

Presence

*Exploring Profound Change
in People, Organizations, and Society*

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Dedicated to the memory of Francisco J. Varela
(1946–2001)

this over the telephone, I cried like a baby—because I was afraid my life would go back to the way it used to be.’

“It took a scenario that he was going to die for Fred to wake up. It took that kind of shock for his life to be transformed. Maybe that’s what needs to happen for all of us, for everyone who lives on Earth. That could be what a requiem scenario offers us.”

There was silence for a moment.

“You know,” said Joseph quietly, “When all is said and done, the only change that will make a difference is the transformation of the human heart.”

2.

Seeing Our Seeing

In the movie *The Truman Show*, actor Jim Carey plays a man whose entire life is a television show, broadcast to millions, unknown to Truman himself. From his point of view, he is just living his life. In the middle of the movie, a group of reporters interview “the director,” the Godlike figure played by Ed Harris who literally determines Truman’s life—whether it’s going to rain or be sunny, the plot for the next week’s story, whether or not things will turn out OK for Truman. One interviewer asks the director, “How do you explain that Truman has never figured out that his whole life is just a television show?” The director responds, “We all accept reality as it is presented to us.”

Like Truman, our awareness presents itself to us as immediate and unmistakable. A table. A book. A sentence or word. Yet there is always much more than we “see.”¹ In the table are also a factory and workers,

a tree, a forest, water and soil, and rain clouds. Indeed, a book contains all of these as well. And a simple word or sentence that moves us speaks of a lifetime—of schools and teachers, of questions and dreams, of current problems and possibilities. With just the slightest pause, we can begin to appreciate the symphony of activities and experiences, past and present, that come together in each simple moment of awareness. Yet out of the symphony we typically hear only one or two notes. And these, almost always, are the ones most familiar to us.

The problems that arise from taking our everyday awareness as “given” are anything but “merely philosophical,” especially when our world is changing.

In the early 1980s, executives from U.S. auto companies started making regular trips to Japan to find out why the Japanese automakers were outperforming their U.S. counterparts. Speaking with one Detroit executive after such a visit, Peter could see that the executive hadn’t been impressed by the competition. “They didn’t show us real plants,” the Detroit executive said.

“Why do you say that?” Peter asked.

“Because there were no inventories. I’ve seen plenty of assembly facilities in my life, and these were not real plants. They’d been staged for our tour.”

Within a few years, it became painfully obvious how wrong this assessment was. These managers had been exposed to a radically different type of “just-in-time” production system, and they were not prepared to see what they were being exposed to. They were unprepared for an assembly facility that didn’t have huge piles of inventory.² What they saw was bounded by what they already knew. They hadn’t developed the capacity for seeing with fresh eyes.

With hindsight, it’s easy to dismiss the “seeing” problem of the Detroit executives as idiosyncratic. But this problem is universal.

Most change initiatives that end up going nowhere don’t fail because they lack grand visions and noble intentions. They fail because people can’t see the reality they face. Likewise, studies of corporate mortality show that most Fortune 500 companies fail to outlast a few generations of management not because of resource constraints but because they are unable to “see” the threats they face and the imperative to change. “The signals of threat are always abundant and recognized by many,” says Arie de Geus. “Yet somehow they fail to penetrate the corporate immune system response to reject the unfamiliar.”

The Capacity to Suspend

Seeing freshly starts with stopping our habitual ways of thinking and perceiving. According to cognitive scientist Francisco Varela, developing the capacity for this sort of stopping involves “suspension, removing ourselves from the habitual stream [of thought].” Varela called suspension the first basic “gesture” in enhancing awareness. As the noted physicist David Bohm used to say, “Normally, our thoughts have us rather than we having them.”³ Suspending does not require destroying our existing mental models of reality—which would be impossible even if we tried—or ignoring them. Rather, it entails what Bohm called “hanging our assumptions in front of us.”⁴ By doing so, we begin to notice our thoughts and mental models as the workings of our own mind. And as we become aware of our thoughts, they begin to have less influence on what we see. Suspension allows us to “see our seeing.”

Sometimes it’s easier for people to understand suspension physically than conceptually. A very simple physical practice to appreciate suspension starts with sitting on a chair and grabbing its sides. Now hold the sides of the chair more tightly. You might even imagine that there

is no gravity and that if you let go, you would float right up out of the chair. Notice how your body feels as you hold tightly to the chair: the tension in your arms, your shoulders and back, stomach and neck. Now release your hold on the chair. Feel all these muscles relax. Often we hold on to our thoughts in much the same way. Suspension starts when we release the hold and simply notice our current thoughts, like noticing the chair you are sitting on. The thoughts may not go away immediately, but we no longer have as much energy tied up in holding on to them.

