



PRESENCE

EXPLORING PROFUND CHANGE IN PEOPLE, ORGANIZATIONS AND SOCIETY

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Of Parts and Wholes

Everything we have to say in *Presence* starts with understanding the nature of wholes, and how parts and wholes are interrelated. Our normal way of thinking cheats us. It leads us to think of wholes as made up of many parts, the way a car is made up of wheels, a chassis, and a drive train. In this way of thinking, the whole is assembled from the parts and depends upon them to work effectively. If a part is broken, it must be repaired or replaced. This is a very logical way of thinking about machines. But living Systems are different.

Unlike machines, living Systems, such as your body or a tree, create themselves. They are not mere assemblages of their parts but are continually growing and changing along with their elements. Almost two hundred years ago, Goethe, the German writer and scientist, argued that this meant we had to think very differently about wholes and parts.

For Goethe, the whole was something dynamic and living that continually comes into being "in concrete manifestations." A part, in turn, was a manifestation of the whole, rather than just a component of it. Neither exists without the other. The whole exists through continually manifesting in the parts, and the parts exist as embodiments of the whole.

The inventor Buckminster Fuller was fond of holding up his hand and asking people, "What is this?" Invariably, they would respond, "It's a hand." He would then point out that the cells that made up that hand were continually dying and regenerating themselves. What seems tangible is continually changing: in fact, a hand is completely recreated within a year or so. So when we see a hand—or an entire body or any living System—as a static "thing," we are mistaken. "What you see is not a hand," said Fuller. "It is a 'pattern integrity,' the universe's capability to create hands."

For Fuller, this "pattern integrity" was the whole of which each particular hand is a concrete manifestation. Biologist Rupert Sheldrake calls the underlying organizing pattern the formative field of the organism. "In self-organizing Systems at all levels of complexity," says Sheldrake, "there is a wholeness that depends on a characteristic organizing field of that system, its morphic field. Moreover, Sheldrake says, the generative field of a living system extends into its environment and connects the two. For example, every cell contains identical DNA information for the larger organism, yet cells also differentiate as they mature—into eye, or heart, or kidney cells. This happens because cells develop a kind of social identity according to their immediate context and what is needed for the health of the larger organism. When a cell's morphic field deteriorates, its awareness of the larger whole deteriorates. A cell that loses its social identity reverts to blind undifferentiated cell division, which can ultimately threaten the life of the larger organism. It is what we know as cancer.

To appreciate the relationship between parts and wholes in living Systems, we do not need to study nature at the microscopic level. If you gaze up at the nighttime sky, you see all of the sky visible from where you stand. Yet the pupil of your eye, fully open, is less than a centimeter across. Somehow, light from the whole of the sky must be present in the small space of your eye. And if your pupil were

only half as large, or only one quarter as large, this would still be so. Light from the entirety of the nighttime sky is present in every space—no matter how small. This is exactly the same phenomenon evident in a hologram. The three-dimensional image created by interacting laser beams can be cut in half indefinitely, and each piece, no matter how small, will still contain the entire image. This reveals what is perhaps the most mysterious aspect of parts and wholes as physicist Henri Bortoft says, "Everything is in everything."

When we eventually grasp the wholeness of nature, it can be shocking. In nature, as Bortoft puts it, "The part is a place for the presencing of the whole." This is the awareness that is stolen from us when we accept the machine worldview of wholes assembled from replaceable parts.

The Emergence of Living Institutions

Nowhere is it more important to understand the relation between parts and wholes than in the evolution of global institutions and the larger Systems they collectively create. Arie de Geus, author of *The Living Company* and a pioneer of the organizational learning movement, says that the twentieth Century witnessed the emergence of a new species on earth—that of large institutions, notably, global corporations. This is a historic development. Prior to the last hundred years, there were few examples of globe-spanning institutions. But today, global institutions are proliferating seemingly without bound, along with the global infrastructures for finance, distribution and supply, and communication they create.

