered in several cities around the world; the workshop at the Forum was designed with the same co-creative intention.

That appetite for connection and sharing points to the community’s growing confidence in itself as a living, complex adaptive system, open to learning from its edges.

What was most gratifying about the workshop was the way the Butterfly Framework stimulated participants to share the system navigation tools and methods they have found most effective in their work. I came away with a wall-full of possibilities for collaborative inquiry and action.

**Attunement to the Edge**

That appetite for connection and sharing points to another vital sign that, in Paris, seemed more robust than ever: The community’s growing confidence in itself as a living, complex adaptive system, open to learning from its edges, where it overlaps and intersects with other systems.

For example, two of the people I was most impressed with at the Forum were young researchers who, in their separate ways, bring an interdisciplinary perspective to organizational learning. Andreas Hieronymi of St. Gallen University in Switzerland was recently recognized for his contribution to transdisciplinary research by td-net, an initiative of the Swiss Academies of Arts and Sciences, for his paper “Understanding Systems Science: A Visual and Integrative Approach.” Camille Morvan, a French post-doctoral researcher and co-founder of the award-winning cognitive science start-up Goshaba, is in the early stages of a project looking at the relationship between our hard-wired survival instincts and our capacity for collective intelligence. In general, while there is still room for improvement in intergenerational engagement, younger participants contributed significantly to the quality of the Forum, not just as learners but equally as teachers and as active representatives of complementary learning networks.

Another edge dynamic was visible in the excitement surrounding an “East Meets West” subtheme, with representatives from several Asian countries active in the Forum community, and two of them—China and India—vying to host the next Global Forum in 2016. One of the leaders of SoL’s emergence in China, Will Zhang, is partnering with SoL France on a project dubbed “New Silk Road” that aims to revive a dialogue between two ancient cultures. GASC’s vision of additional SoL communities in the East and in the global South is motivated not just by a desire to grow the community in numbers, but also to expand understanding about how organizational learning can be adapted to new and different cultural contexts.

In short, I would say that I saw in the cocoon of the Global Forum encouraging patterns of balance, resilience, flexibility, and aspiration. That makes for a beautiful butterfly in progress.

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