When we begin to develop a capacity for suspension, we almost immediately encounter the "fear, judgment, and chattering of the mind" that Michael Ray calls the "Voice of Judgment." Ray, creator of highly popular Stanford Business School courses on creativity,⁵ starts with three assumptions: (1) that creativity "is essential for health, happiness, and success in all areas of life, including business"; (2) that "creativity is within everyone"; and (3) that even though it's within everyone, it's "covered over by the Voice of Judgment."⁶

When Otto and Joseph interviewed him, Ray recalled a study by Howard Gardner's Project Zero at Harvard that involved developing intelligence tests for babies. The project also tested older subjects. The researchers found that up to age four, almost all the children were at the genius level, in terms of the multiple frames of intelligence that Gardner talks about—spatial, kinesthetic, musical, interpersonal, mathematical, intrapersonal, and linguistic. But by age twenty, the percentage of children at genius level was down to 10 percent, and over twenty, the genius level proportion of the subjects sank to 2 percent.⁷

"Everyone asks, 'Where did it go?' It didn't go anywhere; it's covered over by the Voice of Judgment," said Ray. "What we're trying to do is set up situations where people can attack the Voice of Judgment and access their deeper creativity." Ray believes that we can consistently bring our creativity into our lives by "paying attention to it" and

by building the capacity to suspend the judgments that arise in our mind ("That's a stupid idea," "You can't do that") that limit creativity.

In practice, suspension requires patience and a willingness not to impose preestablished frameworks or mental models on what we are seeing. If we can simply observe without forming conclusions as to what our observations mean and allow ourselves to sit with all the seemingly unrelated bits and pieces of information we see, fresh ways to understand a situation can eventually emerge. For example, when the economist Brian Arthur and his colleague, the sociologist Geoffrey McNicoll, were working in Bangladesh in the 1970s, they spent months observing, gathering information, and "doing nothing." This was at a time when it was common for Western economists and institutions such as the World Bank to analyze needs of developing countries such as Bangladesh by simply applying traditional economic models without really questioning them. Eventually, Arthur and McNicoll developed a fresh understanding of how "the goals and structure of the whole" functioned, according to Arthur. They showed how conditions such as landlessness and large families were self-reinforcing over time and how standard "Band-Aid" fixes prescribed by international aid institutions only served to "prop up the status quo." What they saw was new, and the paper they wrote helped shift the focus of these institutions toward addressing fundamental socioeconomic conditions rather than just standard economic indicators of development.⁸

Suspending Together

The Voice of Judgment can stifle creativity for groups as surely as for individuals. It is what we typically call "groupthink," the continual, albeit often subtle, censoring of honesty and authenticity in a team.

This collective Voice of Judgment tells people what they should and shouldn't say, do, and even think. Often, its effects become evident only in retrospect. Alan Webber, who along with Bill Taylor left the *Harvard Business Review* in 1995 to cofound *Fast Company*, experienced this firsthand.

"I remember vividly my sense of liberation when I left *HBR*," he told Joseph and Otto. "All of a sudden I started meeting a whole new group of people. The basis for interaction was completely different: 'What are you working on that is interesting, and who are you, and how does it feel?' I was seeing the world with fresh eyes. I was learning at a rapid clip, going places I'd never been before, and meeting people I would never have met before. It was as though I'd escaped the boundaries of a walled city."

It turned out that Webber's "fresh eyes" saw something that other business publishers had missed, for in less than five years, *Fast Company* reached a circulation comparable to that of *Fortune* magazine.

There is nothing inherently wrong with the collective Voice of Judgment, any more than there is with our individual internal censor or critic. In the jargon of social psychologists, groups are naturally coercive: they need shared norms and shared ways of thinking and seeing to function effectively. But, like our individual internal judge, problems arise when the collective censor goes unrecognized. The difference between a healthy group or organization and an unhealthy one lies in its members' awareness and ability to acknowledge their felt needs to conform. Enhancing awareness doesn't require a search-and-destroy mission against our internal fears or judgments. It only requires recognizing and acknowledging them.

Suspending assumptions, individually or collectively, is easier said than done. The challenges in organizations start with the frenetic pace many people feel compelled to maintain. Often management teams simply don't know how to stop, nor do they know how to integrate suspension into normal ways of working together. But breakthroughs

come when people learn how to take the time to stop and examine their assumptions.