This new species' expansion is affecting life for almost all other species on the planet. Historically, no individual, tribe, or even nation could possibly alter the global climate, destroy thousands of species, or shift the chemical balance of the atmosphere. Yet that is exactly what is happening today, as our individual actions are mediated and magnified through the growing network of global institutions. That network determines what technologies are developed and how they are applied. It shapes political agendas as national governments respond to the priorities of global business, international trade, and economic development. It is reshaping social realities as it divides the world between those who benefit from the new global economy and those who do not. And it is propagating a global culture of instant communication, individualism, and material acquisition that threatens traditional family, religious, and social structures. In short, the emergence of global institutions represents a dramatic shift in the conditions for life on the planet.

It may seem odd to think about titanic forces such as globalization and the information revolution as arising from the actions of a new species. But it is also empowering. Rather than attributing the changes sweeping the world to a handful of all-powerful individuals or faceless "systems," we can view them as the consequences of a life-form that, like any life form, has the potential to grow, learn, and evolve. But until that potential is activated, industrial age institutions will continue to expand blindly, unaware of their part in a larger whole or of the consequences of their growth, like cells that have lost their social identity and reverted to growth for its own sake.

The species of global institutions reshaping the world includes non-business organizations as well. Today, for example, it's possible to enter an urban school in China or India or Brazil and immediately recognize a way of organizing education that has become completely taken for granted in the West. Students sit passively in separate classrooms. Everything is coordinated by a predetermined plan, with bells and whistles marking time, and tests and plans to keep things moving like one giant assembly line throughout each hour, day, and year. Indeed, it was the assembly line that inspired the industrial age school design, with the aim of producing a uniform, standardized product as efficiently as possible. Though the need to encourage thoughtful, knowledgeable, compassionate global citizens in the twenty-first century differs profoundly from the need to train factory workers in the nineteenth century, the industrial age school continues to expand, largely unaffected by the realities within which children are growing up in the present day.

As Buckminster Fuller pointed out, a living system continually recreates itself. But how this occurs in social systems such as global institutions depends on both our individual and collective level of awareness. For example, each individual school is both a whole unto itself and a part, a place for the "presencing" of the larger educational system. So, too, is each individual member of the school: teachers, administrators, students, and parents. In particular, adults carry the memory, expectations, and emotions of their own experience as schoolchildren. The same holds true in businesses: the organization's members become vehicles for presencing the prevailing systems of management because those systems are most familiar. As long as our thinking is governed by habit—notably by industrial, "machine age" concepts such as control, predictability, standardization, and "faster is better"—we will continue to re-create institutions as they have been, despite their disharmony with the

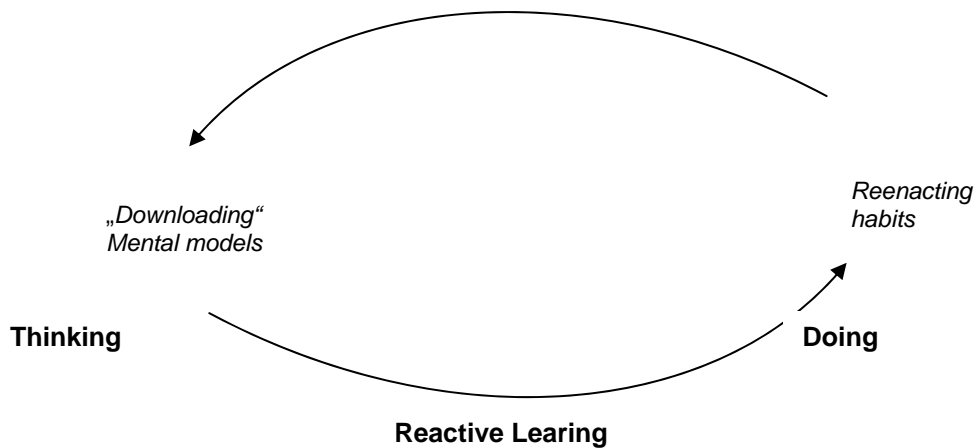
larger world, and the need of all living systems to evolve.

In short, the basic problem with the new species of global institutions is that they have not yet become aware of themselves as living. Once they do, they can then become a place for the presencing of the whole as it might be, not just as it has been.

New Ways of Thinking about Learning

Our actions are most likely to revert to what is habitual when we are in a state of fear or anxiety. Collective actions are no different. Even as conditions in the world change dramatically, most businesses, governments, schools, and other large organizations, driven by fear, continue to take the same kinds of institutional actions that they always have.

