# From the Founding Editor

Few topics in the social sciences have received as much attention as "change," yet few areas remain as murky and confused. I grew up with this area in the 1950s when Kurt Lewin, Ron Lippitt, Lee Bradford, Ken Benne, and many others were developing a "theory" of change that led to both the invention of the T-group (T for Training), in which individuals underwent various degrees of change, and the classic studies of Coch and French on how to change the habits of production workers in the Pajama Factory.

My most vivid memory of that period concerns our efforts to do formal academic research to measure the degree to which individuals changed in the T-groups. It was believed that one of the major impacts of the group experience would be an increasing level of "self-insight" based on all the feedback that each participant would get during the experience. A questionnaire was designed that asked people to rate their level of self-insight before the group experience and, again, after; it was discovered to the researcher's dismay that the level of insight went *down*. What was going on here?

The researchers then put on their clinical hats and talked to people to illuminate these paradoxical findings and discovered what, in retrospect, should have been obvious. People who came to the workshops thought they had a reasonably good level of self-insight, only to discover through the T-group experience how little they knew of their impact on others and what "drove" their own behavior. The group experience revealed to most of us (and I experienced this myself) that we had much less self-insight than we thought we had. This was important learning, and we all felt the better for it. The formal measurements failed to capture this change and, unfortunately, even provided grist for the mill of the critics of group training.

In the organizational context, what I often noted in my role as process consultant is that the description and measurement of change depended entirely on who was doing the measurement and from what perspective. A major change from the senior executive's perspective may hardly be noticed by the workers, yet a minor change in production methods from an engineer's point of view might seem like a major change to the workers. The implication of this hairsplitting is that concepts like "change," "learning," "evolution," and "revolution" really don't mean much until they are put into the appropriate concrete context. Who is changing, what is changing, and from whose point of view is the change being assessed? It may well turn out that change theory and models of change will have to be quite specific, and the perceived consequences of change will vary as a function of who is doing the perceiving. This issue of *Reflections* on the theme of change will not resolve these various issues but, hopefully, will explore them in enough different contexts to give the reader a sense of why "change" is difficult to manage.
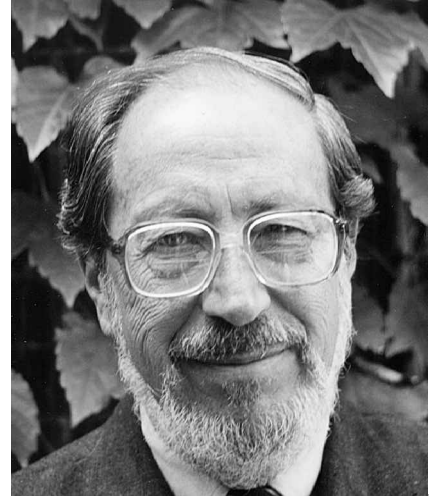
Ed Schein

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I was very pleased to see that the articles in *Reflections* present core organizational learning concepts in accessible language, a rarity in the academic and practitioner literature. I say this as both an academic and a consultant.

Initiating the journal with classic articles from respected thought leaders reminded us in the community that we do not have to reinvent the foundations. We already have some great concepts and tools, even if it doesn't feel like it sometimes when we are in the field. To me, these classic articles exemplify the benefits of bringing together practitioners, consultants, and academics. Practitioners bring an understanding of what's important to work on and creativity in applications. Consultants contribute a rich experience-base across many organizations and strong skills in applying methods, concepts, and tools. Academics bring knowledge of fundamental building blocks and rigor in testing what makes a specific method, concept, or tool successful or not.

In this direction, *Reflections* provides some classic academic concepts, many extracted from real-world experiences. Consultants and practitioners, including many SoL members, have spent the past two decades since these articles were written, applying and improving these concepts. I look forward to future issues of *Reflections* where we begin to understand how these concepts have evolved in the field and how these three groups inform each other.

James Ritchie-Dunham

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In This Issue

Edgar H. Schein and Karen Ayas

Classic

We begin this issue with a very important classic that has not received enough attention. While acknowledging that one of the powerful ways of communicating is to think metaphorically, we have not sufficiently examined that idea in the context of how we think about "change." The language we use to describe change may reduce or increase our power to accomplish what we want. It often reveals not only the rationale but also the emotions that underlie the effort. Robert Marshak takes us through a number of metaphors of change and shows how they subtly influence both our theory and practice of change.

Features

Change occurs at many levels, as the next papers illustrate. Our capacity to change or facilitate change expands as we begin to see and understand how the world works. Adam Kahane, a brilliant "change agent" takes us on a global journey of social change that, in the end, requires self-change. As Nancy Adler underscores in her commentary, leaders who really make a difference are those who have the courage to engage in personal transformation and to *be* the change they want to see. In their comments, Arie de Geus and Ged Davis provide perspective on the role of scenarios in understanding and perceiving how the world wants to change.

Next, Peter Frost, in an arresting account, shows how organizational toxins impact the self and reminds us that much of what goes on in organizations becomes visible only through its sometimes negative impact on the self. Bill O'Brien, a former CEO, provides insights on where he seeks the remedy to toxicity and how to create institutions that minimize emotional pain.

We then shift to an interesting case of managed organizational change by Ursula Versteegen, Otto Scharmer, and Katrin Käufer in which many of the interventions are based on concepts that push change "theory" into new realms, as noted in Ed Schein's comments. Jean Bartunek's questions invite us to reflect on the different aspects of putting such theory to use.

We all know that change theory and practice is complex and frustrating. The next two papers provide some insight into why this might be the case. Richard Axelrod notes that we have been stuck in old models and have not fully utilized whole systems change interventions sufficiently. He proposes the engagement paradigm, whose distinct emphasis is on involving and enrolling *all* employees in the change process. Mike Beer argues that there are fundamental problems even in the way we generate knowledge, which explains the low level of utilization and poor implementation. Lotte Bailyn and Karen Ayas comment, and it is worth noting that this state of affairs is one of the prime reasons for the existence of *Reflections.* Russell Ackoff rounds out the issue with a useful distinction between educators and gurus.

Views

John Seely Brown and Paul Duguid have put many of their important ideas into *The Social Life of Information,* which is reviewed by Etienne Wenger. Richard Karash reviews *Transforming Social Inquiry, Transforming Social Action,* edited by Francine T. Sherman and William R. Torbert.

Please write or e-mail us your suggestions and recommendations. Let us know what you would like to see in *Reflections.* Send mail to jane@solonline.org or to Editor, *Reflections: The SoL Journal,* 222 Third Street, Suite 2323, Cambridge, MA 02142.

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Managing the Metaphors of Change

Robert J. Marshak
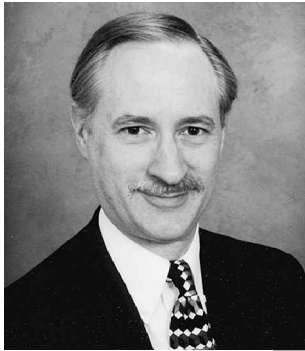
Robert J. Marshak
Consultant, teacher, and trainer

For most leaders and change agents, one seven-word expression has become synonymous with resistance to change: "*If it ain't broke, don't fix it!*" On the surface, it's a straightforward, rather blunt statement of fact and advice: "Don't mess with what's already working." As usually interpreted, however, it's a slogan of resistance, defiantly asserting: "No change is wanted or needed here; go tinker somewhere else!" Considered symbolically, it may also reveal an unarticulated set of assumptions about change and the organization in question. Every individual, and for that matter, cultural system, views and interprets empirical events through a set of beliefs and assumptions. Often these beliefs and assumptions are subconscious and rarely examined or questioned. They just are. Yet they exert a profound influence over how a person sees a situation, and what actions will or will not be taken. If, for example, someone implicitly assumes that interpersonal communication is like calling another person on the telephone, then any miscommunication might be attributed to a "bad connection" or "static on the line." Viewed as a computer-to-computer interface, the difficulties might be alternatively defined as "incompatible software or hardware." Depending on the implicit view, different remedies are likely to be suggested: "Let's hang up and try again," or "Let's make sure we are both using the same (computer) language."

This discussion advances the proposition that these underlying, usually unarticulated understandings about a situation are often shaped and revealed metaphorically. Furthermore, because these understandings are critical to how people assess the need for change—and indeed, their conception of change itself—paying attention to managing the metaphors of change becomes a critical competency for leaders and change agents.

Metaphors and Metaphoric Analysis

A metaphor is a form of symbolic, rather than literal, expression. The *Webster New World Dictionary* defines a metaphor as: "A figure of speech containing an implied comparison, in which a word or phrase ordinarily and primarily used for one thing is applied to another, e.g., the curtain of night." Beyond their usefulness to poets and politicians, some psychologists assert that metaphors serve as the essential bridge between the literal and the symbolic, between cognition and affect, and between the conscious and the unconscious. As such, metaphors are often the medium for understanding and presenting ideas, insights, and intuitions not always available to analytic reasoning and discourse. Others, including linguists and philosophers, go further to suggest that metaphors serve as a primary method for understanding and expressing abstract, affective, and/or intuitive experience.

From these points of view, the statement "*If it ain't broke, don't fix it!*" is more than a phrase signifying resistance to change. It is the manifest expression of a deeper, sometimes preconscious, symbolic construct that informs and maintains "reality" for the speaker. It is, therefore, a key to what a person may really be thinking, even when the person "hasn't really thought about it." Consequently, for diagnostic purposes, the way

to approach and listen to metaphorical expressions is "as if" they were literally true. A closer look at our example slogan will reveal the potential power of this form of analysis.

First, consider what "it" in the slogan stands for. Clearly, "it" refers to the organization, system, policy, etc., in question. Thus the phrase is really saying: "If the **organization** ain't broke, don't fix it!" Now let's consider the rest of the phrase. Things that literally break and require fixing in the "real world" are typically machines—toasters, washing machines, lawn mowers, automobiles, etc. The phrase is essentially equating the organization to a machine that requires fixing only when there is a breakdown or malfunction. Thus, it would not be unreasonable to assume that at the moment of invoking the slogan, the speaker conceives of the organization, at a conscious or preconscious level, as if it were a machine and is inviting others to do the same. This is not a trivial association when we consider the implications of the extended metaphor of an organization as a machine. If it is a machine, then things should be smooth-running, well-oiled, predictable, efficient, and designed such that all the parts fit together to fulfill a single, unambiguous function or purpose. This bears more than a passing similarity to the Scientific Management theory of organizations and reminds one that the Father of Scientific Management, Frederick Winslow Taylor (1856-1915), was a trained mechanical engineer and machinist.

This leads to another important aspect of the extended metaphor. If an organization is a machine, then who are the managers and leaders of the organization/machine? Typically, machines are run by **operators** and **engineers** who determine output standards, maintain the equipment, and set commands and controls that dictate what the machine will do. Furthermore, when a machine breaks down or needs servicing, a **repair person, maintenance worker,** or **mechanic** is called in, asked to bring a tool kit, and told to "fix it."

The concept of change itself is also part of this extended metaphor system. Thinking in terms of a machine metaphor invites thinking about organizational change in terms of something "breaking down" and therefore "needing repairs." Ideally, this should be done with "minimal downtime," doing just enough to "get things up and running again." Consequently, in the machine metaphor system of thought, change is often equated to something being poorly maintained or broken. Accordingly, from this mind set, the arrival of a change agent (repair person) at your place of work implies psychologically that you've done something wrong or, worse, broken something. This helps explain the sometimes emotionally-charged reaction: "There's nothing wrong. . . nothing's broken!" Thus, one way people understand the abstract phenomena of organizational change is as if a broken-down machine is being returned to smooth-running performance through the assistance of a repair person who was called in and who works under the direction of the machine's operator or engineer.

An Example of Being Stuck in Machine Metaphor Thinking

A large high-tech company was faced in the 1990s with a host of dilemmas: Its traditional market base was eroding, new competitors had entered the field, costs and overhead had to be drastically cut to increase competitiveness, structural realignment was needed to promote greater synergy and quicker response, long-time customers were demanding more responsiveness and less arrogance, and the "everyone can do their own thing as long as you are successful" culture was getting in the way of the teamwork and collective focus needed to respond to the new challenges.

The top executives . . . were caught in an implicit machine metaphor model of change.

Unfortunately, the top executives of this corporation were caught in an implicit machine metaphor model of change. The CEO called meetings of all the VPs, and ordered them to "fix things quickly in order to maintain our market position." The VPs dutifully went looking for "what was broken" so they could "fix it," but came back perplexed. Everything was working the way it always had been—"nothing was broken"—so they couldn't find anything to "fix." Because they had always been successful, they rationalized that there was nothing wrong with them; it was just a temporary thing and soon everything would be back to normal. Conditions, however, continued to get worse.

Next, they decided to hold a series of retreats to find the problems in how they were producing their traditional products and services. They identified a number of problems that surely had to be "what was broken." These were "fixed" with great fanfare and everyone was convinced that "things would soon be up and running again" the way they always had been. Instead, conditions continued to worsen. Employees began to get worried and angry at the top leaders because they were failing to "fix the problem." Leaders and managers, in turn, were blaming supervisors and employees for not working harder to "fine-tune operations and/or operate at full throttle." This led to a series of all-employee meetings where the top leadership assured everyone that the situation would soon be "under control and smooth-running again." Employees were further assured that a series of task forces were going to "take apart the operation from top to bottom to find out what was wrong." Everyone just needed to have some patience. When conditions didn't get better, the CEO held a week-long special retreat with all the key managers of the corporation. In concurrent sessions, different aspects of the corporation were "broken down and put back together again." The reports all came back with minimal or marginal ideas for improvements. Everyone kept saying: "Things are working correctly—the way they were designed to work." Furthermore, the existing "set-up" was the most effective and efficient way to "run the organization."

Conditions continued to decline, and in desperation, the CEO called in a group of management consultants. Their backgrounds varied, but their advice was the same: "You have to rethink your whole business; up until now you have only been tinkering." Somewhat taken aback, the CEO assured each of the consultants that every conceivable way to "fix or improve operations" had been tried, and that perhaps the consultants didn't really understand how the business worked. All of the consultants were steadfast and assured the CEO that nothing less than a "new conception" of the business and how it operated would save the corporation. At this point the CEO, somewhat defensively, challenged the consultants: "You are the experts, find something in your tool kits to fix the problem." The consultants all replied it was not a question of "fixing" anything, rather a need to "reinvent" the corporation. This just further annoyed the CEO, who couldn't figure out how business results could be so poor, if "nothing needed fixing."

Recently, the CEO was replaced by the board of directors. In taking this action, the board explained that they needed "a new leader who was not a captive of the past, had some vision, and was capable of giving birth to a new era."

The story of this corporation is a familiar one in the 1990s. CEOs who try to "fix" or "repair" their organizations are being replaced in favor of new leaders who promise "a new way of thinking." One need only look at GM, IBM, American Express, and even the U.S. presidential election of 1992, to see leaders who thought they knew how to "keep the machine running" being replaced by new leaders with "the vision thing." The following discussion may shed some new light on this phenomenon and raise questions about whether or not a change in implicit metaphor could make a difference.

Metaphors of Change

The "Fix and Maintain" imagery described above, while frequently encountered, is hardly the only metaphor of organizational change. We can consider three additional types of organizational change processes: Developmental, Transitional, and Transformational. Each has its own characteristics and associated change technologies:

- **Developmental** change builds on the past and leads to better performance over time, e.g., better teamwork.
- **Transitional** change involves a move from one state or condition to another, e.g., from manual to automated operations.
- **Transformational** change implies the transfiguration from one state of being to a fundamentally different state of being, e.g., from a regulated monopoly to a market-driven competitive business.

Clearly what is happening is different in each case. Significantly, the metaphors and imagery used to understand and describe each type of change are also different.

In **developmental** change, one builds on a foundation to achieve higher levels of per-

formance. The metaphors and imagery are analogous to construction and/or developmental growth. The organization is described as if it were a building under construction or a developing person. This kind of change is often perceived as positive (getting bigger, getting better, etc.), especially when the developmental plan and/or goals are agreed upon in advance. Developmental change agents are often referred to as **trainers, coaches,** and/or **developers**. They may be asked to do organization "development" or team "building" to help "lay a better foundation" in order to "improve" performance, "increase" capabilities, "build" additional competencies, and/or "stimulate" and "nurture" growth.

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An example of a developmental change effort was a series of strategy sessions conducted by the editors of a national travel magazine. They saw their task as figuring out ways to "build and develop" the magazine. Consequently, they focused on strategies to "build circulation," "develop" new features, and "increase" advertising based on the "strong foundation" of their traditional audience "base." The possibility that changing trends and demographics might call for more radical changes was consistently ignored because "our job is to develop what we've got."

In **transitional** change, an organization goes from one state to another state, such as moving from a centralized to a decentralized operational system. The metaphors and imagery are analogous to relocating and/or moving from one place to another place. Expressions such as "moving forward," "knowing the right path," "taking the best route," "keeping to the timetable," "avoiding obstacles and dead ends," "leaving the old behind," and so forth, are common. The lack of "a clear destination," disagreement over the need or desirability of "the move," conflict over "the best route to take," debates over who has "to move," "how fast to go," and whether or not this is the best time "to pack up and leave" are all ways to describe common difficulties encountered in transitional change efforts. Transitional change agents are called upon to be **planners, guides,** and/or **explorers** because they are supposedly more familiar with "the journey" and with what to expect "along the way." Consequently, they are usually asked to help make plans for the "duration of the journey," or at least to make sure everyone is "headed in the right direction." They are also supposed to help facilitate "movement," insure things "stay on track," and that no one is "left behind." Once the organization "arrives" at its desired "destination," it is assumed their guidance will no longer be needed.

An example of a transitional change was the planning process carried out by a leading daily newspaper to introduce a new printing technology in its publishing plant. The process included specifications of the "desired end state" and the exact time the plant would "get there." Meetings were held with the union to insure that everyone was "on board," that "things stayed on track," and that "the road ahead stayed clear." A major sticking point in the discussions with the union was "how fast to make the changeover." After following a very detailed "schedule and timetable," everyone in the plant celebrated "the arrival" of the new equipment and had a moment of silence for the old presses that were being "abandoned and left behind." Indeed, many of the workers talked about how hard it would be to get used to the sounds and rhythms of the "new place." Despite all the detailed planning and work with the union, no one ever considered working on other changes such as redesigning jobs or the pay system because "our job was to move to a new way of printing, not create a whole new plant."

In **transformational** change, there is also language about change from one state to another state. However, the metaphors and imagery are not about geographic movement so much as they are about an alteration in the state of being, as in becoming a fundamentally different kind of organization. The imagery of "becoming" in transformational change is also more radical and extreme than in developmental change, where the organization becomes better at something, but doesn't abandon its foundation, roots, or essential being. In transformational change, the metaphors and imagery are about a fundamental alteration in who or what the organization is—its very identity and way of being, e.g., "abandoning the past in order to become a completely different kind of company."

A range of metaphors are often used to describe organizational transformation. These include images and metaphors associated with awakening, uncovering, escaping, purifying/purging, enlightening, becoming whole, returning to the core, unfolding, and dying and being reborn. Thus, in organizational transformation, we might hear expressions of a need "to wake up," "remove the blinders," "get out of the box," "get rid of excess baggage," "see the light," "become more holistic," "return to the basics," and "recreate ourselves anew." Organizations experiencing transformational change may ask change agents to help them "remove their blinders" in order to develop new visions and values, assist in "breaking out of the box," help people "to see" or "to get it," and/or help the organization "re-invent" itself or "give birth" to a whole new way of doing things. At such times, the change agent is likened to a **liberator, visionary,** or **creator** who possesses the ability to help "unlock the situation," "see new possibilities," and "give birth" to the new organization. One of the clearest examples of (forced) transformational change was the break-up of the Bell system into the new AT&T and the regional "Baby Bells." In addressing this change, the leadership and employees of the new organizations were initially stymied in their efforts to "build and develop" their businesses based on past practices. It was only after they struggled with "letting go" of time-honored values, traditions, and ways of thinking in order to create new structures and systems, all in the context of new visions and missions, that they began to experience success.