William Isaacs, founder of the Dialogue Project at MIT, says that the first opportunity to shift the quality of conversation in a working group often arises when people are confronted with an opinion with which they disagree and find they must choose whether or not to defend their views.⁹ In such situations, most of us see only two options: to defend why we think the way we think or to say nothing. Isaacs points out a third possibility: to suspend one's view. But doing this requires knowing how to present one's view and then inquire rather than defend. For example, rather than saying nothing or telling the other person why you think he or she is wrong, you can simply say, "That is not the way I see it. My view is . . . Here is what has led me to see things this way. What has led you to see things differently?" The form of the question doesn't matter. But the sincerity does.

If questions like this are insincere, they will backfire. But often, even one person honestly suspending his or her views in this way can shift a conversation, allowing the collective Voice of Judgment to abate and new possibilities to arise that no one had seen before.¹⁰

Building a Container

The challenges to suspending and inquiring into established views collectively also arise from the lack of safety and trust in most work settings. Many people recognize the problem of low trust levels, but trust is not something that can be created by fiat. Efforts to get people to trust one another often produce the opposite effect by drawing attention to the lack of trust that currently exists.

In the early 1990s, John Cottrell, president of United Steelworkers of America Local 13 in Kansas City, Missouri, helped establish a project the goal of which was to help the company management team

and the elected union leadership to learn to talk together. These people had literally thrown chairs at one another in past meetings and, according to one veteran union official, "had not actually talked with one another for two or three generations." Those who've never been in the middle of union-management relations that have soured have little idea how bad they can be. This was bad.

Within nine months, something almost miraculous had occurred. In separate meetings, Isaacs and colleagues from the MIT Dialogue Project had led each group in mastering the basic practices of dialogue. Then the teams began to meet together—and after only a few meetings, the combined group began to discover the ability to have "real talk" about difficult issues. Eventually, tangible consequences became evident in the plant: dramatic declines in accidents and absenteeism, as well as improvements in productivity. The backlog of grievances fell from 485 to zero. Union and management were starting to work together to address systemic issues that had been neglected for decades.¹¹

The effects on the individuals involved were equally dramatic. "For the first time in my life, I'm thinking," said one steelworker. "And I'm listening to my wife," added another. How had this transformation happened?

Cottrell explained it by using the image of molten steel: "We work with energies that can kill you. The essence of our craft lies in containing those energies. If we fail, people can die. The same is true for human beings: we generate energies that can kill one another. The question is, can we hold these energies, or will they destroy us? Just as the cauldron contains the energies of molten steel, dialogue involves creating a container that can hold human energy, so that it can be transformative rather than destructive."¹²

The steelworkers' imagery is strikingly similar to some of the oldest theories of transformation. The ancient alchemists, in their attempts to transform base metals into gold, created a large body of

literature on container building, ideas that the Swiss psychoanalyst C. G. Jung claimed were as much about psychological as material transformation. For the alchemists, transformation was a process involving the interaction of elements within a closed, transparent container in relation to a carefully tended fire.

The principle of the container as transformative vessel is present in nature, too. Within the cocoon, just as within the alchemist's container, something "melts" in order to transform itself into something new. The creation of new life often requires a specialized "container" because established systems are naturally hostile to the "other," the "outsider," the "alien." The normal chemistry of an adult human body would be toxic to an embryo, just as the mainstream culture of an organization is often toxic to the innovators it spawns. And when the organizational immune system kicks in, innovators often find themselves ignored, ostracized, or worse.¹³

This same dynamic is at work even in our own learning. When we're learning something new, we can feel awkward, incompetent, and even foolish. It's easy to convince ourselves that it's really not so important after all to incorporate the new—and so we give up. This is our own psychological "immune system" at work. Living systems' natural "prejudice" against otherness helps explain why suspension can be dangerous.

The Courage to See Freshly

The capacity to suspend established ways of seeing is essential for all important scientific discoveries. It is also why the discoverers, like innovators in established organizations, often find that their lives become more difficult as a consequence.

Brian Arthur is well known for his insights into the "network economy" and the dynamics of "positive returns to scale." These insights

started to form when he read an essay by the Nobel Laureate chemist Ilya Prigogine on positive feedback. "Prigogine talked about emergent self-organizing structures in everything from the way termites build nests to the phenomenon of languages taking over," Arthur said. "The more people speak English in the world, the more advantageous it becomes to learn English. So what gets ahead tends to get further ahead. I realized that this insight was also important to economics."

Eventually, Arthur saw that small events could lock the economy into different structures. But this meant that the way we organize the economy—whether through capitalism or any other form—does not automatically lead to the best of all possible worlds. And Arthur's ideas got him into trouble.