This does not mean that no learning occurs. But it is a limited type of learning: learning how best to react to circumstances we see ourselves as having had no hand in creating. Reactive learning is governed by "downloading" habitual ways of thinking, of continuing to see the world within the familiar categories we're comfortable with. We discount interpretations and options for action that are different from



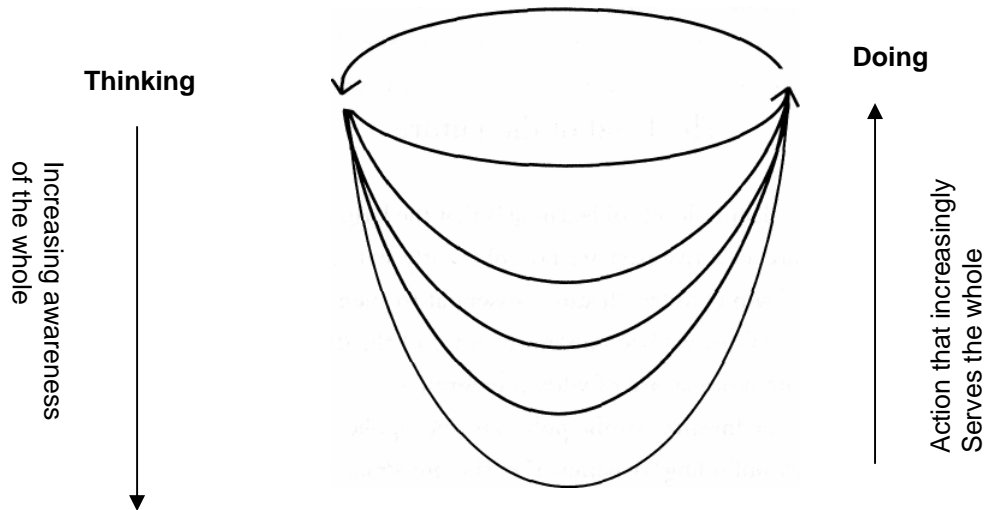
All learning integrates thinking and doing. In reactive learning, thinking is governed by established mental models and doing is governed by established habits of action.

we know and trust. We act to defend our interests. In reactive learning, our actions are actually reenacted habits, and we invariably end up reinforcing pre-established mental models. Regardless of the outcome, we end up being "right." At best, we get better at what we have always done. We remain secure in the cocoon of our own worldview, isolated from the larger world.

But different types of learning are possible. More than seven years ago, Joseph and Otto began interviewing leading scientists, and business and social entrepreneurs. Those interviews—which now total more than 150—often began by asking each person, "What question lies at the heart of your work?" Together, the two groups illuminated a type of learning that could lead to the creation of a world not governed primarily by habit.

All learning integrates thinking and doing. All learning is about how we interact in the world and the types of capacities that develop from our interactions. What differs is the depth of the awareness and the consequent source of action. If awareness never reaches beyond superficial events and current circumstances, actions will be reactions. If, on the other hand, we penetrate more deeply to see the larger wholes that generate "what is" and our own connection to this wholeness, the source and effectiveness of our actions can change dramatically.

In talking with pioneering scientists, we found extraordinary insights into our latent capacity for deeper seeing and the effects such awareness can have on our understanding, our sense of self, and our sense of belonging in the world. In talking with entrepreneurs, we found extraordinary clarity regarding what it means to act in the service of what is emerging so that new intuitions and insights create new realities. But we also found that for the most part, neither of these groups talks with the other. We came to realize that both groups are really talking about the same process—the process whereby we learn to "presence" an emerging whole, to become what George Bernard Shaw called "a force of nature."



Deeper Levels of Learning

Deeper levels of learning create increasing awareness of the larger whole—both as it is and as it is evolving—and actions that increasingly become part of creating alternative futures

The Field of the Future

The key to the deeper levels of learning is that the larger living wholes of which we are an active part are not inherently static. Like all living systems, they both conserve features essential to their existence and seek to evolve. When we become more aware of the dynamic whole, we also become more aware of what is emerging.