Mixing and Matching Metaphors

The four dominant types of metaphors about organizational change and change agents are summarized in Exhibit 1.

Knowing how to understand, use, and align these metaphors can be a powerful tool in any change effort. Consider Exhibit 2, where an organizational situation is presented and then described through each of the four different change metaphor systems.

These metaphors help to first define and then address the situation. Consequently, knowing which metaphor(s) a person is using, whether they are aware of it or not, helps enormously in understanding how they see the situation. Paying attention to how someone talks or writes about the change is a key to the underlying metaphor. For example, if someone says in response to the situation described in Exhibit 2, "We have a strong **foundation** to **build** on, we just need to **improve** our performance," it would be a good guess to assume they are operating from some form of an underlying "Build and Develop" metaphor system. With this understanding, one can then choose to get "in sync" with the person by communicating using the same metaphor or image system, or invite an alternative way of conceiving things by purposefully using a different metaphor or image system. This is illustrated in Exhibit 3.

In fact, because of the relationship between the underlying metaphor and how someone conceives of and then acts in a situation, it is possible to:

- **Diagnose** unarticulated assumptions and beliefs by paying attention to the metaphors and images used to describe any particular change.
- **Prepare** and **align** people with the true nature and requirements of the change by using congruent and appropriate metaphors and images.
- **Confuse** or **mislead** people by using inappropriate or incongruent metaphors and images.

With the examples in Exhibits 2 and 3 in mind, let's look at these assertions in more detail. First, it's important to remember that the same situation can be viewed and assessed

Exhibit 1 Metaphors of Change and Change Agents

Image of Change	Image of Change Agent
Fix & Maintain	Repair Person, Maintenance Worker, Mechanic
Build & Develop	Trainer, Coach, Developer
Move & Relocate	Planner, Guide, Explorer
Liberate & Recreate	Liberator, Visionary, Creator

Exhibit 2 The Impact of Metaphors on Assessment and Action

Objective Situation: Processing of customer orders is being delayed as paperwork moves back and forth among four different departments. Invoices are late and sometimes inaccurate. Inventory control is described as "out of control."

Metaphor	Internal Assessment	External Action
Fix & Maintain	The "processing machine" is broken somewhere. We may need to fix the machine and/or fix (re-train) the operators.	"Things just aren't in sync. A lot of things are fouled up. I don't know if anything's broken or not, but we've got to fix things fast. We can't afford a lot of downtime. Find someone with a good set of tools fast!"
Build & Develop	The basic set-up is fine. We need to learn how to work faster with better hand-offs and teamwork between the departments.	"We can do better than we have been doing. We have a strong foundation to build on, we just need to improve our performance. I'd like to set some stretch goals to shoot for, construct a winning team, and then really develop the business. Find someone who can help build us into a better team!"
Move & Relocate	We need to move from our old, familiar manual processing system to a new, automated one. It will be hard to leave the old ways behind, but we need to move on.	"We've got to keep moving. We've stayed with our old system too long. It's time to leave that behind and go on to a more modern operation. We've a long way to go, so we better start out now. Find someone who's been down this road before to help us plan how to get there!"
Liberate & Recreate	We need to open our eyes and rethink the business. Our hierarchical, sequential operation must end. We need to become a whole new kind of organization.	"It's time we woke up to reality. We need to get rid of a lot of things and get down to the essence. We need to break away from our habitual ways of thinking. We need a new beginning and an end to our past practices. Find someone who can help us create a new vision of the future, re-invent the organization, and get us out of the box we're in!"

in many different ways. Everyone sizes up a situation based on their own set of assumptions, beliefs, and metaphors for dealing with and describing reality. It is possible to view and interpret the same situation as if one were dealing with a machine, a construction project, a cross-country move, and/or breaking free from some limitation. Test this yourself. Think of a recent change in your organization. Was this done because "something was broken," because "it would make things bigger, better, faster," because "it made sense to move from one place (or way of doing things) to another place," and/or because "it was time to let go of the past and (re)create a new way of working"?

Second, how a situation is assessed—the metaphor(s) one uses to help define what is happening—will lead to differing courses of action. Depending on the metaphorical perspective, a wide variety of change initiatives could be recommended, from "tinkering" to "recreating" the business. If a "well-oiled machine" metaphor is used explicitly or implicitly to assess the problem, it is likely the remedy will be some form of "repair and maintenance," perhaps a "tune-up." It is unlikely, however, that a machine metaphor assessment would lead to a values or inspirational vision-driven intervention. It just wouldn't make sense to say: "We need a tune-up, so let's break free of the past and envision the future in order to breathe new life into the business." Nor would it make sense to say: "We need to move from where we are now to a new state, so let's keep what we've got, build on it, and strengthen it." Our actions tend to follow our assessments.

The previous example of the Bell system is a case in point. During the first few months (some would say years) after the break-up of the Bell system, managers and employees had a hard time adjusting to the changes. In a series of workshops convened to help people talk about what was happening and what they needed to do, the same sentiments came up over and over again: "Nothing was broken to begin with; we don't know what to fix." "They've taken away everything we were based on. How can they

Exhibit 3 Aligning the Metaphors of Change

Example 1:	*Out of Sync*
Leader A:	So what do you think about the task force's recommendation?
Manager B:	It's going to be quite a haul to get from where we are now to where they want us to go. (Move & Relocate)
Leader A:	You're not kidding. It will be quite a job to wake up this organization. How about you? Have you seen the light? What do you think we need to do to make sure we successfully break free from past practices and create the new organization? (Liberate & Recreate)
Manager B:	Well, as long as everyone is perfectly clear where we're headed, why we're going there, and the milestones along the way, it shouldn't impact on current operations too badly. When will we get our marching orders? (Move & Relocate)

Example 2:	*In Sync*
Manager X:	So what do you think about the task force's recommendation?
Manager Y:	It's going to be quite a haul to get from where we are now to where they want us to go. (Move & Relocate)
Manager X:	Are you up for the trip? What do you think we need to do to make sure we get to where we are headed? (Move & Relocate)
Manager Y:	Yes, I'm on board. Let's be clear where we're going and then map out the best way to get there. (Move & Relocate)

Example 3:	*Re-sync*
Leader Q:	So what do you think about the task force's recommendation?
Executive P:	It's going to be quite a haul to get from where we are now to where they want us to go. (Move & Relocate)
Leader Q:	I think we need to first realize the box we're stuck in before we can go anywhere. (Move→Liberate)
Executive P:	Yeah, I know what you mean. It's hard to get anyone to think about going anywhere—you know, change—around here. We're all stuck. (Move→Liberate)
Leader Q:	What do you think might help us get unstuck—get out of the box we're in—so we can see some new possibilities? (Liberate & Recreate)
Executive P:	It's funny. I never thought of it that way. I guess you can't go anywhere as long as you are trapped in a box. Maybe we need an escape hatch! (Liberate & Recreate)
Leader Q:	That's a great idea! Do you have any ideas where the escape hatch is located or how we could create one? (Liberate & Recreate)
Executive P:	Well, now that you mention it, we could try. . .

expect us to improve our performance now?" "We've been reorganized before, but this isn't like other moves; we've abandoned everything we stood for and we don't know where we're going." It was only after the concept and imagery of transformational change was introduced that people found the words to express what they had been feeling: "Yes, that's it. It's like we died and are waiting to be reborn." "No wonder I felt so lost. Now I understand that we have to create a whole new organization." "No wonder I felt so confused trying to build on what I had done in the past."

Third, the metaphors and images used by people in publicly describing a situation are usually a strong indicator of the private, underlying assessments and premises from which they are operating. For example, hearing someone say: "We've got to **move from** a hierarchical organization **to** a flatter structure" is a reasonable signal to assume that they are looking at the situation through a "Move and Relocate" metaphor system. When different people in the organization share the same underlying metaphor(s), there is usually agreement and focus on what to do. A common metaphor provides a shared understanding for everyone. When the underlying metaphors are different, conflict over what to do and how to do it is common. Thus one person may be trying to "fix the machine," while another

wants to "move the organization," and still another doesn't want to "tear down what we've spent so much time building up." In such situations, people may fight over the causes and cures to the problem without ever realizing that their differing, unexpressed, metaphorical reasoning may be preventing them from really understanding one another.

This is illustrated by a planning session involving managers of a major government agency addressing what to do about workforce diversity. During the session, there was strongly divided opinion about how much needed to be done. Some felt a major effort involving retraining managers and redesigning the organization would be needed. Others were equally adamant that not much more than a few directives would handle the situation. It was when they were asked to complete the sentence: "Dealing with workforce diversity issues is like doing _____ to an automobile," that they realized what their conflicts really were. About half of the managers responded: a "tune-up," a "new paint job," or a "good cleaning and washing." Meanwhile, the other half said: "a complete overhaul," "installing a new engine and frame," or "a complete redesign and reengineering." It was only after the implicit imagery that had been guiding their thinking was revealed that they were able to have a substantive discussion about what needed to be done.

Fourth, people will be confused and misled when a manager or leader uses metaphors and imagery in public discussions about a change effort that do not match the actual intended change. For example, if the leader privately believes there is a need to "rethink the business," "break free from the past," "wake up to the new realities," and "create anew," then some form of transformational change is probably intended. Such changes can be traumatic, lengthy, and require a fundamental alteration in thinking and doing by organizational members. If, however, in public presentations, the leader tells the organization that: "We've entered a new phase where we need to build on our past successes, strengthen ourselves further, and insure a smooth running operation," then it is likely that "Fix and Maintain" and/or "Build and Develop" metaphors and images will be evoked in the minds of the audience. Thus, they will be ill-prepared, psychologically and emotionally, if they are then sent to workshops to learn how to "think outside of the box." If they then act confused or slow to get it, they may be labeled as resisters, rather than people who have been confused and/or misled by inappropriate imagery. Sometimes such mixed messages are unintended or derive from some confusion or lack of clarity by the leader. In other cases, they may be intended, but in the hopes of helping versus hurting the situation.

For example, in a large corporation heavily dependent on Defense Department spending, its president realized that world events, shifting priorities, and declining governmental budgets would seriously impact the company's future unless the organization fundamentally repositioned itself, changed its product/service mix, and altered its traditional culture. Nonetheless, when addressing middle managers about the need for these changes, the president kept (inappropriately) describing the changes called for as "based on our long history and traditional values" and "building on our past successes." The president ended the session by exhorting the managers to go out and "develop their operations for the future." Unfortunately, the president became increasingly dismayed as manager after manager began developing plans to expand on what they were already doing, rather than rethinking the business. When later asked why imagery related to "building on the past" was used, the president responded: "I thought it would help reduce resistance if they thought the changes weren't really that drastic. I just couldn't imagine telling them the 'past was dead' and that we had to 'wake up' to the new realities and 'invent' a new organization."

Finally, one way to help people align themselves with an intended change effort is to insure first that everyone is operating from the same metaphor/image system, and then that the metaphors and images are congruent with the intended change. If people seem confused about what to do, changing or altering the implicit and explicit metaphors may either free up their thinking, or cast the situation in a new light. When Total Quality Management (TQM) is talked about as a way to "provide more tools to fix more problems," it is unlikely that people will understand the aspects of TQM that call for a new management philosophy because a "Fix and Maintain" image is being evoked. Alternatively, if TQM is described using a "Liberate and Recreate" metaphor system as "a whole new way of being

When the underlying metaphors are different, conflict over what to do and how to do it is common.

Exhibit 4 Some Keys for Managing the Metaphors of Change

1. Listen to the word images you and others use to describe the change effort in order to assess clarity, consistency, and comprehension.
2. Make sure what you tell yourself and others metaphorically is what you mean literally.
3. Describe the change situation using all four (or more) change metaphor systems as an exercise to gain new insights and guard against blind spots.
4. Work to align the symbolic language system to help get people fixing, building, moving, or recreating in unison.
5. Seek to intentionally shape how people conceive and think about the change through the creative and constructive use of metaphors, images, and symbols.
6. When stuck, deliberately change the prevailing metaphor(s) and image(s) as a way to get out of the box and induce new ways of thinking.

that breaks from past practices and calls for new ways of working together," then it is more likely that it will be understood as intended to change existing management practices. People may still resist, but at least they and you know what they are resisting.

A good example of this was a large accounting firm where the introduction of TQM was met with fierce resistance from all levels of employees and managers. They objected to the idea that something might be wrong with the professional quality of their work and "needed fixing." The change strategy that emphasized training managers in TQM problem-solving tools and techniques ("because it was more hands-on") had been a serious miscalculation. Everyone was angry that top management thought something "was broken" in the quality of their work and therefore they were being given "tool kits to fix things." When the change strategy was shifted to also explain the underlying logic, rationale, and factors and forces driving the change, tempers finally abated.

Managing the Metaphors of Change

Based on the above discussion, the following ideas (summarized in Exhibit 4) offer some specifics to consider when dealing with organizational change:

1. Pay careful attention to how you and others describe, verbally and in writing, the change in question. Are you describing the change as if what is needed is to:

- **Fix & Maintain**: repair, tinker, adjust, fine-tune, deal with what's broken, get the right tools, etc.?
- **Build & Develop**: Add to, grow, lay a good foundation, nurture, train, get bigger, get smarter, get faster, etc.?
- **Move & Relocate**: move forward, go from _____ to _____, leave something behind, watch for obstacles, timetables, clear steps, milestones, etc.?
- **Liberate & Recreate**: wake up, think out of the box, create a new paradigm, see the light, break free from the past, end _____ and give birth to _____, reinvent, recreate, etc.?

Listen to yourself and others as an act of diagnosis to test clarity, intent, and understanding regarding the change.

2. Make sure what you say is what you mean. Insure that how you think about and describe the change metaphorically is consistent with the intended change. Otherwise, you may be confusing others and/or yourself. Don't talk about "building on the past" if what you really want to do is "escape the past and create a new future." Note that any recurring inconsistencies in how you and others describe the change could be a possible indicator of continuing doubt, confusion, or lack of clarity as to what is really intended and why.

3. Describe the intended change using all four, or more, metaphor systems as a planning exercise. Pay attention to the ways in which you see the situation the same or differently through each metaphor. Note the implications for intervention and action. For example, imagine a meeting of Kremlin leaders in 1990 going through such an exercise:

- We need to **fix** and **maintain** communism because _____.
  In order to do that, we need to _____.

- We need to **build** and **develop** communism because _____.
  In order to do that, we need to _____.
- We need to **move from** the old form of communism **to** a new and different communism because _____.
  In order to do that, we need to _____.
- We need **to end** communism and **begin anew** because _____.
  In order to do that, we need to _____.

While there is no guarantee how such an exercise will turn out, it does assure that multiple views will be examined. It might also turn up some blind spots created by unspoken beliefs associated with unexpressed metaphorical reasoning.

4. Work to align the symbolic language system of everyone involved to match the desired change. It does no good for the CEO to be talking about "moving and relocating" if lower-level managers are talking exclusively in terms of "fixing and/or building." It's hard to imagine a successful organizational change effort where the CEO sends a message about a "faster, more responsive, more effective organization" to middle managers who tell supervisors to "go fix your operation," but are greeted by angry workers who say: "What's the problem? Nothing's broken!" This also means that a change agent should not unintentionally reinforce inappropriate metaphors and, in turn, the underlying ways of conceiving the situation. If a manager worries that a change effort may "require too much downtime" and that "a good set of tools is needed," then the response "Don't worry, I'll get my tool kit and keep downtime limited" is reinforcing. That's appropriate if the intended change is a "Fix and Maintain" type of change. If it isn't, then a more appropriate response might be: "I'm not sure we're fixing anything, so much as we are moving from an old system to a new system. The move may take some time, so we need to plan it carefully. The first step will be to map out the direction we're headed in and where we want to be by next year."

5. Lead by helping to shape how people conceive and think about things. The creative and constructive use of symbolic language systems is a critical leadership competency, especially during organizational change. Leaders simply cannot afford to let their change initiatives be recast and/or misunderstood as a result of implicit or unexamined metaphors. Leaders must be clear in what they want and help shape and inform change through congruent use of literal and symbolic reasoning. They must also be sensitive to their own blind spots created by unthinking use of favored metaphors or images that may be limiting their own reasoning processes.

6. Intentionally change prevailing metaphors and images as a way to induce new ways of conceiving a situation. "In the box" thinking is created by habitual use of thought patterns that inevitably lead to the same conclusion. New patterns are needed to "get out of the box." Because most people naturally use metaphors for abstract reasoning, one way to "get out of the box" is to deliberately change the underlying metaphors and images being applied to the situation. Any organizational change that requires people to reconceive the situation they face will require a change in the underlying and usually unexamined metaphors. To ignore this aspect of managing change is to jeopardize the whole change effort.

Concluding Remarks

In sum, how one conceives of something is often based on the implicit or explicit metaphorical system(s) used to comprehend and engage reality. Therefore, how an organizational change is described metaphorically is both:

- an indicator of the speaker's internal understanding and assessment of the situation, and
- a way to cue and influence how listeners should understand and respond.

Change may be change, but the symbolic languages associated with Maintenance, Development, Transition, and Transformation are all quite different. The next time someone in your organization says: "But if it ain't broke, why fix it?," recall this discussion and seize the opportunity to paint a word picture of what you really want to communicate.

How to Change the World: Lessons for Entrepreneurs from Activists

Adam Kahane

Adam Kahane
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Speech delivered to Fast Company's *Real Time Conference, Orlando, Florida, May 2000.*

For the past 14 years, I have had a bit of an unusual life, commuting between two very different worlds: the world of entrepreneurs and the world of activists. I've spent most of that time in the world of business, for the first seven years as a strategist with two large industrial companies, and then for the last seven as the co-owner of a consulting firm. I've been able to work with top business leaders in more than 50 countries, and with great companies like Royal Dutch/Shell, Federal Express, and PricewaterhouseCoopers.

During the same period, I've been making excursions into the world of politicians and guerillas, civil servants and community leaders, trade unionists and clergymen. I've been privileged to work with people who are trying to make a difference in some of the most challenging places in the world, including Israel, Northern Ireland, Cyprus, and Colombia, as well as in two of the countries that made the most remarkable peaceful transitions of the 1990s, South Africa and Guatemala.

Throughout these two sets of experiences, I have found myself confronted with the same questions. How can we change the world? How can we make an impact for the better? How can we influence the future? And the question I want to focus on here, how can we make sense of all of this in the world and language of business? The best way I know to explain what I've learned is to take you through these past 14 years and tell you four stories. I've chosen these stories because they explain four key lessons I've learned, four steps toward answering these questions. Then I'll conclude with a summary of what I've learned and what I think it means for those of us in business who want to make a difference in the world.[1]

Let me start, briefly, at the beginning. I was born in Montreal, into a family that believed that it was important to try to make a difference. I grew up thinking that I needed to find my vocation, and that that vocation needed to be connected, even in a modest way, to making the world a better place. I had a good head for analysis and so I studied physics and mathematics at McGill University. But I wanted to do something that was connected more directly to making a difference in the world, and so when I went to graduate school at Berkeley, I studied energy economics and energy policy. The big surprise I got in switching from physics to economics was that it wasn't as easy to predict and control the behavior of people as the behavior of physical objects. If this lesson had sunk in, it would have prepared me well for life in the corporate world—but of course it didn't.

The Illusion of Control

This brings me to my first story, which I call "The Illusion of Control." In 1986, I got my first real job, as a corporate planning coordinator for Pacific Gas & Elec-

tric Company in San Francisco. PG&E was the monopoly supplier of electricity and gas to all consumers in its territory in northern California. I liked having an important job with a powerful company that did something so concrete and useful. I was happy to be able to use my analytical skills to help figure out what was happening in the world and what the company should do about it.