"It was the middle of the Cold War, the Reagan-Thatcher years, and these ideas threatened the whole edifice that had been built up for two hundred years," he said. "I was saying that you couldn't do economics statically anymore. I was also saying that the outcomes that manifested in the economy—the technologies we end up with, the companies that come to dominate, the legal and banking institutions that develop—are not necessarily the best of all possible worlds. Markets aren't perfect. The economy isn't perfect. Small events can build up and lead you to inferior solutions. When I began to say this, I knew there would be hell to pay. I just didn't realize how much."

Arthur waited more than two years to write up his ideas, and when he did, in 1982, he couldn't get the articles published. It took six years before he could get an article on positive returns into a top economics journal. In the first ten years of his career in economics, he had published many articles and won a faculty chair at Stanford. During the second ten years, he published one article. And in the end, "the hassle that ensued" as a result of that article led him to leave Stanford. Though he eventually became a founding faculty member of the prestigious Santa Fe Institute, a think tank on nonlinear systems and com-

plexity¹⁴ being set up by economics Nobel Laureate Kenneth Arrow and physics Laureates Murray Gell-Mann and Philip W. Anderson, the years of being misunderstood and ignored were part of the price Arthur paid for seeing things differently.

The Inner Work of Suspending

When you consider the risks involved in suspending, you begin to appreciate not only the courage required but also the personal work. By "personal work," we mean cultivating the ability to be more aware of our thoughts, including those—like "I am here and you are there"—that arise so quietly in our awareness that they remain invisible to us as thoughts. A virtually infinite variety of meditative and contemplative methods from Western, Eastern, and native traditions are available to help build our capacity to slow down and gradually become aware of our "thought stream." What matters is not the particular method we choose but our willingness to make our own cultivation a central aspect of our life.

While Brian Arthur was starting to see the economy as an emergent system, he was also beginning to study with a Chinese Taoist teacher. Arthur's study began abruptly, when some of his most unquestioned assumptions were suddenly revealed—and called into question. After attending a weekend workshop, he was invited to join the group, including the teacher, for dinner. "I thought, 'I'm with this high Taoist master, and I should ask him a question,'" said Arthur. "I thought very hard about what I should I ask him because I had a strong instinct that if I asked a real question, I would get a real answer." Trying hard to find the right question, he finally just blurted out, "If I were to take all this up, what would it do for me?"

The master put his chopsticks down, looked directly at Arthur and

said, "You would live twenty or thirty years longer. You would be productive twenty or thirty years longer. And you would end up a very nice professor."

Then he paused and added, "If that's all you want."

Arthur was "incensed, insulted, intrigued, and challenged. I'd worked all my life for what he'd just dismissed as 'if that's all you want.'" Soon after, he began training with this master, eventually moving to Hong Kong so that he could work with him daily.

The story of Arthur's initial meeting with the Taoist master shows how opportunities for suspending often start with "stopping," being brought up short or caught off guard. The teacher's comment over dinner startled and shocked him. Reacting from fear or discomfort, he could have ignored the opportunity to ask himself, "Is that all I want?" Instead, in that moment, when his normal thought stream was interrupted, he discerned the beginnings of a journey that eventually would have great meaning for him, the journey of learning to see. Embarking on and continuing this journey requires the willingness to accept many such moments of "profound disorientation," in which our most taken-for-granted ways of seeing and making sense of the world can come unglued.

Integrating Inner Work

Joseph and Otto told this story about Brian Arthur late in the afternoon of the day we had started by talking about the requiem scenario.

"You know, it's amazing that we were the first people Arthur ever told all of this to," said Joseph. "While he was doing his pioneering work in economics, his whole way of seeing the world was changing profoundly. Yet the outside world only saw Brian Arthur the economist. We know from talking with him that over time, the inner work he has done has influenced his evolving understanding of the economy

and especially what he thinks business leaders must learn to do. Yet he's written virtually nothing that integrates the personal and professional sides of his journey. In fact, he's only just now beginning to talk about it. That's pretty interesting when you consider that he called meeting the Taoist teacher 'the central event in my life.'"

"Think about it this way," Otto said. "If the tolerance of the economic establishment for radical new ideas like increasing returns was around zero, the tolerance for Arthur's Taoist studies may be minus two hundred. It's off the charts. As Thomas Kuhn found in his study of scientific revolutions, you can't convince the protectors of the old paradigm with better arguments. The reality is that you have to wait until the establishment scholars finally retire from their positions and are replaced by a younger and more open generation of scientists.