Jonas Salk, the inventor of the polio vaccine, spoke of tapping into the continually unfolding "dynamism" of the universe, and experiencing its evolution as "an active process that ... I can guide by the choices I make." He felt that this ability had enabled him to reject common wisdom and develop a vaccine that eventually saved millions of lives.

Many of the entrepreneurs we interviewed had successfully created multiple businesses and organizations. Consistently, each felt that the entrepreneurial ability was an expression of the capacity to sense an emerging reality and to act in harmony with it. As W. Brian Arthur, noted economist of the Santa Fe Institute, put it, "Every profound innovation is based on an inward-bound journey, on going to a deeper place where knowing comes to the surface."

This inward-bound journey lies at the heart of all creativity, whether in the arts, in business, or in science. Many scientists and inventors, like artists and entrepreneurs, live in a paradoxical state of great confidence and profound humility—knowing that their choices and actions matter and feeling guided by forces beyond their making. Their work is to "release the hand from the marble that holds it prisoner," as Michelangelo put it. They know that their actions are vital to this accomplishment, but they also feel that the hand "wants to be released."

Can living institutions learn to tap into a larger field to guide them toward what is healthy for the whole? What understanding and capacities will this require of people individually and collectively?

Presence

We've come to believe that the core capacity needed to access the field of the future is presence. We first thought of presence as being fully conscious and aware in the present moment. Then we began to appreciate presence as deep listening, of being open beyond one's preconceptions and historical ways of making sense. We came to see the importance of letting go of old identities and the need to control and, as Salk said, making choices to serve the evolution of life. Ultimately, we came to see all these aspects of presence as leading to a state of "letting come," of consciously participating in a larger field for change. When this happens, the field shifts, and the forces shaping a situation can move from re-creating the past to manifesting or realizing an emerging future.

[...]

In the end, we concluded that understanding presence and the possibilities of larger fields for change can come only from many perspectives—from the emerging science of living systems, from the creative arts, from profound organizational change experiences, and from direct contact with the generative capacities of nature.
[...]

An Emerging Understanding: The Theory of the U

We gradually realized that an understanding that had been incubating for many years was becoming clearer. This understanding had been embedded in the work Joseph and Otto had been engaged in for several years, and in experiences each of us had had when we encountered "an emerging future that depended upon us." Insights from Joseph and Otto's interviews now started to combine with our direct experience to reveal the process at work in these extraordinary moments. Many of the people Joseph and Otto interviewed had illuminated different aspects of this process, and one, the economist Brian Arthur, had laid out a complete picture.

The Seeds of a Theory

In 1999, when Otto and Joseph first interviewed him, Arthur talked about the need to "sense an emerging future" in order to meet the challenges of managing in an increasingly technology-based economy.' As the pace of technological development quickens, so does the rate of what the economist Joseph Schumpeter called "creative destruction"*—of products, companies, and even entire industries. This leads, said Arthur, to the continual "forming, configuring, locking in, and decaying of structures." Little is predictable or repetitive. Problems are not well defined. The rules of the game as well as the other players change rapidly as the stakes get increasingly higher. Overall, business operates less and less like "the halls of production of the old, repetitive manufacturing industry" and more and more like a kind of "casino of technology." In this kind of business environment, making decisions based on the habits of past experience is no longer optimal—or wise. As Arthur pointed out, business leaders such as Bill Gates, Steve Jobs, and Sam Walton have succeeded in the new business environment because they know "how to distance themselves from the 'problem' and to avoid knee-jerk reactions." They have developed the capacity to avoid imposing old frameworks on new realities. Arthur's view encompassed suspension and redirection, but it also linked these to a different way in which action arises, through a process he called a "different sort of knowing." "You observe and observe and let this experience well up into something appropriate. In a sense, there's no decisionmaking," he said. "What to do just becomes obvious. You can't rush it. Much of it depends on where you're coming from and who you are as a person. All you can do is position yourself according to your unfolding vision of what is coming. A totally different set of rules applies. You need to 'feel out' what to do. You hang back, you observe. You're more like a surfer or a really good race car driver. You don't act out of deduction, you act out of an inner feel, making sense as you go. You're not even thinking. You're at one with the situation.