Strategy work at PG&E had a particular slant because the company was a shareholder-owned, publicly regulated utility. A lot of the decisions about what we were able to do and most of the decisions about how much profit we could make were in the hands of various regulatory commissions. This was the time when the trend toward deregulation was starting to hit the US electricity and gas industries, so most of the strategic attention of PG&E executives was on negotiating with the regulators. One measure of the importance of this was that nine out of ten members of the company's top management committee were lawyers.

This was my first exposure to the world of corporate strategy, and to the corporate way of approaching the future and of being in the world. What I learned in that job was the importance of analyzing what was going in the world, of forecasting what would happen, of advocating for the rules we wanted, and of reacting to the rules as they were changed. I would characterize our paradigm as an orderly world in which almost all the things that mattered to us—inside and outside the company—could be controlled, either by us or by the regulators. I liked this way of approaching things; it certainly was invigorating from where I sat, near the top of the company hierarchy, but I knew that it was parochial and that it couldn't last. Deregulation was pushing PG&E and its executives into a larger world where they would be forced to deal with many more competitors and much less control. For myself, I wondered what it would be like to live in this larger, out-of-control world.

The Limits of Detachment

This leads me to my second story, which I call "The Limits of Detachment." In 1988, after I'd been at PG&E for a few years, I got a job offer from the strategy department of Royal Dutch/Shell in London. For someone who was interested in the larger world of corporate strategizing, this was a wonderful opportunity. Shell is one of the largest and most global companies—it has operations in 130 countries—with a tradition of leadership that is not only cosmopolitan and businesslike but also thoughtful and ethical.

What particularly interested me is that Shell had pioneered a sophisticated way to approach the future that centered on a methodology called scenario planning. The key idea was that it really wasn't possible to forecast or control the future, and in fact, the conceit that you could forecast what was going to happen led to a "tunnel vision" that could be fatal. Instead, the approach was to inquire deeply and broadly into what was happening in the world and then to construct two or three or four scenarios about how things might turn out. These scenarios about the world then became the basis for exploring different options for the company and deciding on what to do. The emphasis was on building the capacity of the company to learn; Shell played a big role in launching the whole field of organizational learning.[2]

This story is about the global scenario work we did from 1991 to 1992. One of the important principles of the Shell approach was to stretch to see what we were not seeing. Two important techniques we used were to go on Learning Journeys—to visit places and organizations around the world where we could glimpse new things that were going on—and also to consult Remarkable Persons—businesspeople, academics, activists, scientists, heretics, anyone with a usefully different way of looking at what was going on. You can imagine what an exciting and enriching experience this was for me.

Our exploration ended up focusing on the twin revolutions of globalization and liberalization. By liberalization, we were talking about opening mar-

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Commentary
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Scenarios have found many, sometimes surprising, applications. Herman Kahn is credited for being the first to use the Hollywood film script or screenplay to help people think the "unthinkable" (Kahn, 1962). In those days, the "unthinkable" was a nuclear conflict! Later, Pierre Wack developed the idea of using scenarios as a strategic planning tool at Royal Dutch/Shell (Wack, 1985). This was partly to think the unthinkable, but mostly to teach the Shell managers "the gentle art of reperceiving": new ways to see the future or, rather, ways to see new, unexplored futures.

Practitioners then began to find that scenarios are useful instruments for resolving conflict. In this area, Adam Kahane has done his remarkable work in South Africa, Guatemala, and Colombia. Uniting the parties-in-dispute in thinking through a shared future was an effective means for creating a common language. Divided in the past, the parties united around the future or, rather, the possible futures! The word "scenarios" is always plural, in contrast to "prediction," which is by definition singular.

The underlying idea in the use of scenarios is to present the "actors"—that is, the people who need to think the unthinkable or the managers who have to take the decisions—with "internally consistent stories of relevant, plausible futures" (van der Heijden, 1996). The actors have to work through the reperceiving of their future or agree on joint actions or attitudes to take in those futures.

Equally, all through the now 40-year history of scenario planning, the script writers have always had to fight the human inclination to perceive one future as preferable. I have to admit that I have mostly resisted this tendency. It has been my view that the actors or learners, as I like to call them, have to do

their own learning. Also, I have been rather suspicious that the script writers use their acquired detailed knowledge of the possible futures to impose what they think is the most desirable scenario on the learners.

Nevertheless, I think that Kahane makes a strong case that in deep-seated, often bloody conflict situations, a shared vision of a desirable future can become an irresistible force for change.

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kets with free trade and deregulation, and also opening up political systems with free information flow and elections. We constructed two stories about how the world might unfold as a result of these dynamics:

- *New Frontiers* describes what happens when many poor countries liberalize successfully and claim a larger role for themselves on the world stage—politically, economically, and culturally. This liberalization is turbulent and painful to many established interests, but it continues because people believe that it is in their long-term interest, and that their own prosperity is ultimately linked with that of others.

- In *Barricades*, people resist globalization and liberalization because they fear they might lose what they value most: their jobs, power, autonomy, religious traditions, and cultural identity. Many economic and political vested interests are deeply threatened by liberalization and attempt to contain it. Where liberalization is tried, expectations are not met quickly enough. People may believe that liberalization will make them better off in the long run, but the long run is just too long, and in the meantime, the required sacrifices are too great.[3]

These were two logical, plausible, challenging narratives about how Shell's business environment might turn out. After we had written the scenarios, we used them as the input for many strategy workshops with different Shell companies around the world. These sessions were useful in that they helped Shell executives see, talk about, and act on important opportunities and threats presented by the scenarios, including possibilities that were not previously on their radar screens. So they helped the company to learn and adapt.

One aspect of these conversations, however, left me uneasy. Most of us who had worked on or heard the scenarios thought that, overall, *Barricades* was not as good for the world as *New Frontiers*, even though *Barricades* would be brought about by people doing what they thought was best, and would offer good business opportunities for Shell. But the general view at Shell was that it would not be proper for us to try to act to promote *New Frontiers* over *Barricades*, except in areas close to our commercial interests, like trade policy.

This view had two roots. First, favoring one scenario over another would make the stories less effective as a tool for stretching the executives' thinking and helping the company become more adaptable. Second, and more fundamental, companies should not intervene in politics; they should stick to their own business playing field. Later, when I worked in Guatemala and heard the appalling story of the United Fruit Company's involvement in the 1954 *coup d'état* there, I understood the risks of corporations becoming involved outside their commercial domain. At the same time, I was disturbed and—more significantly for my story here—I was de-energized by what seemed to me to be a somewhat detached stance toward the world. I wondered whether there was another way to approach the future.

I was disturbed and . . . de-energized by what seemed to me to be a somewhat detached stance toward the world.

The Power of Engagement

This brings me to my third story, "The Power of Engagement." In 1991, after I'd been working at Shell for three years, our department in London got a call from a professor at the University of the Western Cape in South Africa. A group of academics, businesspeople, and activists there had heard about the Shell scenario methodology and wanted to use it to think about the future of South Africa. I was chosen to go help them, and that's how I ended up facilitating what became known as the Mont Fleur scenario project.[4]

The context in South Africa is important to understanding this story. In 1990, Nelson Mandela was freed from prison, and the ban on the African National Congress (ANC) and the other black and left-wing political parties was

lifted. The first all-race elections were held in 1994. So the Mont Fleur project took place right in the middle of a complex period of many kinds of negotiations about how to make the transition from apartheid. There was a series of official constitutional negotiations and also hundreds of different "forums" where multi-stakeholder groups worked on issues of health, transport, education, economics, and so on. During this period, no one was really in control; both the government and the liberation movement had concluded that they couldn't impose their solution on the other and that, regrettably, some sort of cooperation was necessary. The joke going around at the time was that there were two ways to solve the problems of South Africa: the practical solution and the miraculous solution. The practical solution is that we would all get down on our knees and pray for a band of angels to descend from heaven and make things better. The miraculous solution is that we would work together to find a way forward. On the whole, South Africans implemented the miraculous solution. Although the Mont Fleur project played only a small role in this larger process, it gave me a privileged window into what was going on and that's why I focus on it here.

Mont Fleur was a kind of forum that was intended to influence the future of the country through the development of a set of scenarios about how things might unfold over the coming ten years. The project was named after the conference center where we met, in the mountains outside Cape Town. When I arrived, I didn't know any methodology other than the one we used at Shell, so that's what we used at Mont Fleur. What was different about this project, then, was not the process but the context. The Mont Fleur work was not done by the staff of a single company but by a team of 22 leaders drawn from organizations that ranged across the political map: community activists, conservative politicians, ANC officials, trade unionists, academics, establishment economists, top corporate executives, and so on. One of the great things about working with a group like this is that they can learn a lot about what is going on from listening to each other, and have somewhat less need than a corporate group for Learning Journeys and Remarkable Persons to help them see what they are not seeing. It was as if each of them had a piece of the larger puzzle picture of South Africa.

The team came up with four scenarios:

- *Ostrich* is a story of the white government believing that it could avoid a negotiated settlement with the black majority, burying its head in the sand, and thereby making matters worse in the end.
- *Lame Duck* tells the story of a prolonged transition where the new government is hobbled by compromises built into the constitution and, because it purports to respond to all but satisfies none, it isn't really able to address the country's problems.
- *Icarus* describes a strong black majority government coming to power on a wave of popular support and embarking on a huge, unsustainable public spending spree that crashes the economy.
- *Flight of the Flamingoes* is a story about how the new government could avoid the pitfalls of the first three scenarios and gradually rebuild a successful economy.

I want to focus here on the *Icarus* scenario. Of the four stories, it was the most unexpected and, I think, had the most influence on thinking in South Af-

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rica. Here was a group that included the most prominent economic thinkers on the left—including one who later became the first black Minister of Finance and another the first black Governor of the Reserve Bank—pointing out the danger of a black government trying to implement certain kinds of left-wing economic policies. This scenario was being told at a time when most leadership attention was focused on achieving a successful political and constitutional transition, not on economics. The conventional thinking about economics on the left was that South Africa was a rich country and that its problems could be solved by quickly redistributing resources away from rich whites toward poor blacks, but *Icarus* said that this would not be a sustainable solution.

Once the scenarios had been written, the team organized a series of workshops with different political, business, and civic groups, where the stories were presented and the implications discussed. One of the workshops was with the leadership of the Pan Africanist Congress (PAC), a radical black political party, and at this meeting, one of the members of the Mont Fleur team, who was the PAC's head of economics, presented the *Icarus* scenario. He said, "This is a story about what will happen if our rivals, the ANC, come to power.

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And if they don't do it, we will push them into it." That provocation led to one of the most productive of all the workshops. Many years later, in 1999, when another member of the team was appointed to be Governor of the Reserve Bank, he said in his official inauguration speech, "We are not Icarus. There is no need to fear that we will fly too close to the sun." Overall, one of the biggest surprises about post-1994 South Africa is how economically prudent the new government has been. So at least one of the scenarios—and probably the others as well—had a significant influence on how the future unfolded.

Why did this scenario exercise have such a big and broad influence? And why did I feel such an extraordinarily passionate and creative energy in the Mont Fleur workshops? The answer is obvious, although it didn't occur to me for years. Although the methodology of this project was the same as the one we used at Shell, the purpose was fundamentally different. The Mont Fleur participants were not, like corporate strategists, simply trying to adapt to the future as best they could; they had come together because they wanted to influence the future, to make it better. They were playing on a larger field. When you think about it logically, one of the reasons the future is unpredictable is because we can influence it. The team members didn't see themselves as detached observers, but as active participants; most of them had devoted their lives to fighting for a better South Africa. They were aware of how their own thoughts and actions had an impact on what happened around them—they were reflective—as, for example, in the statement the man from the PAC made about the dangers in his own party's policies.

The Mont Fleur project showed me the enormous potential that cooperative, multi-stakeholder processes had to change the world. But it also raised several new questions in my mind. I noticed that some members of the team were uneasy with the consensus of the group and especially with the attempt to agree on a shared vision of the future they wanted, as it was articulated in *Flight of the Flamingoes*. They were concerned that they had compromised, that they had not been true to the ideas and ideals that were important to them; they worried that they had collaborated with the enemy. Obviously, South Africans had taken enormous strides toward reconciliation and peaceful resolution of their terrible differences, but I wondered what it would take to break down the barriers further.

The Mont Fleur participants were not, like corporate strategists, simply trying to adapt to the future as best they could . . . they wanted to influence the future.

This Mont Fleur experience catapulted me into a new life. I knew that the energy I felt in helping the South Africans to help their country meant that I had found my true vocation. I ended up resigning from Shell, moving to South Africa, marrying the project coordinator, Dorothy, and with a few friends, opening the consulting business that has grown into Generon. In the years that followed, we worked with large companies, governments, non-governmental organizations, and multi-stakeholder civic groups in Africa, Europe, Asia, and the Americas.

Five Minutes That Changed History

My last story, "Five Minutes That Changed History," is about a civic scenario project that we led in Guatemala from 1998 to 1999.[5] The process we used was based on the original Mont Fleur model, as we had improved on it in the intervening years. The situation in Guatemala was in some ways similar to that in South Africa and in some ways different. Guatemala had suffered the longest-running and most brutal civil war in Latin America, more than 36 years, with more than 200,000 people killed or disappeared, mostly at the hands of the government. The government and the guerillas had finally signed a peace treaty in 1996, and the society had now begun the difficult work of rebuilding.

We worked with a group of 45 leaders drawn from every sector of Guatemalan society: government ministers, former guerilla leaders and military officers, business owners, university presidents, journalists, human rights leaders, mayors, students, and others. They were at a higher level and were more diverse than the Mont Fleur group. Guatemala is the country in the Americas with the largest percentage of indigenous people (more than half), and the team included a strong contingent of Mayan leaders.

In the first phase of the work, constructing the scenarios, this team met three times at beautiful Lake Atitlán in the highlands. The results of this phase were at one level similar to Mont Fleur: a set of three scenarios about what might happen in Guatemala over the coming years.

- *The Illusion of the Moth.* The moth's path is dangerous; it flies toward whatever light it sees and is therefore often dazzled and burned. In this scenario, economic conditions do not improve, and diversity and interculturality are not really taken to heart, so discrimination of all types persists. National reconciliation is shallow, and polarization and social conflict continue. People cry out for political messianism and authoritarianism. Labor instability and unemployment rise, and international cooperation decays. The economy is characterized by short-termism. Tax revenues are not sufficient to pay for social necessities. The national spirit is pessimistic, mediocrity prevails, the rule of law is absent, and impunity remains. Overall, the process is one of people being worn down, with expectations unmet and solidarity eroded in the face of selfish agendas.
- *The Zigzag of the Beetle.* The back-and-forth flight of the beetle is erratic and directionless. In this scenario, advances in political, economic, and social life occur side by side with regressions. There is economic growth along with unequal participation in its benefits; interculturality along with exclusion and discrimination; and citizen participation along with apathy and lack of representation. Environmental degradation increases. The state is incapable of achieving real fiscal reform. Reconciliation and dialogue coexist with deep wounds and fear. Overall, the pattern is one of mixed results and no clear progress.
- *The Flight of the Firefly.* Each firefly illuminates its own way and also that of others; together, a group of fireflies pushes back the darkness. In this scenario, Guatemalans come to terms with their history and construct a model where tolerance and educational transformation create interculturality and eliminate discrimination. Holistic development is reflected in a nation with its own identity, and with pluralism, fairness, the rule of

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Commentary
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For somebody who has a strong desire to change the world, it is not unnatural to ask the question: "How can the world be changed?" And as a scenario practitioner, one is forced to address the more subsidiary question: "What role, if any, might scenarios play?" Scenarios, as alternate stories about the future, can be vehicles for all sorts of ideas. Depending on one's mental maps, they may be viewed as outrageous, inspiring, challenging, or boring.

The simplest analysis of the world assumes that it can be understood by trends alone. Unfortunately, simple extrapolation has a rather poor track record. A simple analysis recognizes that the past and the present are inert, so we can expect some things to persist. What these things might be is something worth knowing. But the future is a blank sheet, and knowing what can change is also very worth knowing. When we can distinguish between what might persist and what might change, we can use this to expand our understanding of how the world works. This is important for both activists and entrepreneurs because "a trend is a trend until it bends," and at the bends are risks, excitement, and opportunities for change.

To make a difference, we need to impart information that has the power to change future and current actions. As Gregory Bateson points out, for this to happen, we need a "difference that makes a difference." This is the starting point for useful scenarios, since we do not change the world but only the opinions and visions of people. Scenarios, if they are insightful and have an impact, can change people's view of how the world works and even encourage them to rethink their own roles. In this sense, scenario practices lean heavily on psychotherapy theory and practice developed in the past 50 years.

Of interest in Kahane's work is not just the final scenarios that are a basis for questioning vision and the generation of options, but the processes that he has designed to force catharsis and new understanding in the group of scenario explorers and builders. A scenario practitioner would like to know more about who was selected to join the teams, who should have been but was not, and the processes for interaction and synthesis of ideas.

Generally, as scenario practitioners, we are interested in the future of complex, open human systems, but most of the tools that planners use presume we know the structure of the system we are studying and can predict outcomes. The problem, of course, is that human systems are not physical systems (which, as modern physics tells us, are also not always predictable). The image that actors have of the system they are in is every bit as important as our understanding of the system itself. Human systems invariably hold in the present the seeds of many potential futures. Kahane's "Illusion of Control" is, in practice, the illusion of closed, predictable human systems. One rarely comes into contact with such systems.

I wonder how detached Shell's scenarios have been. From the early 1970s, they have rested on insights (that is, "uncomfortable realities") about how the world works. Their aim has been to challenge prevailing group-think, to derive challenging planning assumptions, and to provide a catalyst for generating new options and benchmarking business visions. Changes in a large corporation can take time. The 1989 scenarios on which I worked with Kahane produced two scenarios: *Sustainable World*, which introduced the company to the potential of climate change and sustainability as policy issues, and *Global Mercantilism*, which highlighted rapid market liberalization and the emergence of a customer-focused energy industry. These anticipated the direction of the policy agenda in the 1990s and were an element in the development of Shell's vision to embrace sustainable development and move closer to the customer in the gas and power businesses.

The 1992 global scenarios, *New Frontiers* and *Barricades*, were the first to explore the post-Cold War era and anticipated the risks of rapid globalization. In some respects, they were not detached—*New Frontiers* was visionary ("a globalization that works for all"), and *Barricades* explored a world reacting against these global forces.

Shell has, over the years, supported scenario work in a number of countries in order to aid open debate on future possibilities. The Mont Fleur scenarios in South Africa have been the most publicized and, in some ways, the most successful, presuming that the participants learned much about how the whole system works. The scenarios demonstrate the power of using one's hopes for the future as a basis for mediation in the

law, and genuine consensus. A democratic state grants equal opportunities to all. A fiscal pact reduces gaps between sectors. Citizen participation and productivity increase. Sustained and fair economic growth create real reconciliation and spreading optimism.

Once these stories had been agreed on, the second phase of the project began, using the scenarios to engage the nation as a whole. Here the work started to look different from the South African project: more purposeful and ambitious. The team used the scenarios not just to stimulate debate but to provoke concrete action intended to change the future of their country. Team members played a role in the 1999 national elections as candidates, political platform drafters, and non-party public figures; they worked on educational reforms in universities and in the public school system; they organized local development projects in Quezaltenango, the second largest city; and worked on reknitting the country's torn social fabric through replicating the team's dialogue process with hundreds of business, Mayan, academic, NGO, media, military, church, and worker organizations.[6] The *Visión* Guatemala project, which is still ongoing, is a significant chapter in the postwar rebuilding of Guatemala.

Where did this higher level of collective, concrete action to change the world come from? I would give a macro and a micro answer to that question. At a macro level, the project convenors and participants were willing, unlike in Mont Fleur, to attempt to agree explicitly not just on what might happen in Guatemala (the scenarios) but what they wanted to happen (the vision, that is, the *Flight of the Firefly* scenario); this is why the project was given the name *Visión* Guatemala. Perhaps this was due to the fact that the project took place after the brutal war and also after the conclusion of the peace negotiations (whereas the Mont Fleur work took place during the South African negotiations), so the time was right to try to work together and be seen to work together toward common goals. Perhaps it was due to a different orientation of the project leaders or my different orientation.