"This isn't true only for Brian. A number of scientists we interviewed have very serious spiritual practices that they regard as integral to their science. For me, this connection between inner work and outer work is one of the most important findings from the interviews. But most of them do not feel safe talking about it, even those who have achieved some integration of the two domains."

"It's easy to understand and empathize with their plight," said Betty Sue. "In our present culture we rarely give ourselves permission to talk about connections between the spiritual and the professional. It's tragic. It keeps scientists like Arthur from sharing the full extent of their insights. It obscures the creative process they have lived and limited future generations of students from their own creative work."

"Doesn't this also tell us why suspending is so hard, individually and collectively?" asked Peter. "When we truly suspend taken-for-granted ways of seeing the world, what we start to see can be disorienting and disturbing, and strong emotions like fear and anger arise, which are hard to separate from what we see. To the extent we're trying to avoid these emotions, we'll avoid suspending. To the extent we can't talk about any of this, it limits all of us. We all know that a team that can't

tell the truth about its emotional state limits its strategic thinking as well, because the cognitive and emotional are so connected. And this happens on a larger scale as well."

"You didn't say so, Peter, but I imagine that when you spoke at that business and environment conference, you had to struggle not to express how angry the whole situation was making you."

"It seemed impossible to share how I felt," he agreed. "When I spoke that night, I tried to be direct about how far I believe we have to go in developing truly sustainable business practices. But I wasn't direct in communicating my emotions, not even to myself. My emotions were confusing to me. I just knew I was upset. Indeed, it wasn't until a couple of days later that I saw more clearly that the anger arose from the deeper fear."

"But this still leaves one more problem," added Otto. "Peter's experience doesn't seem to have empowered him. He encountered the larger system directly, not through conceptual analysis. But as far as I can see, it didn't shift his sense of possibility in any way. Nor, I think, does suspending in general. I find that in moments of real suspension, like Peter's, people are more likely to feel unsettled than empowered."

"That's true. My immediate experience was more of being a victim, because in the moment I couldn't see any way to influence the system I found myself stuck in. I don't think that's uncommon when people first start to see a larger system at play."

"I think this is because the first awareness of larger forces, or a larger pattern, is just the beginning," said Otto. "It's as if we awake to something that's been going on all around us but that we haven't seen. Maybe we've even subconsciously worked to keep ourselves from seeing it. Then, all of a sudden, we see this larger pattern, and it's a real 'Aha!' By suspending our normal analytic ways of thinking, we allow ourselves to encounter the system directly. But it's still a problem 'out there,' a situation that is separate from ourselves. I think seeing our seeing is just the beginning."

Seeing from the Whole

n empowering awareness of the whole requires a fundamental shift in the relationship between "seer" and "seen."

When the subject-object duality that is basic to our habitual awareness begins to dissolve, we shift from looking "out at the world" from the viewpoint of a detached observer to looking from "inside" what is being observed. Learning to see begins when we stop projecting our habitual assumptions and start to see reality freshly. It continues when we can see our connection to that reality more clearly.

Martin Buber evocatively described this as a movement from an "I-it" to an "I-thou" relationship. In the former, everything we see appears to us as an "it," an external object separate from us. It actually makes no difference if the "it" is a table or a person. In the "I-thou" relation-

ship what appears in our awareness is whole and exists in an intimate relationship with us. For example,

If I face a human being as my *Thou* . . . he is not a thing among things, and does not consist of things.

Thus human being is not *He* or *She*, bounded from every other *He* and *She*, a specific point in space and time within the net of the world; nor is he a nature able to be experienced and described, a loose bundle of names and qualities. But with no neighbor, and whole in himself, he is *Thou* and fills the heavens. . . .

Just as the melody is not made up of notes, nor the verse of words, nor the statue of lines, but they must be tugged and dragged till their unity has been scattered into these many pieces, so with the man to whom I say *Thou*. I can take from him the color of his hair, or of his speech, or of his goodness. I must continually do this. But each time he ceases to be *Thou*.¹

The key to "seeing from the whole" is developing the capacity not only to suspend our assumptions but to "redirect" our awareness toward the generative process that lies behind what we see.

Redirection: Seeing the Generative Process

When Otto interviewed cognitive scientist Francisco Varela at the Ecole Polytechnique in Paris,² Varela referred to redirection as "turning our attention toward the source rather than the object." If suspension is the first "basic gesture" of enhancing awareness, redirection is the second.

"What's funny about suspension is that when many people do it, nothing much happens," said Varela. "That's why most people would say, 'This introspection thing doesn't work. I look, and nothing hap-

pens.' Nothing happens at the beginning because the whole point is that after suspension, you have to tolerate that nothing is happening. Staying with it is the key, because suspension then allows for redirection. Suspension leads to seeing emerging events, contents, patterns, whatever. Then, you can actually redirect your attention to them. That's where the new is."