"Traditionally, Chinese and Japanese artists sit and look at a landscape. They might sit on a ledge for a whole week just looking at the landscape and then suddenly move to paint something very quickly. It's the same with martial arts: if you have to think in martial arts, you're dead. The twenty or thirty years of training you've had mean that you've internalized lots of possible patterns and can direct all your attention to what is happening right now."

He pointed out parallels in science as well, saying that "most scientists take existing frameworks and overlay them onto some situation," while "first-rate ones sit back and study the situation from many, many angles and then ask, 'What's fundamentally going on here?' My observation is that these outstanding people have no more intelligence than the 'good' scientists do, but they do have this other ability, and that makes all the difference.

"There are many types of understanding. The simplest is a sort of knee-jerk understanding where you just say, 'Oh, they've got an inventory problem here.' Then there's the deeper kind of understanding that asks, 'What really is the problem here?' The first type of understanding tends to be the standard cognitive kind that you can work with in your conscious mind. But there's a deeper level that's more fundamental—and more rewarding. Instead of calling it 'understanding,' I would call this deeper level 'knowing.'"

When Otto asked about this "knowing" and how it arises, Arthur responded, "This inner knowing comes from here," pointing to his heart. "Every one of us has experienced this in different ways, con-

sciously or unconsciously."

In response to Joseph asking how this would work for managers and leaders who are under enormous pressure to act fast, Arthur replied that the kind of observation he was referring to "might take days or hours or fractions of a second in martial arts, or in sports. My point is that if you do the knee-jerk thing, you're overlaying a stock solution on a new situation. In this country, managers think that a fast decision is what counts. If the situation is new, slowing down is necessary. Slow down. Observe. Position yourself. Then act fast and with a natural flow that comes from the inner knowing. You have to slow down long enough to really see what's needed. With a freshness of vision, you have the possibility of a freshness of action, and the overall response on a collective level can be much quicker than trying to implement hasty decisions that aren't compelling to people."

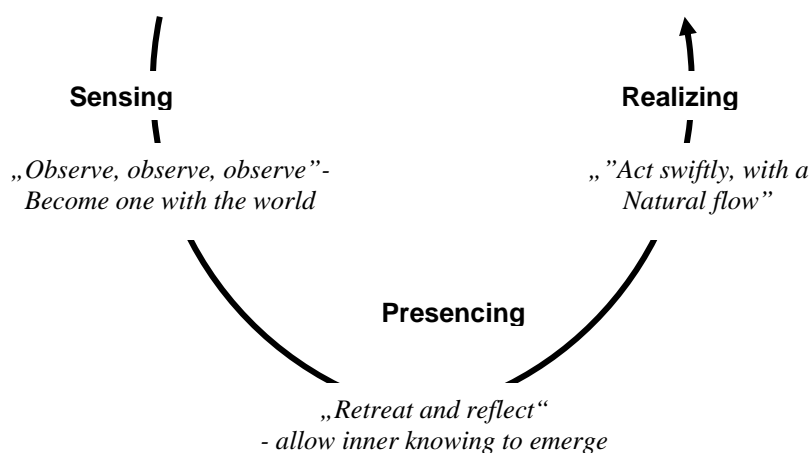
A Second Type of Learning

We began to see that Arthur was talking about a "second type" of learning, in which the future becomes more active. From John Dewey on, theorists have argued that we learn from the past through cycles of action and reflection that lead to new actions. But Arthur was pointing to a different type of learning process where we learn instead from a future that has not yet happened and from continually discovering our part in bringing that future to pass. Learning based on the past suffices when the past is a good guide to the future. But it leaves us blind to profound shifts when whole new forces shaping change arise.

Dewey's original articulation of the learning cycle involved four stages: "observe," "discover," "invent" (new actions), and "produce" (those actions). Since then, academics and consultants have developed many versions of the Dewey learning cycle. While these versions differ in terminology and particular details from Dewey's original, they remain true to Dewey's original intent of characterizing what happens in learning from past experience as do virtually all models of sustaining learning based on past experience in working teams and in larger organizational units. The same is true for common models of organizational change. For example, models of "planned change" typically involve three stages: gather information, following due diligence procedures; decide what you want to do, making decisions and enrolling people in the decision; and follow through, monitoring and adjusting as you go.