My micro explanation is that the future of the project's success was settled during a five-minute episode in the first workshop. On the second evening of this meeting, the team gathered after dinner in a circle, and told stories about experiences they had had that they thought related to what had happened, was happening, or might happen in Guatemala—in other words, to share their personal window onto the dynamics that the scenarios were intended to illuminate. For example, one businesswoman, who is a prominent fighter against judicial impunity, told the story of her sister's assassination by the military. She had gone from office to office trying to find out what had happened, and the first military official she had spoken with and who had denied everything was the man sitting next to her that evening in the circle. So people showed a lot of openness and courage.

Then, first thing the next morning, when we had gathered again, one man who had not spoken the night before said that he wanted to tell a story about his role in the exhumation of mass graves from a village massacre. He talked about what it had been like for him to find the corpses of children and pregnant women, and to work with the villagers to figure out what to do. When he finished his story, the whole room was silent for about five minutes. I had no idea what to do, so I didn't do anything. Something happened during this silence. One person said later that there had been a spirit in the room; another said that this had been a moment of communion. I do not consider myself very sensitive to these extraordinary phenomena, but if you crank up the volume like this, even I can hear it. I heard it then.

I believe that the subsequent success of the team in doing the hard work of agreeing on the scenarios and vision and then acting on this agreement can be traced to that episode. I would say that this was the moment where the group's shared will and shared commitment became clear, when everyone

knew why they were there and what they had to do.[7] Several members of the team have referred to this episode as the turning point in the project.

I think that it is easy to understand why the team was able to achieve a deeper, more real consensus—less of the feeling of having compromised that one of the Mont Fleur participants expressed—through the telling of their personal stories. Social psychologist Solomon Asch wrote that "consensus is valid only to the extent to which each individual asserts his own relation to the facts and retains his individuality; there can be no genuine agreement . . . unless each adheres to the testimony of his experience and steadfastly maintains his hold on reality."[8] We can only move into the future together with confidence if each person has told his or her truth about the past and present.[9]

Another way of describing what happened when the story of the mass graves was told is that the *whole* of the Guatemalan reality became visible in the *part* represented by that story. With this way of listening, each story can be heard as a hologram, rather than merely as the piece of a puzzle.[10] Several years earlier, my wife Dorothy and I had facilitated a strategy workshop for the Synod of Anglican bishops of Southern Africa. At the beginning, when we asked for proposed ground rules for the workshop, one bishop suggested that we listen attentively to each other; then a second one said that we should listen with empathy; and finally a third one offered that we should listen to the sacred within each of us. Holographic listening opens up the possibility of such a communion and oneness.

What I learned from this fourth experience is that we have the greatest capacity to make a difference when we dare to open ourselves up, to expose our most honest nightmares and our most heart-felt dreams. The *Visión* Guatemala team members had the impact they did because they were willing both to commit themselves to their vision of the future and to surrender to it.

How to Change the World

Here, then, is how I would summarize what I have learned from these four experiences. The people I have met who are most effective at changing the world have two qualities. On the one hand, they are extraordinarily committed, body and soul, to the change they want to see in the world, to a goal larger than themselves. On the other hand, they are extraordinarily open to listening to what is happening in the world, in others, and in themselves. Do you know the joke, "How many psychiatrists does it take to change a light bulb? Only one, but the light bulb has to want to change"? My paradoxical conclusion is that to change the world, you both have to be committed to changing it and be able to listen to how *it* wants to change.[11]

The South Africans and Guatemalans I worked with have been able to make history because they have lived this paradox. They have had the courage to commit their lives to effecting the changes they wanted to see. At the same time, they have had the courage to engage with others, even their enemies, to give up the illusion of being in control, to venture beyond detachment, and to surrender to the process. It is through holding this two-part intention that they have been able to help a better future be born. On the surface, these two intentions are in contradiction, but at a subtle, deeper level they are not. Martin Buber expressed this perfectly when he wrote:

> Free is the man that wills without caprice. He believes in the actual, which is to say: he believes in the real association of the real duality, I and You. He believes in destiny and also that it needs him. It does not lead him, it waits for him. He must proceed toward it without knowing where it waits for him. He must go forth with his whole being: that he knows. It will not turn out the way his resolve intended it; but what he wants to come will come only if he resolves to do that which he can will. He must sacrifice his little will, which is unfree and ruled by things and drives, for his great will that moves away from being determined

present. They showed that, although each of the main proponents had a partial and incoherent view of the whole system, a more balanced, holistic understanding was a better basis for joint action.

Such insights can, at the personal level, create enormous energy for change by releasing the individual from self-imposed constraints. This catharsis can be the basis for a new world view and a new sense of the possible. When scenarios are aligned with personal stories, they can become powerful agents of change.

Kahane states that "you have to be committed to changing the world and able to listen to how it wants to change." The pragmatist in me senses that to be successful, we also need to have a good dose of reality, that is, an insightful understanding of "how the world works." We need to have a sense of the scope of our influence to be able to focus on those things for which we have the most leverage.

But do we need scenarios to change the world? The first thing we need is a deep love and caring for the "world" we want to change—to heal, to make it more whole, and in David Bohm's words, to make it more coherent. Second, we need to trust our intuition about the world, knowing that we know more than we think we know.

Scenarios may not make us individually more caring, intuitive, or visionary, but the processes for building them and using them may better our collective understanding of the world and each other's visions. If we know "how things work" and we can share in the larger vision, we can motivate ourselves for great actions. We can then truly change the world. If we achieve this with our most pressing problems, then scenarios will have made a valuable contribution to human development.

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to find destiny. Now he no longer interferes, nor does he merely allow things to happen. He listens to what grows, to the way of Being in the world, not in order to be carried along by it but rather in order to actualize it in the manner in which it, needing him, wants to be actualized by him—with human spirit and human deed, with human life and human death. He believes, I said; but this implies: he encounters.[12]

What relevance does this conclusion from the world of activists have for the world of entrepreneurs? The key to seeing the connection is to understand that great activists and great entrepreneurs have one essential quality in common: they both see that there is something wrong, something missing, something that doesn't fit in the world, and they work to fix it, to fill the gap, to create something new.[13] They have the ability and will to see what is happening and what is needed, and then to actualize it, to bring it forth. Charles Handy calls them "the new alchemists" because they have the ability to create something out of nothing.[14]

The civic experiences I have had, in dramatic settings like South Africa and Guatemala, have allowed me to see concretely how this generativity occurs, clearly and in bright colors. But it also occurs in business, just in more muted tones. If I look at business through this lens, then I can see that you have to do two things if you want to be a great entrepreneur. I'm not necessarily saying that this is the only way to be a great entrepreneur, but it is one way.

The first thing to do is to *commit yourself to changing the world*. The key to tapping into your own best energy and creativity, as well as to the best energy and creativity of those around you, is to commit yourself to serving a larger purpose. The energy I first noticed at Mont Fleur revealed something both about the larger commitment of those South Africans and also about what this larger work evoked in me. People are at their best not only when what they are doing is in line with their personal purpose, but when their personal purpose is in line with a higher purpose.

This alignment is the root of both generativity and entrepreneurialism. In Michael Lewis's book about Jim Clark, the entrepreneur who founded three multibillion-dollar companies—Silicon Graphics, Netscape, and Healtheon—one of Clark's colleagues says: "The passion, the fire was there. There was a feeling that we were about to change the world. And we all knew that was how you made money, by changing the world."[15] An entrepreneur makes money by discovering something that doesn't exist—a "white space"—and by changing the world by bringing it into being.

The questions to ask yourself are: How does my company's product or service meet a real need in the world, make the world better? How does committing myself to this bring out the best in me; how is this my vocation, my destiny? If it isn't, you're not in the right business: not in a business to which you can bring the extraordinary levels of commitment and energy and creativity that a business needs in order to succeed.

. . . if you want to be a great entrepreneur, . . . listen to what wants to change in the world.

The second thing to do if you want to be a great entrepreneur is to *listen to what wants to change in the world*. This imperative is in tension with the first because it means being passionate about an idea and also being open to other ideas. Charles Handy says that entrepreneurs are "self-promoting and, at the same time, self-questioning." So you need to have more than commitment; you have to be able to sense what is trying to be born in the world, to *what* you must commit yourself. And by "sense," I mean more than just "analyze"; when the legendary hockey player Wayne Gretsky said, "I skate to where I think the puck will be," obviously he was referring to a kind of knowing that

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involves more than analysis. These other ways of knowing are especially impor-
tant for entrepreneurs in the emergent, speeded-up new economy.

The sensing and listening and seeing that you have to do have three di-
mensions:

- You have to be able to see the world, to observe precisely, as we did at
  Shell, through your own and other people's eyes; to see new possibilities
  and new scenarios through the eyes of customers, of other players, of
  competitors, of heretics.
- Second and more difficult, you have to be able to see yourself in the mirror,
  as some of the Mont Fleur participants did; to see your own role and influ-
  ence, your own part in the dance; to be reflective; to see your own seeing.
- And third and most difficult, you have to be able to glimpse the place
  where looking at the world and looking at yourself are the same, as the
  members of *Visión* Guatemala did, to see the underlying oneness.

Where to Start

This brings me to the end of my remarks and to my final point, which is about
where you have to start if you want to change the world. You can see that the
conclusion I have reached so far implies that my capacity to change the world
depends on my level of personal development: my sense of my own vocation and
my commitment to it, the range of my seeing and sensing, and so on. So another
way to interpret my four stories is that the keys to changing the world were al-
ways there, as much at PG&E and Shell as in South Africa and Guatemala, but
that I was too immature to see them. A more positive way of putting this is that
my capacity to help bring forth change in the world has grown as I have grown.

I can see in my current work when my way of leading—what I do, how I
am—helps something new and better be born, and when it holds it back or kills
it. What I am saying is that if you can't see yourself in the picture, then, by defi-
nition, you have no lever to change the world. To turn the old slogan on its head:
if you're not part of the problem, you're not part of the solution. An activist who
is committed to changing the world, but who can't listen to what wants to change
in the world, is a fanatic. An entrepreneur who is committed to changing the
world, but who can't listen to what wants to change in the world, is a tycoon.[16]

So generativity requires reflectiveness. Our capacity to see and change the
world co-evolves with our capacity to see and change ourselves. This is the
holographic principle again. Goethe put this beautifully when he wrote, "Man
knows himself only to the extent that he knows the world; he becomes aware
of himself only within the world, and aware of the world only within himself.
Every object, well contemplated, opens up a new organ within us."[17]

Let me summarize with a story about a rabbi who, like me, set out to
change the world. He found that he wasn't making much progress, so he tried
to change his country. This was also too difficult, so he tried to change his
neighborhood. When he didn't have success there, he tried to change his fam-
ily. Even that was easier said than done, so he tried to change himself. Then
an interesting thing happened. When he had changed himself, his family
changed. And when his family changed, his neighborhood changed. When his
neighborhood changed, his country changed. And when his country changed,
the world changed.

So now you know where to start.

Notes

1. See also Kahane, A. "Changing the Winds: Scenarios for People Who Want to Change
   the World." *Whole Earth* No. 96 (March 22, 1999).
2. See van der Heijden, K. *Scenarios: The Art of Strategic Conversation* (New York:

Wiley, 1996); P. Senge et al. *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization* (New York: Doubleday, 1994); and P. Senge et al. *The Dance of Change: The Challenges to Sustaining Change in Learning Organizations* (New York: Doubleday, 1999).

3. These scenarios are summarized in Jaworski, J. *Synchronicity: The Inner Path of Leadership* (San Francisco, CA: Berrett-Koehler, 1996).
4. See le Roux, P. et al. "The Mont Fleur Scenarios." *Deeper News* 7 (1992).
5. See Diez Pinto, E. et al., *Los Escenarios del Futuro* (Guatemala City, Guatemala: Visión Guatemala, 1999).
6. A similar, earlier exercise in violence-torn Colombia involved more than 30,000 people in workshops and reached millions more via television and newspapers. See Carvajal, M.J. et al. "Destino Colombia." *Deeper News* 9 (1998).
7. See Scharmer, C.O. "Presencing: Shifting the Place from Which Leaders Operate." Paper presented at the Conference on Knowledge and Innovation, Helsinki, Finland, May 2000.
8. Quoted in Weisbord, M. *Discovering Common Ground: How Search Conferences Bring People Together to Achieve Breakthrough Innovation, Empowerment, Shared Vision, and Collaborative Action* (San Francisco, CA: Berrett-Koehler, 1992).
9. This is the same philosophy that underpinned the South African Truth and Reconciliation Commission (which started its work in 1995, after Mont Fleur), with its emphasis on hearing the testimony of victims and perpetrators, as well as Guatemala's Commission for Historical Clarification.
10. See Bortoft, H. *The Wholeness of Nature. Goethe's Way towards a Science of Conscious Participation in Nature* (Hudson, NY: Lindisfarne Press, 1996).
11. For a more extended formulation of this idea in the context of the new economy, see Jaworski, J. and C.O. Scharmer. "Leadership in the New Economy: Sensing and Actualizing Emerging Futures" (Beverly, MA: Generon Consulting, 2000).
12. Buber, M. *I and Thou* (New York: Touchstone Books, 1970).
13. See Spinosa, C., F. Flores, and H. Dreyfus. *Disclosing New Worlds: Entrepreneurship, Democratic Action, and the Cultivation of Solidarity* (Cambridge, MA: MIT Press, 1997).
14. Handy, C. *The New Alchemists: How Visionary People Make Something Out of Nothing* (London: Hutchison, 1999).
15. Lewis, M. *The New New Thing: A Silicon Valley Story* (New York: W.W. Norton, 2000).
16. This insight is due to Bill Torbert.
17. von Goethe, J.W. *Goethe's Scientific Studies*. Translated by D. Miller. Edited by A.P. Cottrell and D. Miller. (Boston, MA: Suhrkamp Insel, 1985).

Commentary

by Nancy J. Adler

Leading: Giving Yourself for Things Far Greater Than Yourself

To be human is to give yourself for things far greater than yourself (Chittister, 1998); To lead is to give yourself for things far greater than yourself.

When I was 11 years old, my Austrian mother explained to me that when she was my age, she had wanted to have at least 6 children. Yet by the time she met my American father, just 8 years later, she no longer wanted any children. Losing most of her friends and family during World War II to Hitler's terror had convinced her that the world was not a fit place to raise children. Luckily, especially from my perspective, my father convinced my mother that, within the family, the two of them could create a bubble of love, and within that bubble, their children could grow up in safety and happiness, protected from the inhumanity raging outside. Having grown up within the bubble of their love, and in sunny southern California rather than war-torn Europe, I never doubted that our role on earth, as human beings and as leaders, was to expand the bubble to encompass the world: or, as the rabbis would exhort us, to return to our original task of *Tikun Olam*, the restoration of the world.

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Of course, none of us can claim that the twentieth century exited on a safe, secure, or loving note—a note imbued with peace, wisdom, compassion, and love (Adler, 1998). As we ask ourselves which of our twentieth-century legacies we wish to pass on to the children of the twenty-first century, we are humbled into shameful silence. Yes, we have advanced science, technology, and commerce, but at the price of a world torn asunder by a polluted environment, cities infested with social chaos and physical decay, an increasingly skewed income distribution that condemns large portions of the population to poverty (including people living in the world's most affluent societies), and rampant physical violence continuing to kill people in titularly limited wars and seemingly random acts of violence. No, we did not exit the twentieth century with pride. Unless we collectively learn to treat each other and our planet in a more civilized way, it may soon become blasphemous to even consider ourselves a civilization (Rechtschaffen, 1996).

And yet why not a more peaceful, sustainable, and compassionate society in the twenty-first century?[1] Why not a global civilization that we could bequeath with pride to our children and our children's children? Naively idealistic? Perhaps, but only if we ignore the wisdom and approaches of Adam Kahane and like-minded colleagues around the world. Only if we renege on our role as leaders and simply adapt to the future, rather than collectively attempting to improve it. As US Secretary of State Madeleine Albright admonishes us, "We have a responsibility in our time, as others have had in theirs, not to be prisoners of history, but to shape history" (Albright, 1997).

 After a quarter-century of conducting research and consulting on global strategy and cross-cultural management, I have increasingly focused the past few years on the small but rapidly increasing number of women who are among the world's most prominent business and political leaders—women who have served as their country's president or prime minister or as CEO of a major global firm.[2] Perhaps it is not surprising that at this moment in history, countries around the world, most for the first time, are turning to women leaders rather than to the traditional cohort of men. People want a change; they no longer want the narrow, circumscribed leadership of the twentieth century nor its outcomes. They hope and imagine that women will bring a more inclusive and compassionate approach to leadership.[3]

In Nicaragua, for example, former president Violetta Chamorro's ability to bring all the members of her family together every week for Sunday dinner achieved near legendary status. Symbolically, her dinners gave the nation hope that it could heal its civil war–inflicted wounds and find a peace that would reunite all Nicaraguans (Saint-Germain, 1993). Why such elevated hopes from a Sunday night dinner? Because of Chamorro's four adult children, two were prominent Sandanistas, while the other two equally prominently opposed the Sandanistas, not an unusual split in war-torn Nicaragua (Saint-Germain, 1993). As Chamorro's children told their stories around her dining-room table, others in the country began to believe that they too could "reach a deeper, more real consensus—including unity and peace—through the telling of their personal stories." Implicitly, the Nicaraguans believed that by listening attentively to each other, with empathy, they could hear the sacred within each person, their core humanity and that of the nation. It is no coincidence that the symbol of hope, peace, and unity was a dining-room table and not a boardroom table (Hassink, 1996, 1999). Kahane underscores that such holographic listening—in which each story reflects the whole, rather than merely contributing a piece to the puzzle—opens up the possibility of communion and oneness, of transcending history to create a new future: "We have the greatest capacity to make a difference when we dare to open ourselves up, to expose our most honest nightmares and our most heartfelt-dreams."

As Kahane points out, leaders who make a difference are extraordinarily committed, body and soul, to the change they want to see in the world, to a goal much larger than themselves. In her personal commitment, Chandrika Kumaratunga, the president of war-torn Sri Lanka, has become a prism for the paradoxes of extraordinary leadership that Kahane describes.[4] When she was only 11 years old, her father, who was the country's founding father and its first prime minister, was assassinated, many believe due to his policies, which advantaged the Sinhalese and stripped the Tamil of their cultural rights. Her mother, who also served as prime minister, furthered the country's ethnically divisive

policies. Later on, Kumaratunga's husband, a politically involved citizen and noted actor, was murdered in what many believe to have been Tamil-initiated violence. With the constant and very real threat of death to her and to her children, why did Kumaratunga choose to stay in Sri Lanka and run for office? And once she won, how did she find the courage to tell her mother—whom she later appointed to serve as prime minister—and the country that she was going to attempt to find a peaceful solution to Sri Lanka's seemingly interminable civil war by sitting down with the Tamil and listening to their story?

Kumaratunga, with both her father and husband murdered, chose to go outside the patterns of history and say, "Enough! There has to be a better way." Her attempts to move Sri Lanka toward peace and unity have by no means met with unequivocal success. Yet Kumaratunga persists, even in the face of constant death threats and a bomb explosion that has already claimed one of her eyes.

Kahane reminds us that leaders who influence history do so because they live the paradox. They have the courage to commit their lives to effecting the changes they want to see. At the same time, they have the courage to engage with others—even their enemies—the courage to give up the illusion of being in control, to venture beyond detachment, and to surrender to the process. Will Kumaratunga be able to commit to changing her country while remaining open to how each faction wants to change? Will she be able to maintain the paradox? To paraphrase Martin Buber (1970):

> Does Kumaratunga believe in destiny and also that destiny needs her; that destiny does not lead her, but rather waits for her. Can she proceed toward her country's and her own destiny without knowing where it waits for her? Will she be able to continue going forth with her whole being? Destiny will not turn out the way her resolve intended it; but what she wants will come about only if she resolves to do that which she can. Will she be able to neither interfere nor merely allow things to happen?