Redirecting attention "toward the source" encompasses empathy but goes further. Dissolving the boundaries between seer and seen leads not only to a deep sense of connection but also to a heightened sense of change. What first appeared as fixed or even rigid begins to appear more dynamic because we're sensing the reality as it is being created, and we sense our part in creating it. This shift is challenging to explain in the abstract but real and powerful when it occurs.

When he was an MIT doctoral student, Daniel Kim spent several years working with a large engineering program, applying systems thinking, mental models, and other tools of organizational learning to improve cost and timing performance in developing a new car.³ The program had a five-year budget of more than \$1 billion and about a thousand full-time equivalent engineers, divided into more than a dozen engineering subspecialty teams, each responsible for an aspect of the product. At one point, a working group made up of several teams created a "causal loop diagram," or systems map,⁴ to try to understand what was preventing engineering teams from working together effectively in order to meet critical timing targets.

As they analyzed the systems map they'd drawn, the working team gradually began to see a pattern. When a subspecialty team faced a difficult design issue, they often had a choice: they could apply a quick fix, or they could address the fundamental sources of the problem. Teams could usually implement quick fixes on their own, whereas more fundamental solutions often required collaboration among different teams. Everyone was under intense time pressure, so quick

fixes were the norm—unfortunately, often with unrecognized side effects for other teams. For example, when “NVH” (noise, vibration, and harshness) engineers solved a vibration problem by adding some structural reinforcements, they eventually created new problems for the chassis team, who were responsible for overall car weight. Angry with the NVH specialists for creating a weight problem, the chassis specialists solved the weight problem with their own quick fix: taking weight out elsewhere and specifying a higher tire pressure to keep the car stable. When the NVH specialists eventually found out about this, they were furious—because the higher tire pressure meant a new source of harshness. All of this was captured on the system diagram that the group, including NVH and chassis engineers, created.

As the whole group studied the diagram, they realized that this pattern—quick fixes leading to unintended side effects and new problems for others, leading to more quick fixes and more side effects—occurred everywhere among the subspecialty teams and was a primary cause of the antipathy and distrust throughout the whole program. People felt stuck. They didn’t have time to collaborate, yet not collaborating meant that they consistently failed to meet their timing goals. But it was also clear that much of the time pressure came from the rework they created for one another.

“At one point, there was a palpable shift in the room,” Kim said. “It was as if they suddenly saw what they all knew but didn’t know they knew. All the details were very familiar to them—the problems, the reactions, and the strained relationships that characterized their work environment. Now they were actually seeing the systemic pattern that caused this, and they could see that no one individual was to blame. They had created this pattern together. Each team did what made sense to it, but no one saw the larger system their individual reactions created—a system that consistently produced poor technical solutions, stress, and late cars. As the implications of the system began to

sink in, one of the group members said, ‘My God, look what we’re doing to ourselves!’”

The key word in this statement was “we.” Up to this point, there had been someone to blame for every problem: the other teams, their bosses, not enough time. When the ‘theys’ go away and the ‘we’ shows up, people’s awareness and capabilities change. Through many similar moments of awakening, a new attitude gradually developed within the car development program that caused significant changes in how people worked together. Eventually, they finished the car almost a year ahead of schedule and returned \$63 million in allocated but unspent overrun costs. When people who are actually creating a system start to see themselves as the source of their problems, they invariably discover a new capacity to create results they truly desire.

Encountering the Authentic Whole

One reason that the shift to seeing from the whole rarely occurs is that it is poorly understood. And as Varela suggests, the capacity for redirection—turning our attention toward the source—builds on the capacity for suspension. Until people can start to see their habitual ways of interpreting a situation, they can’t really step into a new awareness. Members of the product development program, for instance, had spent many months practicing suspending and examining their assumptions or “mental models.” The group included senior managers in the program, one of whom later said, “We had to stop being bosses. We no longer felt that we had all the answers.”

When Otto asked physicist Henri Bortoft what is required to move beyond suspension to develop the capacity for redirection, Bortoft said, “You have to cultivate a quality of perception that is striving outwards, *from the whole to the part*.” He explained that our attention nat-

usually gravitates toward concrete particulars. If we then try to see "the larger system," we usually look at how one part interacts with others and try to infer what the larger pattern of interactions must be—we try to figure out the whole from the parts through an intellectual process of abstracting. Since figuring out the larger system is so hard, we often just give up and go back to concentrating on the parts. But there is another approach: understanding the whole to be found in the parts.