But as Adam Kahane says, most change processes are superficial because they don't generate the depth of understanding and commitment that is required for sustaining change in truly demanding circumstances. Planning, deciding, and monitoring and controlling the ensuing process may be all that are needed in situations where change is essentially about reacting to new circumstances but, says Kahane, "when you're facing very difficult issues or dilemmas, when very different people need to align in very complex settings, and when the future might really be very different from the past, a different process is required."

For several years, Joseph had talked about this different process as "sensing and actualizing new realities prior to their emerging." At the same time, Otto had been developing a theory of different levels of perception and change, using the image of a "U" to distinguish different depths of perceiving reality and different levels of action that follow from that. In Arthur's terms, the process entails three major stages or elements: "Observe, observe, observe"—become one with the world; "retreat and reflect"—allow the inner knowing to emerge; "act swiftly, with a natural flow." We have come to call these sensing, presencing, and realizing



Sensing

The three basic aspects of this U movement are extensions of what happens in all learning processes. That's why they bear a superficial similarity to standard models of planned change. In a sense, more superficial learning and change processes are abbreviated versions of the U movement. Most change efforts, for example, don't move very far "down the U" because little deeper sensing occurs. Gathering information doesn't necessarily imply either suspending habitual ways of seeing or redirecting our attention to sense what is happening from within a situation or phenomenon, rather than from outside. It's quite possible to simply gather information that confirms our preexisting assumptions—indeed it's common. We "download our mental models," as Otto says, and see what we're prepared to see. In a sense, what we're seeing is our past, in the form of our mental models reflecting past experience. Even when we do suspend and see freshly, there's no guarantee that we will see our own connection to what exists already. By contrast, Arthur talked about not imposing preestablished frameworks, even tacitly, and immersing yourself in the reality of the situation until ultimately you become "one with the situation."

Presencing

Likewise, the depth of what happens in "sensing," moving down the U, shapes what happens thereafter. Standard theories of change revolve around making decisions, determining "the vision," and very often acting through a charismatic figure who can command people's "commitment to the vision." But Arthur spoke of reaching a state of clarity about and connection to what is emerging, to an "inner knowing" where, "in a sense, there is no decision making. What to do just becomes obvious," and what is achieved "depends on where you're coming from and who you are as a person." The rational calculus model of decision making and following through pays little attention to the inner state of the decision maker.

The state at the bottom of the U is *presenting*—seeing from the deepest source and becoming a vehicle for that source. When we suspend and redirect our attention, perception starts to arise from within the living process of the whole. When we are presencing, it moves further, to arise from the highest future possibility that connects self and whole. The real challenge in understanding presencing lies not in its abstractness but in the subtlety of the experience. This is redirecting—moving from seeing the details to accessing the imaginative capacity to see the living whole.

In effect, presencing constitutes a third type of seeing, beyond seeing external reality and beyond even seeing from within the living whole. It is seeing from within the source from which the future whole is emerging, peering back at the present from the future. In these moments, we can feel linked to our highest future possibility and destiny. The source of intention shifts from our past to a future that depends on us, as Otto says, "from your historical self, your desires and need, to your Self with al capital "S" as your highest future possibility.

We chose the term "presencing" to describe this state because it is about becoming totally present—to the larger space or field around us, to an expanded sense of self, and, ultimately, to what is emerging through us.

Realizing

Moving up the U involves bringing something new into reality, just as in the standard model of learning—but this action comes from a source that's deeper than the rational mind. Arthur's analogy to martial arts ("If you have to think in the martial arts, you're dead") emphasizes the importance of the ability to act in a natural flow.

In part, the magic comes from the capacity to sense something new and act instantaneously in accordance with what that felt knowledge dictates. By contrast, the chronic shortcoming of many planned change efforts is blind adherence to "the plan." The magic also arises because our awareness is expanded and the source of our intention has shifted. Just as moving down the U requires refraining from imposing preestablished frameworks, moving up from the bottom of the U involves not imposing our will. As Joseph puts it, "Operating from this larger intention brings into play forces one could never tap from just trying to impose our will on a situation."