While the answer will only be written in the months and years ahead, we know that Kumaratunga has demonstrated enormous courage to date to begin the journey.

This past summer, my Jewish nephew Aaron married a deeply religious Catholic woman Karen. Although told that their wedding ceremony and life together would be rooted in both spiritual traditions, both families questioned the reality of the young couple's pronouncement when the invitations arrived announcing that the wedding would take place at Holy Family Catholic Church with a Catholic priest, and no rabbi, presiding. Only as the priest opened the service in Hebrew with a Jewish prayer, did the tension begin to recede.

In one of the most moving and profoundly meaningful wedding ceremonies I have ever attended, the priest celebrated Aaron and Karen's unique individuality, including their two distinctly different spiritual traditions. He made no attempt to minimize or ignore the differences between Judaism and Christianity. After the bride and groom had exchanged vows, the priest reminded us of the hatred that has all too frequently separated Jewish and Catholic communities. He then asked each of us to see Karen and Aaron as symbolic of the love that could unite the two traditions, the love that could replace the all too common hatred. What more powerful symbol of global leadership: love replacing hate, love bridging distinct individuality, love uniting bride and groom on their wedding day, love respecting and bridging differences among all peoples at all times. Kahane reflects that our capacity to see and change the world co-evolves with our capacity to see and change ourselves. As the marriage ceremony changed Aaron and Karen into husband and wife, so too did it change all of us into people who more deeply understand what it means to unify diversity without extinguishing individuality. Paraphrasing Goethe: People know themselves only to the extent that they know the world; they become aware of themselves only within the world, and aware of the world only within themselves (von Goethe, 1985).

To be human is to find ourselves behind our names (Krieger, 1998).
To lead is to find ourselves behind our names.

Notes

1. The McGill-McConnell Program for Leadership in the Voluntary Sector has the goal of creating a more peaceful, compassionate, sustainable society. Many of the ideas expressed in this commentary reflect the philosophy of the program and the approach

that the author took as a part of the team developing and delivering the first module, the Reflective Mindset. For more information, contact the McGill-McConnell program at Tel: 514-398-4060.

2. For a more in-depth discussion of women serving as global leaders, see Adler, N.J. "Did You Hear? Global Leadership in Charity's World." *Journal of Management Inquiry* 7 (1998): 135–143; "Global Leaders: A Dialogue with Future History." *International Management* 1 (1997): 21–33; "Global Entrepreneurs: Women, Myths, and History." *Global Focus* 11 (1999): 125–134; "The Women's Global Leadership Forum: Enhancing One Company's Leadership Capacity." *Human Resource Management* 39 (2000): 209–225.

3. To date, given the novelty of women in very senior leadership positions, there is no proof that women will in fact lead in different ways from men.

4. For a further discussion of Chandrika Kumaratunga's leadership as prime minister and executive president of Sri Lanka, see Burns, J. "After Years of War, Hope in Sri Lanka." *New York Times* (August 24, 1994): A11; Burns, J. "In Sri Lanka, Glimmer of Peace After Years of War." *New York Times* (April 16, 1995): 8; Editorial "Sri Lanka's Cycle of Tragedy." New York Times (August 19, 1994): A26; Burns, J. "Sri Lanka's Leader Presses Drive to Take War to Rebels." *New York Times* (November 13, 1995): A3; Piyasena, S. and B. Parmanand. *Chadrika and The Electoral Revolution in Sri Lanka* (New Delhi: Navrang, 1995); "Chandrika Bandaranaike Kumaratunga" as found on the Internet at www.slfp.lk/CBK.html on October 20, 1999; "Kumaratunga, Chandrika Bandaranaike," *The International Who's Who 2000* 63rd edition (London: Europa Publications Ltd., 1999): 874; "Special Report/Sri Lanka/Interview: I Can Take a Lot of Risks: President Kumaratunga on War, Peace and Solitude." *Time International* as found on the Internet with Electrical Library on October 20, 1999; among others.

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From Illness to Insight: Discovering Toxins in People and Their Organizations

Peter J. Frost
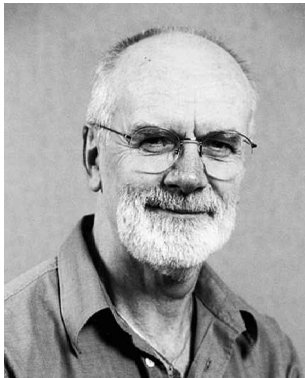
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In 1999, I coauthored an article entitled "The Toxic Handler: Organizational Hero—and Casualty" (Frost and Robinson, 1999). What follows are my reflections and interpretations, my story of how the ideas for the notion of toxicity and toxin handling grew from my experiences with cancer and with handling the emotional pain of people in my organization. Primarily, I try to show how an idea emerged from personal experiences and capture some of the serendipity of the outcome. I also comment on what I currently think about toxin handlers because my research on the topic is a work in progress.

In March 1997, late on a Friday evening, just as my wife and I were preparing to go out for a walk, a doctor from the Vancouver Cancer Center called. "I'm sorry to give you this call, Doctor Frost, but the needle biopsy we took from your neck this afternoon has shown melanoma cancer, and it's in your lymph system," he said. "You will need to come in next week for a consultation. Your oncologist will talk to you about arranging to meet a surgeon. You will need to have all the lymph nodes on the right side of your neck surgically removed as soon as we can arrange it."

While this triggered changes in my personal life (Frost, 1999; forthcoming), it also set in motion my ideas about ways in which organizations and people in them behave. Of course, at that time, my primary focus was on coping with the onset of an aggressive form of cancer and trying to get well. In a few weeks, I had surgery to remove the infected lymph nodes and took several weeks off work to heal. At the same time, I found myself trying to make sense of the onset of cancer, given my life experiences during the previous few years. I assumed no direct responsibility for having caused the cancer nor did I feel any guilt because I had cancer. However, I knew from my reading of the literature on stress that illnesses like cancer can be triggered by high levels of stress that depress the body's immune system and weaken the body's resistance to illness. Given that I had been working in a high stress environment for several years (particularly as an associate dean), it seemed possible that what I had been doing might have been a factor in my illness. I was motivated to try to identify anything in my work habits and life style in those years that I might need to address and change.

Any practices and treatment that could keep my immune system healthy became important to my recovery plan, so a few months after surgery, I attended Joan Borysenko's week-long seminar on health and healing. At this workshop, I crystallized my ideas about emotional pain in organizations and what might happen to people who try to manage that pain for the benefit of the organization.

Joan Borysenko is a cofounder and former director of the Mind/Body Clinic at the New England Deaconess Hospital, Harvard Medical School, and author of a book on some key early ideas in mind/body medicine (Borysenko, 1987). Given her research focus and practical experience and my health concerns, the workshop was helpful to me in a number of ways. Midway through the week, Dr. Borysenko talked about the effects of emotions on people's immune systems, noting that strong emotions such as anger, sadness, frustration, or despair can be particularly "toxic" to the human body and can affect the immune system's ability to protect it. Her comment rang a bell for me and fed into some thoughts that I had been connecting to my work experiences (more on this later).

What really got my attention, however, was Dr. Borysenko's observation that there are some people who take on the emotional pain of others for the benefit of the whole system: "They are like psychic sponges for a family or for a work system. They pick up all the toxicity in the system." I wrote this comment down in my notebook, and I remember getting goose bumps on my arms. (In some societies, Dr. Borysenko noted, "sin eaters" take on the sins of the group so that the whole community can be healed.) "Aha!" I thought excitedly, "All this ties directly into what I have perceived as something leaders do for their companies. Maybe some leaders are toxic leaders, in the sense that they take on the pain in their organizations for the benefit of others!" (I subsequently changed my thinking to distinguish between leaders who create pain for their subordinates and peers, "toxic bosses," and people exercising formal or informal leadership who handle other's pain. I now believe it is possible for leaders to both create and handle toxicity in their workplaces. Perhaps this is a feature of being a good leader.)

There are some people who take on the emotional pain of others for the benefit of the whole system.

Another reference in the workshop fed my excitement and triggered a second insight. Dr. Borysenko discussed the work of Larry Dossey, author of *Healing Words* (Dossey, 1993). He cited empirical evidence of the healing effects of prayer. The book was a bestseller, and Dossey received a flood of mostly congratulatory feedback from readers. However, Dossey also got hate mail criticizing him for meddling with prayer through his work. Some people wished him ill, saying that they would pray that he be punished for his hubris. Dossey did further research on the negative effects of prayer, culminating in *Be Careful What You Pray For* (Dossey, 1997). The comment that produced more goose bumps and generated another "Aha!" was the observation that some forms of prayer might be toxic to the person who is the focus of the message. It might then be possible, I thought, for someone to be hurt by another person's negative feelings, wishes, or emotions when they are directed toward them.

Whether or not this is true, it provided important input to my puzzle about leadership and emotional pain. I began to think that people who were handling the emotional pain of others might themselves become vulnerable to the pain expressed. The work of handling toxins might then become hazardous to the handler's health. This outcome might be particularly likely if a member of an organization became known as a person on whom to dump one's unhappiness. Given my interpretation of Dossey's message, it occurred to me that this transfer might also happen if the person in pain associated any of the pain's cause to the handler and thus wished the handler ill. This situation might arise, for example, when the handler was a formal leader in an organization. The leader might have been responsible or seen to be responsible for someone else's pain and then had the effect of the pain directed toward himself or herself.

After the workshop, I began to play with these ideas in the context of my own experience. For four years, in the early to mid 1990s, I was associate dean of my business school. At first, I had the portfolio of faculty development (a type of human resources function) and later took on the additional role of associate dean for professional and management development programs (the executive training arm of the school). I was part of a team of four senior executives in the school, led by the dean. It was a time of rapid change fueled partly by many initiatives from the dean's office and partly by ongoing budget cuts that hit the university and the school. I had been a practicing manager earlier in my career. Now, with my background as an organizational behavior professor, I had a chance to practice what I preached (this practice met with mixed success, as anyone who moves from academia to administration quickly finds out). I enjoyed the role despite the many pressures and the fast work pace, although I felt burned out by the end of my term. Part of me wanted to accept the dean's invitation to stay on. Instead, I took a sabbatical and returned to research and teaching.

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So what had I learned that might be related to my ideas about toxicity? I began to see that emotional pain or toxicity was quite prevalent in my organization. It stemmed from many sources including the frustration when dedicated academics have to teach and do research in an environment constantly squeezed for resources. It came from professional staff who often did not have the flexibility or sufficient funds to do their jobs as well as they wanted. It came from faculty having to deal with changes initiated by the dean's office. It was embedded in the debates and discussions on policy changes and new practices that inevitably favored some members more than others. It came from constraints and from opportunities. People could become angry and frustrated or despondent and sad because of what was added to their work as well as what was taken away. Emotional pain seemed to occur as a normal product.

Some pain occurs because people lose benefits or feelings of self-worth or esteem. Or the pain may be caused by people striving to improve certain aspects, for example, creating new products or services, setting new benchmarks for performance, and so on. Achieving a goal is rarely painless, although success typically enhances self-worth. Because toxicity is likely to be part of the best-run organizations, the issue is less about creating toxin-free systems and more about keeping toxins moving through and out of the system or finding ways to contain and then disperse them.

I started seeing an organization as the human body or some other living system. Perhaps organizations are entities that produce toxins as a normal function. One may be able to understand how an organization is performing by analyzing the toxins it produces, that is, by tracking the kinds and distribution of emotional pain triggered as various processes occur. It might be useful to identify and understand how pain is dispersed in the system. My hunch is that some organizations do a better job of processing pain than others. I think it is possible that when the levels and intensity of pain generation are pathological, they create duress for the handling systems, possibly damaging them. In the human body, the equivalent would be the onset of stresses that make it difficult for the natural toxin removers, the kidney or the liver and so on, to function efficiently. Over time, these components may wear down and become damaged, so the immune system is compromised and illness ensues.

Questions raised by this perspective include: How do organizations monitor the level of toxicity in their systems? How does toxicity become pathological? How can toxicity be kept below a level at which it is no longer dangerous to individuals and to the organization? Two other questions preoccupied me: How is the toxicity managed and dispersed? What happens to the people who try to handle the toxins?

To my knowledge, little had been written in the organizational literature at that time about emotional pain in the workplace or about how to handle it. (I later read a book on toxic leadership [Whicker, 1996], which focused on the toxicity managers generate. And a colleague pointed out a piece on toxicity in organizations that featured an interview with Jeffrey Pfeffer [Webber, 1998].) There don't seem to be ways of thinking about the social organization equivalents of the liver, the kidneys, and so on, although, in some ways, the human resource (HR) function might be seen this way, and services such as Employee Assistance Programs (EAP) have the structure to help. My sense of toxicity and how it needs to be handled suggests a more pervasive involvement of organization systems than just "delegating" it to HR or to EAP.

How can toxicity be kept below a level at which it is no longer dangerous to individuals and to the organization?

I turned once again to my own experience as a manager and to my sense that some managers may be toxin handlers. One activity that occupied much of my time as a dean was listening to people who were upset or unhappy or frustrated with what they were dealing with inside the organization. Sometimes the issues were work-related; sometimes they were personal. Often, I would be a listening post for the pain or would try to alleviate it. Sometimes, anger or disappointment would spill into my office as a result of something generated by leadership initiatives in the school or university. Sometimes, as an administrator, I was the initiator of the unhappiness or I was involved in triggering the emotion. I was, nevertheless, someone to whom others came to express their pain.

This kind of emotion-managing work is hard to "see" in contrast to other organizational work such as preparing budgets, writing reports, or producing products. When someone asks, "What did you do at the office today?," the response of the toxin handler is typically vague: "Well, I listened to different people tell me their stories of pain." Often that would be it; such work can take the whole day. Yet it does not register in the organization the way that other work does. The so-called "real work" of reports, projects, and so forth that the toxin handler is responsible for has to be done off hours, away from the press of people's concerns. This almost invisible work, toxin handling, does not figure much in the lexicon of organizational performance and is not well understood. Consequently, it is not well supported or rewarded.

For me, the pain was often intense and, while the person who expressed it may have left feeling better, I often carried it around with me, especially if I felt that I had somehow caused it. During four years, I found it increasingly difficult to release the pain others presented to me, in part because I was not really aware of the "wear and tear" on me until after I had left.

Based on my experience, I speculated that handling toxins for too long or in an intense environment without support or respite can harm the toxin handler. The toxins penetrate the handlers' defenses, and the handlers become toxic themselves. Experienced handlers such as therapists and social workers burn out despite being trained to handle pain. Few managers have the protective training of such professionals, so they are very vulnerable to contamination by toxins.

I began sharing my ideas with managers in executive seminars. The first time I spoke about my thoughts, I was ending a morning session on leadership issues with some 30 managers attending a three-week executive program. There were managers from several organizations, mostly Canadian, some from other countries. They were all being groomed for senior management posts and had successful track records in their companies. I decided to take the last 10 minutes to sketch out my ideas about toxicity and the role and costs of toxin handling. The room became very quiet. At the end of my brief presentation, I said that we could continue the conversation over lunch if people were interested. I added that, together with colleague Sandra Robinson, I was starting to interview managers about their experiences with toxic situations and if any of the class wanted to volunteer, I would be happy to include them in the study.

At the end of class, the participants who wanted to talk about my ideas mobbed me. Many said that the term toxin handler "connected the dots" about their experiences as managers that they could not previously articulate. They felt these legitimate activities were so "touchy feely" that they needed to hide them from their managers. The term *toxicity* seemed to serve as a release. Many volunteered to be interviewed and typically told powerful stories about toxicity in their companies. Sometimes the source of the pain was other managers, organizational interventions, or simply change. Sometimes they saw themselves as a source of the pain and were astute or lucky enough to end the situation and to dissipate the pain. Often they described ways in which they were toxin handlers. Their backgrounds confirmed my hunch that the handlers include line managers running projects, managers in charge of operational units, or product or service champions. Several participants gave examples of toxin handlers eventually burning out or becoming ill.

I speculated that handling toxins for too long or in an intense environment without support or respite can harm the toxin handler.

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I noticed this emotional connection to my ideas in other presentations to management groups in Canada, Australia, and the United States. It encouraged me to expand the reach of our developing sample. On a long bus ride in Norway en route to a conference on organizational culture, I sat next to Ed Schein. His positive response to my ideas further encouraged me to devote my time and energy to the project. By the time our article was published, we had talked with more than 70 managers about their experiences with toxicity (Frost and Robinson, 1999).

So far, the descriptions and stories suggest that these concepts may be useful in understanding organizations. But there is still much careful work to do, and I continue to explore the notions of toxicity and toxin handling. I am also deeply interested in the aspects of compassion in the toxin-handling role and in the way compassion may be a hidden facet of organizational life (Frost et al., 2000).

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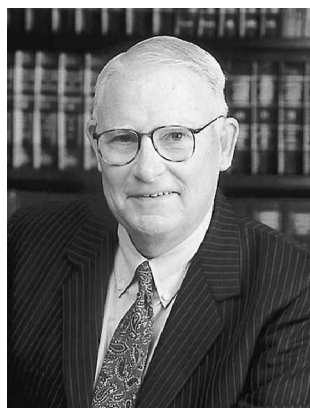
by Bill O'Brien

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Peter Frost's notions of emotional pain and toxicity are an apt diagnosis of the current psychic environment in all too many of our corporations today. If I were a CEO confronted with leading an organization in which the culture is racked with toxins resulting in emotional pain and impaired business performance, I would seek my principal guidance from the field of morals and other spiritual traditions that have accumulated wisdom about the interior life of humans. Why?

First, in my experience, most toxins are produced by inferior moral action such as inappropriate exercise of power. For example, some leaders use their positions to be served rather than to serve or let their egos overwhelm their judgment. Some pursue self-interests at the expense of the common good. And others frame information to manipulate others, rather than allowing them to draw their own conclusions from untainted data (commonly known as spin). There are other sources of toxins that cause emotional pain, but most of them fall into about six generic categories. All these issues are moral problems, not medical ones. I suspect they cause medical problems because the mind/body relationship is real. Malfunctions in one area often produce symptoms in the other.

Second, while the liver and kidneys filter toxins from the human system, their equivalent in human communities has yet to be discovered. The idea of toxin handlers serving as a sort of sponge, in lieu of kidneys or a liver, to absorb emotional pain within an organization makes me apprehensive. The people who serve as sponges will eventually burn out, causing an epidemic of what I call "victimology," which is a breakdown of individual will and personal responsibility, often found when an excessively hierarchical bureaucratic culture overwhelms individual spirit. This highly contagious disease spreads rapidly when people abandon ownership of their responsibilities because they no longer believe they can change things for the better or put a meaningful handprint on their part of the world.

It is clear to me that the remedy for these infected cultures lies in raising the moral quality of leadership. C.S. Lewis offers the best explanation of morals I have read (Lewis, 1996):

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Morals are rules that are the directions for running the human machine. Every moral rule is there to prevent a breakdown, or a strain, or a friction, in the running of that machine. That is why these rules at first seem to be constantly interfering with our natural inclinations.

There are two ways in which the human machine goes wrong. One is when the human individuals drift apart from one another, or else collide with one another and do one another damage, by cheating or bullying. The other is when things go wrong inside the individual—when different parts of him (his different faculties and desires and so on) either drift apart or interfere with one another. You can get the idea plain if you think of us as a fleet of ships sailing in formation. The voyage will be a success only, in the first place, if the ships do not collide and get in one another's way and secondly, if each ship is seaworthy and has her engines in good order. As a matter of fact, you can not have either of these two things without the other. If the ships keep on having collisions, they will not remain seaworthy very long. On the other hand, if their steering gears are out of order, they will not be able to avoid collisions. But there is one thing that we have not yet taken into account. We have not asked where the fleet is trying to get to. However well the fleet sailed, the voyage would be a failure if it were meant to reach New York and actually arrived in Calcutta.