Bortoft illustrated this other approach by explaining how Goethe had studied plants. "It takes time. You have to slow down. You see, and you follow every detail... of a leaf, for example—in your imagination. This process is what Goethe called 'exact sensorial imagination.' You look at a leaf, and you create the shape of the leaf as precisely as possible in your mind. You move around the shape of the leaf in your mind, following every detail until the leaf becomes an image in your mind. You do this with one leaf, with another leaf, and so on, and suddenly you sense a movement, and you begin to see not the individual leaf but the dynamic movement"—the living field of the plant that creates the leaf.

The experience Bortoft describes is similar to what happens when something that was in the background of our perception suddenly shifts to the foreground. The object—the leaf—was in the foreground, and the dynamic living process that generates the leaf was in the background. The living process is usually less evident to us—yet it's the formative field from which the object arises. When they switch and the living process is in the foreground, then we "see from the whole." This shift of the living process to the foreground of our awareness characterizes the essence of redirection.

For the product development group, redirection occurred when they slowed down enough to start to connect the "details" of their frustrations and immediate problems to their own actions, and how



Much of Goethe's scientific study was in botany. He collected samples of plants wherever he traveled. Once, traveling in Italy, he came upon a plant he knew well, the coltsfoot. He had spent many days studying this plant in northern and central Germany and in alpine regions. In his unique way, Goethe's study consisted mainly of simply sitting and pondering the plant, using his active imagination to take in what he saw with his eyes and what he could see in his mind. He had never seen this plant growing by the sea. Here it had spikes, leathery leaves, and a fat stem—features unlike any in Germany. As he contemplated the coltsfoot, he began to "see" the generating whole in a new way, what he called the *urpflanze* or archetypal plant out of which the many manifestations arose. He wrote in his journal, "The One brings the many out of itself."⁵

their actions in turn created problems and frustrations for other teams. Suddenly they saw "the whole"—the vicious cycle of forces they were unwittingly creating and that was undermining their own goals.

Such moments of redirection can be both shocking and instantly empowering: if "we" are creating the problems we have now, then we can also create something different. Bortoft calls this direct understanding of the generative process underlying present reality "encountering the authentic whole." By contrast, when we try to figure out a

larger system intellectually, at best we end up with a conceptual understanding, what Bortoft calls the "the counterfeit whole." When we encounter the authentic whole, we encounter life at work, and we are transformed from passive observers to active participants in ways that intellectual understanding can never achieve.

Seeing from Within an Organization

Seeing from the "whole" in an organization may seem difficult, but learning to be more attentive and genuinely curious about the cultures we live in and enact is the first step. Edgar Schein, one of the most respected scholars of organizational culture, says, "If you want to understand an organization's culture, go to a meeting."⁶ Who speaks and who does not, who is listened to and who is not, which issues are addressed directly and which are ignored or addressed by innuendo are powerful clues to how an organization actually functions. These clues become still more "real" when we also pay attention to our own reactions. Schein believes that we can always learn much more about organizational culture through careful observation and reflective participation than from reading mission or value statements.

We all internalize the cultures of which we are a part. If that were not so, they would not exist, because cultures exist only as we bring them into being moment by moment. By applying Schein's insight in a disciplined way, we can begin developing the capacity to see from within the whole of the organizations in which we work and live. For instance, if you sit through a typical meeting, participating as you normally would, you can learn to pay attention to the "external" dynamics of the meeting as well as to your own thoughts and feelings. When the meeting is over, look at an incident that engaged you emotionally. Using your imagination, take time to re-create how you felt and what

you thought as the incident played out. It can be helpful to talk through your experiences with a colleague or perhaps to write them down.⁷

If you do this carefully for several incidents, you'll learn a lot about yourself and your organization. You'll see where you felt safe and where you felt threatened. You'll see where you were conflicted and where you were aligned with what was happening around you. You'll see where you were distracted and where you were fully present. As you practice this, you'll be able to engage your imagination more actively to "see" the details of your experience.

Then imagine that you were one of the other participants in the meeting. What is similar and different? Try doing this from the point of view of several of the other participants. While your experience in shifting your point of view appears to tell you about the experiences of others, what you're really doing is using your imagination to explore further subtleties of your own experience. Unless they tell you, you have no way of knowing what others actually experience. But you will discover what you were experiencing about others and, empathetically, how the organization's norms and habits are manifested in different people.