We also realized that people moving up the U do not feel alone. They feel connected to one another and to the world. The most basic distinction between the theory of the U and the way we usually try to produce change lies, as Otto put it, in "the relationship between us, as observers and as actors, and the world in which we operate." At its essence, the theory of the U poses a question: "What does it mean to act in the world and not on the world?" In the standard model, the change leader or leaders are separate from what they're seeking to change. For example, executives seek to "change their

organization," as if it were an entity separate from themselves. They then find themselves frustrated when others resist the planned changes, again externalizing the difficulty. Indeed, the very terms "change program" or "rolling out the change initiative" imply the imposition of human will on a presumed external reality.

But the U theory suggests a different stance of "cocreation" between the individual or collective and the larger world. The self and the world are inescapably interconnected. The self doesn't react to a reality outside, nor does it create something new in isolation—rather, like the seed of a tree, it becomes the gateway for the coming into being of a new world.

About the Authors

Peter Senge is a senior lecturer at the MIT Sloan School of Management, and the Founding Chairperson of the Society for Organizational Learning (Sol.). He is the author of the widely acclaimed book, *The Fifth Discipline: The Art and Practice of the Learning Organization* (1990), which has sold a million copies worldwide and was identified as one of the seminal management books of the last seventy-five years by *Harvard Business Review* in 1997. He is coauthor of *The Fifth Discipline Fieldbook* (1994); a second fieldbook on sustaining change, *The Dance of Change* (1999); the award-winning *Schools that Learn* (2000); and his latest book *The Necessary Revolution: How Individuals and Organizations Are Working Together to Create a Sustainable World* (2008).

Peter is widely known as one of the most innovative thinkers about management and leadership in the world, translating the abstract ideas of systems theory into tools for better understanding economic and organizational change. His work today focuses on fostering collaboration among diverse business, governmental, and nongovernmental organizations in order to address long-term systemic change that is beyond the reach of individual organizations.

He received a B.S. in engineering from Stanford University, a M.S. in social systems modeling, and a Ph.D. in management from MIT.

C. Otto Scharmer is a Senior Lecturer at the MIT Sloan School of Management. He is also a Visiting Professor at the Center for Innovation and Knowledge Research, Helsinki School of Economics. An international action researcher, he is a cofounder of the Society for Organizational Learning and has consulted with multinational firms, international institutions, and NGOs in the United States, Europe, and Asia.

Scharmer holds a Ph.D. in economics and management from Witten-Herdecke University, Germany. His article "Strategic Leadership within the Triad Growth-Employment-Ecology" won the McKinsey Research Award in 1991. His most recent work has included research in the form of dialogue interviews with ISO eminent thinkers on leadership, strategy, and knowledge creation. A synthesis of this research has resulted in a theoretical framework and practice called presencing, which he elaborates in his forthcoming book, *Theory U: Leading from the Emerging Future*. With his colleagues, Otto has used presencing to facilitate profound innovation and change processes both within companies and across societal systems.

Joseph Jaworski is the Chairman of Generon Consulting and cofounder of the Global Leadership Initiative. Joseph has devoted much of his life to exploring the deeper dimensions of transformational leadership. He began his professional career as an attorney, specializing in domestic and international litigation at Bracewell & Patterson, a large Houston-based law firm where for fifteen years he was a senior partner and member of the executive committee. In 1975 he was elected as a fellow of the American College of Trial Lawyers. In addition, he ran a successful horse-breeding operation (Circle J Enterprises), and helped found several organizations, including a life insurance company and a refining company.

In 1980, Joseph founded the American Leadership Forum, a nongovernmental organization responsible for developing collaborative leadership. Ten years later, he was invited to join the Royal Dutch/Shell Group of companies in London, to lead Shell's renowned team of scenario planners. Thereafter he returned to the U.S. as a senior fellow and a member of the Board of Governors of the MIT Center for Organizational Learning, and was a founding member of the Society for Organizational Learning.

Joseph is the author of the critically-acclaimed book *Synchronicity* (Berrett-Koehler, 1996), an explication of generative leadership based upon his lifelong work and experience.

Senge, Peter, C.Otto Scharmer, Joseph Jaworski, Betty Sue Flowers (2005): *Presence. Exploring profound change in people, organizations and society*. London (Nicholas Brealey Publishing), S. 5- 15, S. 83-92, gekürzt /RS