Lewis summarizes by saying:

Morality, then, seems to be concerned with three things. Firstly, with fair play and harmony between individuals. Secondly, with what might be called tidying up or harmonizing the things inside each individual. Thirdly, with the general purpose of human life as a whole; what man was made for; what course the whole fleet ought to be on.

If we want to transform our institutions to a higher plateau—that is, better business performance, fulfilled workers, and low toxicity—I suggest leadership development that taps into the rich reservoir of eastern and western spiritual traditions and integrates their wisdom with modern management science and technology. Why is it our organizations have formal programs to achieve best practices for technology, finance, and distribution, but nothing equivalent for their practice of values or morals? The benefit would have a rippling effect through every corner and aspect of the organization.

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Praxis Pentagon of Organizational Learning

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In this paper, we reflect on our experiences in initiating an organizationwide learning and change process within a global health-care company in Europe. The tools and method we used are what we call the "Organizational Learning Pentagon." The five building blocks of the pentagon are based on Senge's concept of the five disciplines (1990, 1994), Schein's process consultation (1987) and corporate culture (1992), Bohm's and Isaacs' dialogue (Bohm, 1990; Isaacs, 1993, 1999), and Argyris and Schön's double-loop learning (1996).

The organizational learning pentagon has five corners (figure 1):

1. Systems thinking. Senge's fifth discipline allows actors within a system to identify the causative factors and feedback loops that determine the behavior of that system and to recognize them as dependent variables of their own thinking (Senge, 1990; Kim, 1992, 1994).
2. Aspiration and personal mastery. Profound change processes always involve significant personal change. Personal mastery is the capacity to tap into the sources of one's own aspirations, commitment, and will: What do I really care about? What do I want to create? (Senge, 1990). Or, as Michael Ray frames the creative process: "Who is my Self? What is my Work?" (Catford and Ray, 1991).
3. Dialogue or conversation. Dialogue is simply the art of collective thinking. It enables individuals and teams to see, suspend, and reflect on their deep assumptions and mental models in use (Bohm, 1990; Isaacs, 1993, 1999; Schein, 1993). Dialogue integrates what Senge refers to as mental models and team learning (1990).
4. Parallel learning structures. These groups, networks, or communities of people operate in parallel with the formal organization (Schein, 1995; Bushe and Shani, 1991). For example, the executive leadership team of a large US-based oil company gathers four times a year for off-site learning meetings to create, capture, and disseminate knowledge and learning. Hence, the first ground rule for the meetings is that no decision will be made. Their purpose is not decision making, but learning together.
5. Process consultation. This consulting methodology helps build relationships with clients and among peers, subordinates, and bosses (Schein, 1987, 1999). In process consultation, the client-consultant relationship is framed as a learning relationship geared toward helping others to help themselves (Schein, 1999).

Health–care Company Case

At a company retreat convened to realign corporate strategy, the CEO of a global health-care company asks the attending general managers what they consider to be the greatest challenge for their businesses in the near future and how the corporate group can help them meet these challenges. The same answers are heard again and again: globalization, increasing speed, coping with the last merger, and redirecting the leadership.

After the company retreat, corporate management publishes a blueprint for the group's strategic realignment, based on the statements of general managers from the countries represented. According to the consensus, the company should not merely re-

act to changing markets but play an active role in effecting the change. The corporate objective thus reads: "We want to become a learning organization which fully uses all of its resources—people, technology, information, and capital."

Strategic Realignment in Europe

The general manager and the vice president of corporate development compile an inventory of the company's situation in Europe: health-care reform laws in many European countries have increased cost pressures in the health-care market. Many national markets have undergone structural changes. The general manager and the vice president initiate a dialogue with several staff members. Most of them are fed up with change of any kind; they report on three projects that have occurred during the preceding 12 months: reengineering, merger, and strategy development. "It has been my experience," states one participant, "that these projects take enormous amounts of time, in addition to one's regular work, but end up not becoming relevant." Another colleague adds, "We have produced mountains of data and binders full of plans and charts—but, as far as I know, the suggestions were not used. Actual decisions did not follow."

At the CEO's request, the internal consultant held interviews, each lasting several hours, with each of the seven top managers. (The interview questionnaire had been developed with the help of an external consultant.) These interviews furnish the data for designing a leadership workshop. Some pivotal questions: "What does our company need you for? What do you need your company for? What do you need the other executives for? What do they need you for?"[1] Feedback indicates that there are three mental models regarding the problems, the cause, and the solution. Table 1 maps the managers' perceptions.

Leadership Workshop

Based on the interview data, the internal learning-organization person and external consultants (Versteegen and Scharmer) design a three-day workshop for top managers. The 13 attendees (the general manager, vice president, and divisional managers) meet in a small, secluded hotel. The design of the meeting space encourages people to move about. The tables are placed against the walls, and there are few chairs, causing people to walk around or sit on the rug. Tall café tables encourage spontaneous conversation.

Spatial arrangements make the tension palpable: at one end of the room, corporate executives hang posters from clotheslines, showing corporate vision, objectives, values, principles, and so on. The "status quo" table in front of the posters represents the local managers' views. At the opposite end of the room, the just-formulated vision of the company, its corporate goals, and so on are displayed. Along the sides of the room, posters show the key initiatives with respect to the envisioned goal formulated for general management and action plans and responsibilities.

In an introductory round, the participants use objects they've brought along to describe where, in their view, the company stands. "What's missing is fertilizer," a participant comments while placing a shriveled, tired-looking office plant on the "status quo"

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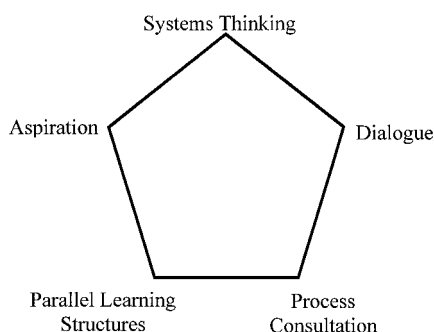Lecturer, University of Innsbruck,
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Figure 1 The organizational learning pentagon.

Table 1 Three views on current reality: problem, diagnosis, therapy.

	View 1: Concorde	*View 2: Boeing*	*View 3: Acrobat Flyer*
Issue/Problem	We don't have enough marketing power.	We can't look far ahead; we don't have enough insight.	We aren't taking enough risks.
Diagnosis/Cause	We aren't aggressive enough.	We act faster than we can think.	We do everything the way we've always done it; we let go of things that we've never done.
Therapy/Proposed Action	We need to speed up.	We need to slow down.	We need to change direction.

table. Another person holds up a rose: "Corporate interest comes before self-interest." The next two-and-a-half days reflect the tension between the present reality and a possible future on three levels: individual, team, and overall organization.

Process

"We bear the responsibility for sales, but are not part of general management. Managers work toward functional goals, but they do not feel that they are responsible for sales," a divisional manager remarks. The divisional managers are sitting on chairs in an inner circle; surrounding them is an outer circle where the general managers are seated. "Why do we need to be a team?" he continues. Only a few minutes earlier, the CEO had described the situation from his viewpoint, singling out the divisional managers for blame. A direct confrontation ensues, but leads to a long dialogue. People concentrate on listening to each other and keep the conversation going. It is almost 1 AM when the meeting finally breaks up.

By the afternoon of the second day, the sales VP is at the end of his patience: "We are sitting around and talking as if we had nothing to do with the problems. We are the leadership!" Without further ado, he takes over as moderator. The discussion starts getting heated. When the third order for sandwiches is received that day, the hotel owner stops by to see what is wrong. For the past 12 hours, no one has been in the dining room.

The group generates a joint vision on Sunday morning. All the elements are on the table. Within 15 minutes during the coffee break, a self-appointed editorial committee writes a statement of corporate vision. "I have never seen anything like this before," says one participant. "Normally, it would have taken us weeks to forge this vision. We would have bargained over every word without reaching a consensus in the end. And the best part is that the whole thing was blessed and approved by everybody within two seconds after the break."

After lunch, the 13 focused individuals stroll through the room studying the points on the old and new posters. Each person's objective is to identify three key leverage points essential for attaining the corporate goals. "At that moment, I realized," said a participant later, "that it is really I who is being challenged to decide what the key points are. No one else."

With speed and concentration, the participants present the leverage points that they identified. Which groupings emerge? The attendees quickly cluster the points into an overall picture, forming a triangle, with "cultural change" in the middle. Its apex is "people"; the two angles at the base read "customer focus" and "products and services." All three initiatives are assigned different corners of the room. Each participant now decides which initiative she or he will personally sponsor during the next six months. All gaze at one another in astonishment because of the clear picture that emerged. Two attendees go to the corner marked "products and services"; two others to "customer focus." All others gather at the merged point, "cultural change and people."

The principal results of this workshop are:

1. Definition of a common vision and common objectives.
2. Identification of three initiatives that management sees as key leverage factors for redirection and change—"cultural change and people," "customer focus," and

"products and services." Each group has two sponsors from the two top management layers.

3. Establishment of a new core group and two additional groups within general management.

The participants quickly reach a decision: the second leadership workshop will convene in three months, during the third week of October. Meanwhile, they will launch experiments and projects related to the focus initiatives. One participant commented: "I really was very skeptical; I couldn't quite imagine all this. But it was worth it, in any case. I've never experienced anything like it." Returning to their jobs, the managers start the initiatives for which they are responsible.

Grassroot Projects

At the same time as the leadership workshop, questions arise in the organization about how everyone can be included in the change process, thereby making employees' experience and know-how productive. Top management's abstract topics can no longer define tasks and team composition. Employees will drive possible projects from the bottom in efforts called "grassroots projects." These projects have a certain degree of invisibility and support before they are made public within the company to prevent premature "growth control" and enable the initiator to succeed even if the idea conflicts with taboos or supervisors' opinions. In this sense, grassroots projects are protected zones where the initiatives are given financial and consulting support. Employees initiate grassroots projects everywhere in the organization.

Communication

Another issue is how to keep the staff up to date. A design student creates a logo of an open door. The door leads to a "room of opportunities" where employees can bring individual creativity as part of grassroots projects. The symbolic room turns into a real project office when management makes unused office space available.

The company's employee newspaper reports on the overall process and various grassroots groups and top management's focus initiatives. Employees ask for their own section to report on day-to-day events.

Strategy Summit

About four months after the leadership conference, at 7 AM one morning, a downtown streetcar depot buzzes with activity as the members of the 17 initiatives, focus groups, and grassroots projects are setting up displays. At 9 AM, the plenary panel begins by looking back on the past year and ahead at prospects for the next year. About 120 staff members who have been actively searching for direction and change attend.

A pianist plays in the background; "chill-outs" provide islands of retreat in the unobstructed hall furnished with deep carpets, sofas, and small table lamps in pink, green, and white. A mirrored ball hangs from the ceiling of the two-storied, open hall. It rotates during dinner, shedding sparkling starlight on the people seated at long, festively decorated dining tables.

In different areas of the room, members present 17 initiatives, from which 10 workshops form. During the plenary session, the workshop attendees report and address

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four questions: (1) what did we try to do?, (2) what has happened?, (3) what have we learned?, and (4) what new questions do we have and what steps should we take?

In its documentation, the editorial team formed at the end of the day describes the outlook for the next year:

"Many plans were made, drafts prepared, project groups established, and partial steps taken. A few opened their previously closed minds, engaged in discussion, invested time and commitment, and, in the best of cases, arrived at practicable results. Individual projects have been a success. Now everyone is called upon to bring current projects to a rapid conclusion, converting ideas into palpable results. For this, we need courage and clear language."

Customer Dialogue Study

One outcome of the strategy summit is the obvious need for a new relationship with customers. Employees conduct dialogue interviews with customers (physicians) and identify three different physician profiles: the scientific-information users who are content with merely receiving the offered product information; the application-oriented physicians who would like to be regarded as users and need product information written in terms of disease symptoms; and the research-driven physicians who want to be seen as fellow researchers who aim for mutual fact-finding.

One outcome of the strategy summit is the obvious need for a new relationship with customers.

Figure 2 describes three customer-relation logics. The first logic is product-driven, primarily by the sales representatives ("push principle"). The second is service-driven by customer needs ("pull principle"). The third logic is driven by research, mutual fact-finding, and the creativity of the two cooperating partners ("creativity principle").

Since logic one characterizes the existing field sales force, the question arises of how to develop and establish the basis and core competencies for the other two customer-relation logics. A discussion of the study produces a project proposal for developing the second and third logics: to build strategic learning partnerships with the self-organizing physician networks, and to build a nationwide platform from which the creators of new cooperation models between medical practitioners and other professional groups can reflect on their experience, learn from each other, and jointly develop their next steps. The nationwide project, "Making Network Experience Productive," is implemented. It establishes a nationwide platform by and for practitioners in networks to help them learn from their experiences better and faster. A year later, 120 initiators and activists from physicians' networks and new cooperative models meet for a symposium. Thirty companies and organizations jointly sponsor the project.
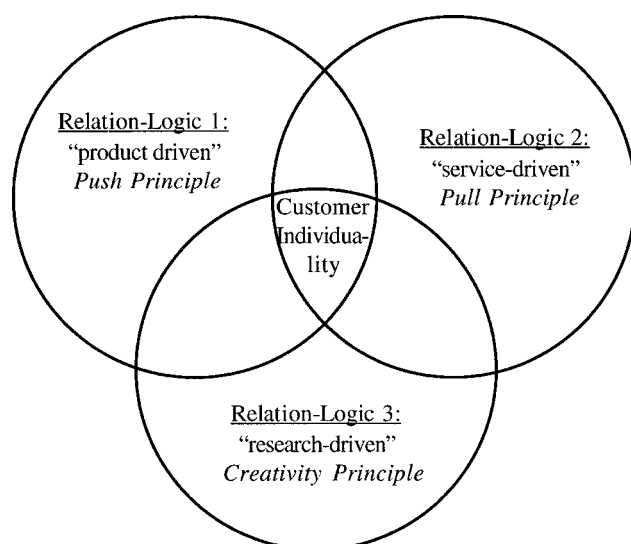
Reflection: Anatomy of an Innovation Stream

The initial company retreat of general managers revealed that the present and future challenges could be met only if the organization succeeded in developing organizational learning capacities. Following the leadership workshop, change projects formed at both the periphery and the center of the organization. The grassroot projects in the field sales division were change processes coming from the periphery. The three focus initiatives begun in the leadership workshop were change processes originating in the center. What followed was a dialogue with customers that finally transcended the corporate boundaries, reaching the real target group for the company's value creation. Finally, the nationwide physician practitioners' symposium marked the farthest-reaching effect of the changes.

Figure 2 Three customer relation logics (from Käufer, Scharmer, and Versteegen, 1996).

The symposium constituted cooperation with the customer—a requirement set forth at the beginning of the process. Some of the processes initiated in the leadership workshop have dissipated; some have materialized into project experiences, and others have been incorporated into new organizational routines, becoming part of the corporation's knowledge base.

From our vantage point today, the process we describe had four outcomes:

1. Improved leadership and dialogue ability within the leadership team and between the leadership team and the rest of the organization.
2. Prioritization of central change processes (focus initiative on cultural change and people; customer focus initiative).
3. Identification of two new relationship logics with customers as a basis for strategic realignment of the future sales force (dialogue study).
4. A parallel structure of learning for the top leadership team (leadership workshops).

An Emerging New Set of Principles

Throughout the change episode outlined, a team composed of staff from the corporate development group and external consultants provided support, facilitated and designed workshops, conducted interviews, and helped organize events. The external consultants included researchers affiliated with the Society for Organizational Learning (SoL) and the HdK (Berlin School of Arts). The organizational learning pentagon served as the basic toolbox that the team used throughout its work. In reflection during and after the process, other less visible, but no less significant principles and practices emerged:

1. Primacy of praxis
2. Space-time sculptures
3. Moving through the eye of the needle
4. Uncovering common will
5. Self-transcending will

The team considered these new principles as relevant to the success of the process as the learning pentagon.

Principle 1: Primacy of Praxis

Primacy of praxis shifts the focus of practicing from the context of "doing exercises" to the context of "coping with real-world praxis." The Greek term *praxis* means action. Aristotle distinguished between two types: (1) action that we perform in order to make something *(poiesis),* for example, producing shoes, or (2) actions we do for the purpose of enacting this activity for its own sake *(praxis),* for example, the process of playing music. Thus, primacy of praxis has a double meaning. On the one hand, it simply means that practitioners define and own the agenda. On the other hand, it means to engage in activities that contain their goal in themselves, that is, in activities that we value because of themselves.

Primacy of praxis focuses on creating fluid, situated practice fields that allow learning environments to follow the flow of innovation and change, rather than organizing for learning around a fixed set of workshops, exercises, and infrastructures. In our work, we have found two principles for structuring workshops: (1) begin with "current" and "emerging" realities and then move to images, inspirations, and intuitions of the future; and (2) have an unfettered focus on the participants' real work challenges and make the teaching of tools contingent on the current issues and challenges.

This principle avoids the traditional lectures by experts to novices and instead focuses on helping participants perceive the process by which they continuously recreate and reenact the reality in which they operate. In this regard, primacy of praxis situates systems thinking in the context of real work.

Principle 2: Space–Time Sculptures

Most workshops and seminars are designed according to constrained uses of time and space, which we call unidirectional architectures. For example, presenters usually use one

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side of the room, and the audience sits on the opposite side. Or often the meeting is devoted either to reviewing the past or to planning the future. What is missing is a social technology that allows the systematic inclusion of the full spectrum of temporal and spatial diversity. The principle of space-time sculptures focuses on eliciting the whole temporal and spatial experience.

One way of dissolving a spatial fixation on one perspective is to rotate the presenters in the room by 360 degrees during the course of the workshop. In this way, participants face each wall of the room successively. For example, in a three- or four-day workshop, we begin by describing the current situation and the "journey that brought us here" on one wall (present reality, timeline). Then the spatial orientation changes, and the second step focuses on sensing and articulating emerging new patterns within and around the system (wall two: emerging patterns). The next morning, we start with yet another spatial orientation, focusing on presencing[2] emerging futures, and crystallizing the vision that people want to create (wall three). This step deals with the "journey of the future" and is organized around issues of purpose, vision, and will. Finally, the fourth step evolves from a "journey of getting there," represented by moving between the two opposite poles of "present reality" (wall one) and the "aspired future" (wall three). Focusing on the creative tension between present and future states results in identifying key initiatives (wall four), which helps participants move the system from current reality to the aspired future.

The principle of space-time sculptures focuses on eliciting the whole temporal and spatial experience.

Inspired by a professor and his students at the HdK, we allow for a diverse experience of time and space by breaking the space with tall bistro tables and chairs, sofas, and easy chairs. The goal is to create a physical space that people can arrange and experience in many different ways, mirroring and reinforcing the notion that participants can also rearrange their internal experiences in new ways.

Principle 3: Moving through the Eye of the Needle

The relevance of participants' personal journeys during workshops has become more obvious to us. Whether or not participants are able to move through the "eye of the needle" in a workshop corresponds to the success and the sustainability of the change process they initiate. In his theory of social sculpturing, the avant garde artist Joseph Beuys coined the term *umstülpung* (inversion) to describe the process we call "moving through the eye of the needle" (Beuys, 1989). *Umstülpung* literally means turning a whole field upside down and inside out. For a better understanding of this shift, let us consider a root polarity of social reality formation: the relationship between self and other, or self and world. Goethe says:

> Man knows himself only to the extent that he knows the world; he becomes aware of himself only within the world, and aware of the world only within himself. Every object, well contemplated, opens up a new organ within us.[3]

For Goethe, polarity and enhancement meant that the poles of a polarity are not separate but intertwined. The more you focus on one side, the more likely you will end up at the other.