As you continue this process of activating your imagination and applying it in different working sessions, you'll start to sense the organization's culture as a living phenomenon. The figure and ground will reverse, just as for Goethe in his study of plants. What was in the background—in this case, the living process of the organization's culture—will start to come into the foreground of your attention. The concrete particulars of the meeting will then become embodiments of this living process. And you will start to see yourself as part of this process, an active agent in enacting the "organizational culture." If you seriously ask, "What am I doing—in my actions, thoughts and feelings—to maintain these patterns as they are?" you will see many ways

that you play a part and perhaps a few new options for what you might do differently.

The Inner Work of Redirecting

Like the inner work required for learning to suspend, building the capacity for redirecting attention to seeing from the whole is deeply connected to spiritual practices. In particular, many meditation practices have the common aim of developing the capacity to quiet the mind and to move beyond rigid subject-object separation.

One of the pioneers of meditation and pain reduction research, Dr. Jon Kabat-Zinn,⁸ told us that meditation involves "purposefully refining our capacity for paying attention, ultimately to anything and everything that might be relevant to navigating in the world with open eyes and hearts." In his work, he distinguishes between two basic levels of meditation.

The first level is concentration. "When you begin to focus," he said, "two elements come quickly to the fore. One is that the mind has a life of its own and tends to go all over the place. By cultivating paying attention, you can become less reactive and agitated. That's called the *concentration* aspect of meditation.

"Then, if you bring a certain kind of open, moment-to-moment, nonjudgmental awareness to what you're attending to, you'll begin to develop a more penetrative awareness that sees beyond the surface of what's going on in your field of awareness. This is *mindfulness*. Mindfulness makes it possible to see connections that may not have been visible before. But seeing these connections doesn't happen as a result of trying—it simply comes out of the stillness."

Kabat-Zinn's distinction between the concentration and mindfulness levels of meditation corresponds closely to the distinction

between suspension and redirection. In particular, mindfulness explores the possibility of dropping "underneath our conventional and highly conditioned way of seeing that separates and reifies a subject and an object." He points out that simply seeing a situation as a "problem" has the effect of allowing us to distance ourselves from it and blocks "observing whatever arises as it actually is."

The power of this nonjudgmental and nondualistic awareness is illustrated in Kabat-Zinn's well-recognized work on pain reduction. "When our patients practice just dwelling in their pain, their relationship to that pain can change dramatically because they are embracing it for a change—not as 'pain' but as bare sensation, allowing it to be met exactly as it is, in awareness, even if it has a strong element of unpleasantness . . . rather than getting caught up in thinking about it and trying to make it go away. Often, without trying to fix anything, over time, the pain can diminish, sometimes quite dramatically.

"In general, if you feel you've got a problem to solve that is 'out there' and you don't necessarily see or want to see any possible relationship between the 'you' who is trying to solve the problem and what the problem actually is, you may wind up not being able to see the problem accurately, in its fullness. You therefore may unwittingly be contributing to maintaining the undesired situation rather than allowing it to evolve and perhaps dissolve."

Kabat-Zinn's comment illustrates what may be the most important consequence of redirection: when people start to see from within the emerging whole, they start to act in ways that can cause problems to "dissolve" over time. In this way, redirection transcends the subject-object dualism of the problem-solving mind-set. By reinforcing the separation of people from their problems, problem solving often functions as a way of maintaining the status quo rather than enabling fundamental change. The problem-solving mind-set can be adequate for technical problems. But it can be woefully inadequate for complex

human systems, where problems often arise from unquestioned assumptions and deeply habitual ways of acting. Until people start to see their own handprint on such problems, fundamental change rarely occurs.

This is also why the powerful changes that can result from collective redirection can be difficult to explain, even after the fact. "One of our biggest problems was explaining our success," said the program manager for the car program Kim worked with. "This may seem like an unimportant problem, but it wasn't. Our bosses kept asking, 'What did you do to solve your problems?' and we just said that 'The people started operating differently, and many of the problems just went away.' They found that unconvincing and consequently tended to discount much of what people accomplished. The idea that hundreds of people just started to see things differently and to act more in line with the health of the whole seemed like nonsense to them."

Herein lies the paradox of redirection. Until you do the inner work of learning how to see with "your eyes and your heart open," as Kabat-Zinn puts it, deep problems will persist. Once the capacity for suspension and redirection develops, the types of changes that ensue can be all but impossible to explain to those not involved. Moreover, just as suspension can be threatening, so too can developing the capacity for redirection. Kabat-Zinn speaks of learning to tolerate the "don't know mind," of "just being still, holding the whole in awareness, not having to have to know anything." This is the true inner work of redirection—and almost the opposite of the conditioning of most managers.