Umstülpung or inversion denotes a shift in identity. Before going through the eye of the needle, social structure is perceived as the primary reality. Individual identity is a quasi "secondary" reality because individuals see themselves as having to adapt *to* the primary reality of the existing social structure (for example, people complain about issues with the mindset of a victim). After going through the eye of the needle, people experience social forms and structures entirely differently because they have participated in creating those structures themselves (for example, people co-creating their futures). Thus, their self-experience or identity as social actors changes from having been *created* (before the threshold) to being a *co-creator* (after the threshold).

Principle 4: Uncovering Common Will

When a group of people uncovers the various layers of present reality and develops a shared image and an emerging sense of the future, they form and access a common will.

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The process of uncovering common will involves more than "visioning." It evolves only *after* the process of unearthing various layers of current and emerging realities. In agriculture, the success of the sowing season is a function not only of the seeds, but of soil preparation. In the same way, the success of will formation is a function not only of vision, but of first passing through the layers of present and emergent realities that then become the container for intuiting the emerging future. To paraphrase Clausewitz (1989), who claimed that war was the continuation of politics by other means, we can say that the formation of will is the continuation of awareness by other means.

Principle 5: Self-Transcending Will

Bill O'Brien, former CEO of the Hanover Insurance Company and now founding partner of Generon, summarizes his key learning: "The success of an intervention depends on the interior condition of the intervenor." In other words, the success of a tangible move in a particular situation depends on the intangible "interior condition" of the intervenor. (The capacity to create the appropriate interior condition is becoming a significant topic for future research and practice.)

> *The most important tool for leading transformational change is one's self and its capacity to transcend its own boundaries.*

What source allows us to perform this fundamental shift of will? There is only one such source, says O'Brien: love. Not love as an emotional phenomenon, but love as a property of will, as the capacity "to help others complete themselves." In this sense, we have found that the most important tool for leading transformational change is one's self and its capacity to transcend its own boundaries.

Closure

These emerging principles summarize the learning experience that the consulting or support team in this organizationwide change process considered most important. They might supplement the organizational learning pentagon for future research.

Our involvement with the health-care company began immediately after a restructuring (merger) and a discontinued reengineering process and subsequently focused on changing the mental models and on mobilizing companywide energy. The impulse of the innovation we described started in the center of the organization when the top executives realized the challenges they faced. The impulse for change continued to expand into the rest

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of the organization long after the general manager who had originally initiated the changes left the company. Today, the company is in the midst of yet another mega-merger and is thus engaged in another round of turmoil and change.

Notes

1. The interview questions were inspired by Ekkehard Kappler (1992).
2. Presencing means sensing emerging futures and bringing your full self into reality (Scharmer, forthcoming).
3. Goethe, 1823; quoted from Cottrell, 1998.

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Commentary

by Jean M. Bartunek

Versteegen et al. spark our imaginations about ways in which theoretical models might inspire our actions and contribute helpful suggestions for practical methods that we might use in effective consulting. Some descriptions about the use of space-time are particularly fascinating. The article

also raises several pertinent questions about the relationship between published models of change and their implementation in a particular consulting situation.

First, what does it mean when consulting is informed by certain published models, such as various disciplines in *The Fifth Discipline*, especially since these models require considerable skill in implementation? When such approaches are implemented, is it straightforward what a consultant should do? Is what happens in the setting the same as what authors who describe the model suggest? If not, how and why not? How might the implementation contribute to an understanding of the model being implemented?

Second, what is the source of initiatives during the consultation? The authors sometimes do not identify the sources of actions that occur (for example, "At the same time as the leadership workshop, questions arise . . ."). This gives the impression that sometimes events just happen and raises questions about the consultants' roles. How much of what happened was due to the consultants' initiative, and how much was due to the initiatives of various company members? This can be asked about many consulting initiatives. What kinds and how many initiatives should consultants take, compared with the initiatives of organization members?

Third, would the participants like to join in this type of consultation again? This quote from one participant is common in many critiques of prior consultations: "These projects take enormous amounts of time . . . but end up not becoming relevant." It isn't clear, however, from the description, that successful behavioral changes were implemented. What kind of consulting do people like to participate in on a recurring basis? What kinds of consulting approaches are repeatable? What results are needed and in what time frame for organizational members to feel that their time was well spent?

Finally, the authors assert that a necessary basis for their work is love. But they also note that the organization to which they were consulting had just been through a merger. If there is any potential love, the organization must have been the acquirer, rather than the acquired. How do consultants express feelings that are appropriate to the organization's situation? How is love expressed in an organizational setting in which there is little love? And when is it an appropriate emotion on the part of the consultants?

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Commentary

by Edgar H. Schein

This paper breaks new ground. What we have needed for some time is new concepts that describe what the authors call *praxis,* the actual interventions that are made when managers and consultants attempt to "manage change." These concepts derive from more general models and theories, but they are anchored in their specific connection to how the change agent actually thinks about what he or she is doing. What is striking in this paper is how the authors have combined some fundamental ideas from Senge; Isaacs; Argyris and Schön; Bushe and Shani; and Schein into a coherent framework. Then, in the case, they show how this model helps the consultant/intervenors to plan and structure their interventions.

In reflecting on the case and in analyzing their experiences, the authors then find some new principles, which may well tie together much of what we know about the change and learning process. Some of these principles are not new, but the relative emphasis given to them may indeed be new. In particular, I am struck by how much we are beginning to pay attention to the concept of "will" and the "uncovering of common will." We have always talked of motivation and commitment, but the recent work on *will,* which is also reflected in Kahane's case and Axelrod's analysis, reminds us that we may not have uncovered sufficiently the nature of will itself or how to access it.

The intriguing idea here is that *will* might have to be *uncovered,* that we do not always know either individually or as members of groups and larger systems what our will is. The implication that real action and real change occur only when deeper levels of will are accessed must be taken seriously because the kinds of interventions that will enable people to access these deeper levels are quite different from what we usually do. This insight brings me to the next and, perhaps, most important point illustrated in this paper. We cannot separate the cognitive from the emotional and from the motivational. The learning pentagon that the authors introduce is an interesting blend of attention to all three fundamental elements of human nature. And the principles of praxis, which the authors identify at the end of the paper, similarly combine attention to thought, feeling, and will.

This paper will bear rereading, thinking, and reflection for some time to come.
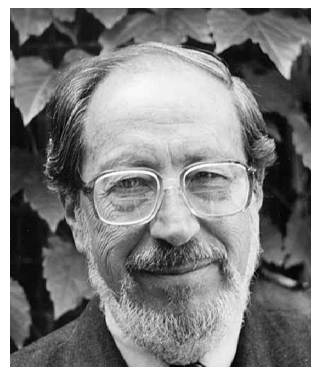
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Why Change Management Needs Changing

Richard H. Axelrod

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Author, *Teams of Engagement*

You fumble for your glasses and check the clock. It's 3 AM. What began a few weeks ago as a nagging anxiety has suddenly transformed into real fear. You are now certain that the major change you are responsible for bringing to your organization is on the verge of collapse. How did it come to this? You followed the standard model for organizational change that the best business schools teach and most successful organizations practice. You gathered your best people and inspired them to take up the challenges ahead. Next, you hired a top consulting firm to provide you with the latest techniques and show you how to manage any resistance. And sure enough, this all-star team produced innovative strategies to move the organization forward. Yet now, as you stare at the ceiling, a loud voice inside you says, "The organization isn't supporting this. The resisters will win out."

Who is to blame in such a situation? The consultants? The committee members who put in so many late nights? You?

Actually, no one is to blame. Everyone followed current best practice. The problem is that the very paradigm that prescribed your actions, as well as those of your consultants and team members, is worn out. In order to understand why, let's examine the historical roots of this paradigm.

Brief History of Organizational Change

The change management paradigm is part of an evolutionary process. Ever since the Western Electric Hawthorne experiments in 1939 identified the critical role of people in organizations, we have been looking for ways to unleash the power of employees. Some say that this process goes back to the early 1900s and that the early time-and-motion studies were really an attempt to create work environments in which people could contribute and be productive. Whatever your point of view, leaders have been struggling for a long time with the question of how to create change that produces high-quality solutions and solid organizational support.

The Hawthorne experiments generated the idea that paying attention to people was important, so important that the simple act of paying attention affected productivity. Kurt Lewin's research during World War II and the landmark Hardwood studies conducted from 1940 to 1947 showed that involving people in change increases the likelihood that they will accept needed change while at the same time increasing productivity. In the 1960s, the University of Michigan's Center for Social Research developed survey-guided development. The idea was to ask employees for input on organizational issues. The survey-guided development process involved collecting data, summarizing it, and feeding it back to the various components of the organization. Each component was then responsible for reviewing its data and resolving the issues identified. The Navy refined this process when it surveyed a crew a week before the ship was put into dry dock. During the time the ship was being repaired, the crew would attend workshops to review the survey data and develop solutions. At the end of the repair period, the ship would return to sea, having done maintenance on its physical and social structures.

Organizational theorists Richard Beckhard and D.E. Zand were among the first to recognize the importance of creating a parallel system for generating organizational change, and others such as John Kotter advocate its use (Beckhard and Harris, 1987; Zand, 1974;

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Kotter, 1996). Although the processes of employee involvement, quality improvement change, and self-directed teams were first developed in the late 1960s and early 1970s, they were not commonly used until the 1980s with the advent of employee involvement and quality circles, which used the popular parallel organization structures for bringing about needed change. For the first time, a worker on an auto assembly line had the power not only to stop the line at once when noticing a problem, but also to work with coworkers to identify solutions and recommend courses of action. Mainstream consulting firms recognized the success of the parallel organization model and soon adopted it under the rubric of change management. There is hardly an organizational change process that does not have a sponsor group, a steering committee, and design groups—all key components of the parallel system—at its core. The parallel organization and the accompanying change management paradigm have become the process of choice for changing the organization.

The Parallel Organization

Typically, the parallel organization (figure 1) is composed of:

- A *sponsor group* of senior leaders who initiate the process, cheerlead the effort, and provide the funding.
- A *steering committee* that represents a cross-section of people from all levels and functions who manage the change process.
- One or more *design groups* that develop the specific changes.

Together, these teams function alongside the regular organization to plan, manage, accelerate, and reduce barriers to change. The promise of the parallel organization is based on the following assumptions:

- A diversity of members on the teams, along with key decision makers, provides a way to overcome red tape and is the most efficient governance structure for the change process.
- Teams populated with "the best and the brightest" ensure high-quality solutions.
- Cross-functional and multilevel membership breaks down silos and guarantees solutions that favor the total organization.
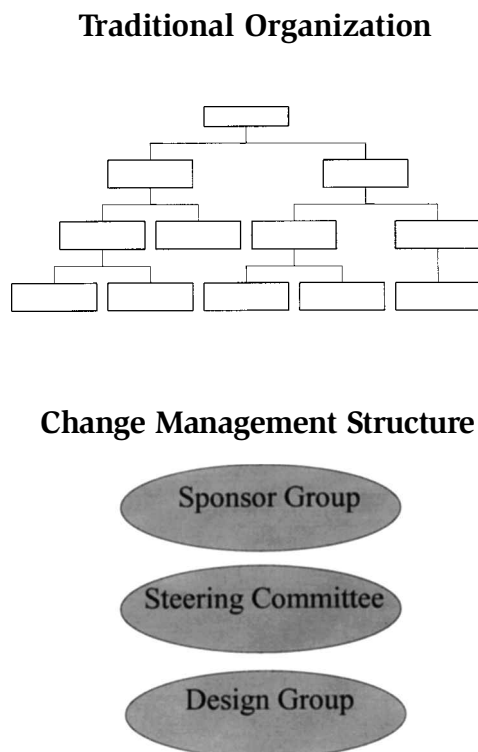

Figure 1 The parallel organization.

- The team members' cooperation will be transmitted throughout the organization.
- The committees' consensus decision making ensures both high-quality solutions and members' buy-in.
- The teams' cross-functional and cross-hierarchical nature ensures that members will believe they were represented in the process.
- The teams' credibility ensures that organization members will readily accept their ideas.

Flaws of Change Management

Mainstream consulting firms' adoption of the parallel organizational model to bring about change was unquestionably a great advance. However, it has failed to live up to its promise for four reasons.

First, participants in the parallel structure often fail to effectively include the rest of the organization in the change process, which produces what Peter Senge calls the "engagement gap." He notes that as a change process progresses, those in the inner circle (typically the members of the parallel organization) become increasingly distant from those outside it (Senge et al., 1999). In the dynamics of "true believers and non-believers," Senge observes that each group develops negative stereotypes of the other that, if left unattended, can cause failure.

Second, when the parallel organization became the mainstream structure, it was often adopted without its underlying values of high employee involvement and participative decision making. Consultants began to lead rather than facilitate the process, using team members as sources of information instead of working with them to design and implement change from within. The whole notion of the parallel organization as a place where organizational members can learn and experiment with new behaviors was abandoned in favor of using the parallel organization to overcome resistance to change and gain acceptance of predetermined courses of action (Schein, 1999). This use of participative structures, where the answers are already known, produces what Chris Argyris calls organizational defensiveness, increasing resistance to change rather than reducing it (Argyris, 1990).

Third, although using the parallel organization model includes people from various levels and functions along with consultants to identify and determine needed change, it often fails to include outside stakeholders such as customers, suppliers, and community members in the process. Outside stakeholders introduce variety and new thinking into the system, heavily increasing the emergence of creative solutions.

Fourth, change management concentrates on process improvements at the expense of cultural issues. As the mainstream consulting processes such as reengineering adopted the parallel organization method, shifting the organization's culture became secondary to implementing the change, often through new technology. Even though the development of new systems and structures required people to change how they worked and with whom they worked, consultants ignored these cultural aspects. People found themselves in new organizational configurations designed to improve cooperation, teamwork, and customer service, while the old hierarchical culture remained unchanged. Michael Hammer explains the failure of many reengineering projects when he comments that he forgot about people: "I was reflecting my engineering background and was insufficiently appreciative of the human dimension. I have learned that's critical" (White, 1996).

There is plenty of anecdotal evidence that the current method of bringing about organizational change does not work. More importantly, in a comparison of change management to what leading organizational theorists are currently advocating, its failings become obvious. In a four-year study of organizational change at six large corporations, Michael Beer, Russell A. Eisenstat, and Bert Spector found that effective change did not occur through programmatic change (Beer et al., 1990). Rather, effective change occurred when organizations follow these six steps:

1. Mobilize commitment through joint diagnosis of problems.
2. Develop a shared vision of how to organize and manage for competitiveness.
3. Foster consensus for the new vision, competence to enact it, and cohesion to move it along.

4. Spread revitalization to all departments without pushing it from the top.
5. Institutionalize revitalization through formal policies, systems, and structures.
6. Monitor and adjust strategies in response to problems.

Similarly, Rosabeth Moss Kanter, Barry Stein, and Todd Jick promote a model for successful change that echoes Beer et al.: "More people participating in the search for ideas . . . create pressure to do something about them. More overlap, communications channels, and team mechanisms keep more ideas circulating. And the existence of teams and teamwork at the top, drawing together many areas and exchanging ideas among them, increase the likelihood of tying together external circumstances and grassroots experience" (Kanter et al., 1992).

There is plenty of anecdotal evidence that the current method of bringing about organizational change does not work.

Finally, Achilles A. Armenakis and Arthur G. Bedeian state: "Evidence has accumulated over the past decade that the successfulness of change efforts is due not only to their content or substantive nature, but also to the processes followed or actions undertaken during their implementation. Content and process considerations must thus be viewed as complementary elements in planning and monitoring an organizational change" (Armenakis and Bedeian, 1999). In short, what we do and how we do it are equally important.

What I call the *engagement paradigm*, which I describe below, provides leaders with the principles and techniques to implement these recommendations and avoid the pitfalls of change management.

Toward a New Paradigm

Recently, a new class of processes commonly called "large group interventions" has revolutionized the practice of organizational change. Some of these include the future search conference, a process by which diverse groups discover common futures (Weisbord and Janoff, 1995); real-time strategic change, a process for aligning and creating collective futures while developing new strategies and directions (Jacobs, 1994); whole-scale change, a process for connecting an organization so that it has one brain and one heart (Dannemiller et al., 2000); and our conference model,® a process for the design of effective organizations and processes (Axelrod and Axelrod, 1999). These interventions take the best ideas of the parallel organization model, creating both the opportunity and place for people in a system to study the system from outside, create new futures, and develop new ways of working together that cross organizational levels and boundaries. However, more people participate than previously thought prudent or possible, thus creating a *critical mass of people* who, because of their involvement, are more likely to support needed changes. In doing so, these interventions, which are examples of the "engagement paradigm," resolve the previously identified difficulties of the parallel organization: namely, more people are actively involved in the change process. The democratic principles that are the foundation of these processes militate against the potential for misuse and provide the opportunity for cultural change. And, because these processes are more inclusive, they add variety to the system, increasing the probability of innovation, adaptation, and learning. To better understand these interventions and how they work, let's examine our method, the conference model, in greater detail.

The conference model consists of an integrated series of large and small group sessions that typically deal with:

- Creating a vision for the future.
- Creating partnerships with customers and suppliers.
- Analyzing organizational processes and cultures.
- Designing new organizational structures and processes.

In these highly participatory sessions, employees—along with other important stakeholders such as customers and suppli-

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ers—examine the organization's history and current circumstances, and then create a future together. The conference model has two unique features: (1) a series of connected *conferences*, held every four to six weeks, which create momentum and address issues at increasing depth; and (2) *walkthroughs*, mini-conferences held for organization members who could not attend the main conferences. In the walkthroughs, participants learn the results of the large group sessions and can provide input to the change process. Thus, they receive feedback, and their input is incorporated into the proceedings before the next session. Together, the combination of integrated conferences and walkthroughs turns the current change management paradigm on its head. Instead of small groups determining what to change and then selling it to the rest of the organization, a critical mass of the organization comes together to create the future.

The conference model in particular and large group interventions in general led to the development of a new model for change, the engagement paradigm. In the large group processes, I observed that, although each process claimed to be based on principles, the principles were used to explain why that methodology worked. I began to realize that a way of thinking about change, independent of methodology and applicable in a wide variety of settings and circumstances, was needed. The methodology-based approaches to change could not provide the necessary innovation and flexibility to meet the requirements of complex organizations in rapidly changing environments. If leaders were limited to techniques for organizational change without a core set of principles for guidance, they would always be using formulaic approaches to change rather than creating change processes to fit their unique circumstances. As a result, the four core principles of the engagement paradigm were born:

1. Widen the circle of involvement.
2. Connect people to each other and ideas.
3. Create communities for action.
4. Embrace democratic principles.

These core principles are the foundation of the engagement paradigm. While building on the change management model, the engagement paradigm provides a framework for developing not only support but also enthusiastic engagement of the entire organization. When an organization follows the four core principles, it can expect that:

- People grasp the issues, become aligned around a common purpose, and create new directions because they understand both the dangers and the opportunities.
- Urgency and energy are produced to create a new future.
- Free-flowing information and cooperation replace organizational silos because people are connected to the issues and to each other.
- Broad participation quickly identifies performance gaps and their solutions, improving productivity and customer satisfaction.
- Creativity is sparked when people from all levels and functions, along with customers, suppliers, and others, contribute their best ideas.
- Capacity for future changes increases as people develop the skills and processes to meet not just the current challenges, but future ones as well.

Marie McCormick, in a recent doctoral dissertation, substantiated the benefits of the engagement paradigm (McCormick, 1999). McCormick's study of 343 participants in large group interventions in both health care and education found that people who participated in organizational change processes based on the engagement paradigm better understood the organization, clients, and customers, the relationships among jobs, and industry issues. Additionally, participants reported increased commitment of organizational members, a greater sense of personal empowerment, increased departmental support, a greater feeling of community, and more hope for future success. Leaders who successfully apply these deceptively simple yet extremely ambitious principles can create organizations that respond effectively to chaos, confusion, and complexity. Let's examine each in detail.

1. Widen the Circle of Involvement

Widening the circle of involvement means including hundreds, even thousands, of employees in a change process, along with lower-level employees, customers, and suppli-

ers. This involvement expands on the process consultation assumption that the client and the consultant must become a team and that the consultant must ensure that the client is appropriately involved, by expanding both the numbers and variety of people engaging in the change process from the beginning (Schein, 1969).

Social scientist Eric Trist substantiated the benefits of the engagement paradigm: "Unless we invent ways where paradigm shifts can be experienced by large numbers of people, then change will remain a myth" (Weisbord and Janoff, 1991). Douglas McGregor in *The Human Side of Enterprise* stated that the ability to create solutions to organizational issues is widely distributed throughout the organization (McGregor, 1960). Similarly, Michael D. McMaster observed, "We become attached to our beliefs that we are leaders because we have titles. . . . These attachments deceive us into believing that we can create all the required change on our own. . . . We think we are able to know what to change and how to change it without including the rest of the system" (McMaster, 1996).

Let's review briefly some benefits of widening the circle of involvement.

Increase Ownership While Reducing Resistance

The argument that engaging more people in change reduces resistance is not new. In a 1948 article, Lester Coch and J.R.P. French found that high-involvement groups, in which employees were involved from the beginning of the change process, not only outperformed the no-participation groups but also experienced increased productivity. The no-participation groups' productivity dropped, and grievances and quits increased. While these results may seem obvious today, we often ignore the lessons learned from this landmark study. Exclusion produces resistance; inclusion produces ownership.

Create a Critical Mass of People

Another benefit of increasing involvement is that it creates a critical mass for change. In sociological terms, *critical mass* is defined as the group of people necessary for an idea to be adopted by the whole population. I believe that successful organizational change requires a critical mass of at least 20% to 40% of employees.

Exclusion produces resistance; inclusion produces ownership.

To create a critical mass, ask who needs to be included and whose voice needs to be heard. When thinking about whom to include, choose people who have the information to create effective solutions, the authority to approve them, and the responsibility to implement them. Also select people who will be directly or indirectly affected by the changes under consideration. And invite those likely to be opposed to the new course of action, such as those who face job elimination.

Increase Innovation, Adaptation, and Learning

We hear constantly about the need for innovation, adaptation, and learning to keep our business organizations competitive. In addressing this issue, the Santa Fe Institute developed a new school of systems theory called *complex adaptive systems*. Robert Axelrod and Michael D. Cohen define a complex adaptive system as one in which ". . . everyone's strategies influence the context in which everyone else is acting. . . . A system is complex when there are strong interactions among its elements, so that current events heavily influence the probabilities of many kinds of later events" (Axelrod and Cohen, 2000). When applied to organizational settings, the study of complex adaptive systems provides leaders with an organizational framework that truly addresses complexity.

Axelrod and Cohen, state that introducing variety into a system increases the probability that innovation, adaptation, and learning will occur. So how can an organization introduce variety into change processes?

1. Include people from outside the formal system, for example, patients, students, or customers.
2. Include those who might not agree with you. For example, if artists or educators are

included in a discussion of technical issues, they will likely bring a different discipline and approach to the situation.

3. Occasionally add new people to existing groups or rotate membership.

The following example of Detroit Edison illustrates the principle of widening the circle of involvement.

Detroit Edison

Like many organizations, Detroit Edison's annual cost of procuring supplies was out of line; so, according to current best practice, management brought in a consulting firm to improve the supply-chain process. Predictably, the consultants set up a parallel organization whose design teams developed innovative recommendations for change. But after two years, few of the recommendations had been implemented. Everyone connected with the change process—the sponsor team, the steering committee, and the design team—was frustrated by the lack of progress. Meanwhile, organization members were both suspicious and resentful of the process. After two years of change management, the process was practically dead in the water.

Fortunately, when the leaders of Detroit Edison recognized that the process was in danger of collapsing, they took drastic action and involved more than one-third of their employees along with customers, suppliers, contractors, and key union officials in large group sessions to devise new plans for the supply chain process. Using the work to date as a starting point, they carefully created links from the previous work to the current challenges. When it was time to implement the new process, they used current projects that required supply chain emphasis, thus grounding the improvements in real work.

Joe Aresto, leader of the supply chain improvement process commented, "A stalled change process marked by withdrawal and resentment was replaced with new enthusiasm and commitment resulting in over 26 active supply-chain improvement projects at Detroit Edison, with savings in the millions. Not only that, but our nuclear division and our customer information technology group picked up on what we did and successfully applied these principles in recent change efforts with excellent results. My personal experience is that I enter these processes with one mental model of how things should be, and, as a result of working with others, my mental model shifts to one that is much better than the original. More importantly, I have learned that when people can put their own thumbprint on a change process, there is no need to sell them on the benefits; they own it."

2. Connect People to Each Other and Ideas

In today's organizations, people may work together for years without ever meeting. They communicate by voice mail, fax, and e-mail. Walls, cubicles, and organizational silos reinforce their isolation. When they need to get something done, they do not know where to go or whom to ask. Unless they are able to connect with each other and a common purpose, they are unable to act effectively. When we connect, we build trust; when we build trust, we are able to create synergy.

Most models of group development, including those by Bruce Tuckman (1965) and Will Schutz (1994), recognize connection as the first stage of group development. Harrison Owen found that people felt the most valuable sessions occurred during coffee breaks, lunches, and other unscheduled activities when they got to know one another (Owen, 1997). Owen made such informal connection a cornerstone of his process for organizational change.

How do you build connection? Here are some techniques:

- *Create a compelling purpose.* This does not mean creating slogans or plaques on the wall. Rather, it means bringing people together to discuss what they want to change in the organization and for themselves, and what they are doing that has purpose and meaning.
- *Honor the past and present in creating the future.* Elders can pass on organizational folklore in story-telling sessions. Everyone can explain what brought them to the organization and why they stay.

- *Listen until you feel you cannot stand it, and then listen some more.* Listening builds relationships. Listen with understanding and empathy. Work for understanding, not agreement.
- *Make the whole system visible*. Activities such as "passing the order through," in which a person pretends to be an order or a service traveling through the organization, allow people to learn what happens in other departments and produces new systemic learning.

In the next example, Inova Health System successfully connected doctors, nurses, patients, and providers from various settings into a cohesive organization.

Inova Health System

Inova Health System employs 15,000 employees in five acute-care hospitals, two long-term care facilities, a large home-health service, and various outpatient clinics. In the mid 1990s, Inova recognized that increasing costs, changing reimbursements, escalating competition, and an increased demand for home and ambulatory services would require dramatic changes in patient care delivery. Instead of following the conventional change management paradigm, Inova used a strategy of systemwide engagement: in six months, the organization held four conferences and 700 walkthroughs, which together allowed 52% of its staff to contribute to the change process. Jolene Tornabeni, executive vice president and chief operating officer, recalls: "I knew there were significant changes that we'd have to go through, and I wanted the change driven from the inside out. It was critical for people to be engaged in understanding the need for change, determining what needed to be changed, and designing how it would be changed."

When we connect, we build trust; when we build trust, we are able to create synergy.

Sticking with the principles of engagement produced a high degree of ownership and cooperation within Inova. For example, it developed a coordinated patient information system and implemented quality case management, which combines the functions of quality assurance, case management, and clinical outcome assurance into one streamlined service. Administrators, clinicians, and staff share and work together across the system. And people who had once referred to themselves as employees of their particular hospital or clinic now call themselves Inova employees.

3. Create Communities for Action

The next principle is to create a community from the large group of connected people. I define a *community* as a group of people who willingly come together and put time and energy toward achieving a common goal or goals. People's willingness to pool their talents and energy makes a community different from a typical business unit. Caring is a function of consent, not control. Therefore, leaders must form a community that cares about outcomes, which occurs when they create conditions that demonstrate that each community member is valued. In doing so, leaders must allow for celebrating successes and learning from failures. To sustain commitment, it is essential to create information-sharing and feedback systems so that the community members can monitor progress. Mutual support must be built into the process. And leaders must be fully engaged in the change process and model behaviors congruent with the proposed changes.

How can you create communities for action?

1. Co-create the future. People support what they help to create. Involve more people at the beginning of the process when the important decisions are being made, not at the end when everything has been decided.
2. Maintain a future focus. In doing so, you create positive energy and see new possibilities.
3. Create a learning environment. Continually ask what is working or not working. As people learn and discover together, they begin to feel smart about the issues. When people feel smart, they act smart, taking control of situations and problems and developing creative solutions.
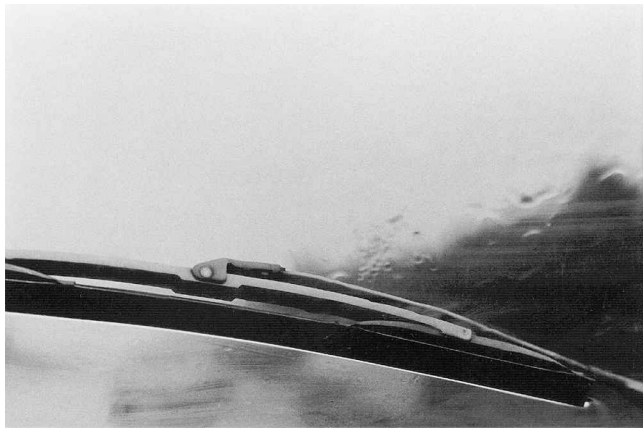
Let's look at how a unit at Hewlett-Packard transformed a "refugee camp" into an engaged community for action.

Hewlett-Packard

Mike Freeman, former director of Hewlett-Packard's micro-electronics operation, remarked, "We were like a refugee camp. We had five different organizations, we were located on one site, and we had to transform ourselves into an integrated manufacturing organization while facing a changing and uncertain market. We worked for the same company but spoke different languages. Shock resulting from a downturn in our industry permeated the organization. We were confused and without organizational homes. Survival meant creating a new way of life."

To redesign the organization, the unit held five large group sessions involving nearly everyone. During these conferences, people built connections that allowed new levels of coordination and cooperation. People began to understand the need for change and became connected around a common purpose—creating a new organization that could effectively meet industry challenges. As a result, the refugee camp was transformed into an efficient, collaborative, customer-focused organization.

Freeman identified six critical outcomes from this process: "An environment that values learning through exploration and inquiry, an organization where we feel free to examine roles and responsibilities and there is a free flow of information, and an organization that responds and adapts more quickly to constant turbulent change. Manufacturing costs have been reduced at twice the asked-for rate, and cycle times are 25% of previous levels. Finally, the quality of work life has significantly improved as measured by a standard employee-survey process."

4. Embrace Democratic Principles

We've come a long way from the feudal systems in which lords owned the land and the means of production, including the people who worked in the fields. Today, most leaders recognize that authoritarian approaches to change do not work. But embracing democracy raises issues of predictability, power and authority, and fear. I call this constellation of issues the democratic dilemma (table 1): Who will care for the whole? Who will provide focus? Who will pull everything together? These are legitimate questions.

It is hard to estimate what is required to embrace democratic principles. And I am not suggesting that organizations should be pure democracies. However, employing these principles makes the difference between a follow-the-rules, resistance-prone organization and one in which people grasp the issues and initiate action. William A. Pasmore and Mary R. Fagans reinforce the importance of democracy: "Although it is true that many institutions in a democratic society can function quite well without adopting democratic values, it is also true that organizations that fail to understand the importance of democracy will never achieve their full potential" (Pasmore and Fagans, 1992).

The democratic principles I advocate for achieving lasting, meaningful change are:

- *Equity and fairness*. Working together blurs the privileges associated with roles and titles. Everyone has an equal responsibility for contributing to the outcome. Considering the impact of the change on everyone requires development of evenhanded outcomes.
- *Maximum sharing of information*. Senior managers often wonder why the rest of the organization does not see things the way they do. Often it is because they have information that they haven't shared. Sharing information lets everyone know what is happening in both the internal and external environments and creates initiative. Holding back information creates dependency.
- *Freedom and autonomy*. Fears of chaos abound when leaders picture everyone in the organization doing his or her own thing, but restricting freedom and autonomy di-

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Table 1 The Democratic Dilemma

	Leader-Centered Approaches	*Democratic Approaches*
Predictability	If I make the decision, I know the outcome.	If I involve others, the outcome is less predictable.
Power and Authority	If I keep decision-making authority, then I have the power to make things happen.	If I include others in the decision, then I must influence and be influenceable.
Fear	If I decide, I have nothing to fear but my own abilities.	If others decide, I am more fearful of the outcome.

minishes action. The trick is to provide a balance so that people can respond to changing conditions, without creating chaos.

- *Open decision-making processes*. It is important for leaders to let go of long-standing prerogatives while, at the same time, contributing their knowledge, insights, and responsibility for the outcome. Decision-making processes must be accessible to many organizational members, they must be public, and they must allow for everyone's input.

Kurt Lewin's research on leadership and participation supports this position (Weisbord, 1987). During World War II, Lewin worked with Margaret Mead to identify ways to reduce consumption of rationed foods. In one instance, an expert lectured housewives on the need to change their buying habits. In another, the housewives were given the facts and time to discuss the issues, after which they made decisions as a group. The results are not surprising. People in groups that reached consensus through discussion changed their buying habits more than those in groups that received expert information through a lecture. Lewin identified a simple but telling principle: we are likely to modify our own behavior when we participate in problem analysis and solution and likely to carry out decisions that we have helped make.

Some techniques for fostering democracy are:

1. Promote equity and fairness by opening the deliberations of the change process to volunteers, thereby avoiding the temptation to hand-pick all the participants.
2. Use round tables or sit in circles.
3. Communicate early and often through multiple channels and with various media. However, face-to-face conversations in which dialogue can occur are the most effective.
4. Spend no more than one-third of communication meetings presenting information. Spend two-thirds of the session dialoguing with one another about the issues.
5. Create high-involvement decision-making processes while clarifying ground rules and boundaries to guard against feelings of betrayal.

The next example shows how embracing democratic principles created a critical mass of people who were able to effect meaningful change in a state educational system.

Washington Alliance for Better Schools

A nonprofit consortium of 11 school districts in and around Seattle, the Washington Alliance for Better Schools incorporated the principles and techniques of the engagement paradigm into its program to meet the state's goals for preparing students to meet future challenges. It successfully engaged school districts, educational organizations, families, communities, higher education, business and labor, and the governor and state legislature in developing a 10-year vision to meet the state's goals. These included the ability to read with comprehension, think analytically, and apply the core concepts of mathematics, social, and physical and life sciences.

Jonelle Adams, the program's executive director, said that the conferences and walkthroughs held across the state were successful because of the attention to democratic principles. At the first conference, program leaders asked participants to explain what it would be like if they were to incorporate the principles of egalitarian spirit, co-creation of the future, and public information and decision making into their work. The principles

guided everything that followed. The participants' work together produced innovative initiatives and a critical mass behind them. Recently, the state legislature approved the recommendations calling for new technology, teacher certification, a safe-schools program, pay increases to retain good teachers, and extra staff-development days.

Five Myths of the Engagement Paradigm

When I discuss the engagement paradigm with potential users, they often raise familiar objections. The myths that make leaders hold to the familiar change management paradigm and prevent them from achieving real change are:

1. "Unless I keep a tight rein, I cannot control the outcomes." As leaders contemplate employee involvement and democratic principles, they sometimes believe that they will be required to completely abdicate their legitimate authority, responsibility, and ability to provide input based on their knowledge and experience. The involvement of leaders is critical, but their roles shift. Instead of being responsible for identifying problems and solutions, they are responsible for identifying issues, purposes, and boundary constraints, and applying the principles of the engagement paradigm throughout the process.
2. "We must build a firewall between the organization and its stakeholders." Accompanying this myth is the fear that if customers, suppliers, and even competitors are included in the change process, the company's dirty laundry will become public and will alienate the people necessary to its success. Just as including those affected by change builds ownership and commitment within an organization, it does the same with those outside.
3. "Productivity will suffer if I involve a lot of people." Exactly the opposite is true; I have seen telephone-call handling rates, manufacturing productivity, and customer service levels improve during conferences. Employees understand the significance of involving more people in change processes, and those unable to attend make extra efforts during these times.
4. "The majority cannot be trusted to put the organization's interests first." When people understand all the issues and the role they play, they are willing to offer ideas and support decisions that benefit the whole.
5. "Changes designed by the best and the brightest are the most cost effective." It is financially and emotionally expensive to increase employee involvement. The whole change process instantly becomes more visible, and the stakes become higher. But consider the costs of disengagement, brilliant strategies never implemented, increased cynicism and resistance, an exodus of talented people who don't feel they are heard. Organizations that invest in engagement reap rich rewards.

Conclusion

The next time you meet with a group, small or large, begin to apply the principles and the techniques outlined here. You will be surprised by how quickly you can transform your organization into a cohesive, purposeful community.

Neil Robertson, principal human resources business manager at British Airways, recently commented on what he saw as the byproduct of engagement: "It is my belief that managers do not know it all, and they have to find ways to tap into the knowledge of the organization. How to get the system talking to itself in useful and systematic ways is crucial to success. When we are successful, we find that, in addition to bringing about organizational change, we have increased the capacity of leaders and their organizations to handle change. This may be the most important outcome of all."

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Why Management Research Findings Are Unimplementable: An Action Science Perspective

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The demands of the competitive environment make it essential that companies adapt their organization and their management practices to many fronts. Since organization and management practices are the means for responding to new market realities, corporations are faced with the problem of rapidly adopting innovations in management practices suitable to their circumstances.

The fast growth of the consulting industry, schools of business, and the executive education industry can be traced to the demand for new knowledge. There is considerable evidence, however, that short of "rare events"—bankruptcy, mergers, or a new CEO, for example—new management knowledge and practices do not take root easily. Yet, awaiting a "rare event," typically a crisis, brings with it economic and human costs—losses to shareholders, disruptions for customers, and loss of jobs for employees. Moreover, a crisis may lead to change, but not to the organization's sophistication in adopting and implementing new knowledge in the future. To avoid these costs, academics and consultants have to take greater responsibility for ensuring that conditions and processes for implementation are researched, specified, and communicated to practitioners. Academics and consultants are increasingly being criticized for failing to do so. Too often, expensive executive education or consulting engagements do not result in effective implementation of ideas that, at the time they were first presented, seemed valid and needed. For example, 120 executives who were asked to grade recent consulting firm engagements in their companies assigned them a "C"—just satisfactory (Beer and Skoler, in preparation). They gave implementability as their chief concern. Though we know of no study that has asked executives to grade the usability of knowledge produced by academics, we suspect that grade would be even lower.

Consider the following example of a company's efforts to apply excellent, relevant research. In 1985, Becton Dickinson (BD), a global medical technology company, found it needed new organizational arrangements to implement its global strategy. Dissatisfied with the recommendations of a consulting firm, it turned to a highly regarded academic who was just completing research on how global companies organized and managed their enterprises. The researcher used the clinical case method and therefore his recommendation was grounded in what the companies studied actually did (Bartlett and Ghoshal, 1989). It was not theoretical but focused on a real management problem. Moreover, the researcher became involved in implementing the research. He designed and taught an extremely well-conceived workshop in all parts of BD's worldwide operations. The workshop engaged managers in applying an analytic framework for deciding on alternative organizational designs for each worldwide business. Moreover, top managers' enthusiasm for launching the new organization was reflected in their attendance at the workshop sessions.

Despite these efforts, the corporation's vice president of strategic management reported, at an academic conference on designing global organizations, that, although the framework for "transnational management" was useful, it was not usable (Biggadike, 1990). The research had provided little or no guidance for implementing change in the new organization. Indeed, the company went back to the researcher on several occa-

sions and reported these difficulties. The researcher renewed his efforts to educate management on several occasions. Finally growing tired of the project, he told management "to just do it." Still unable to implement, management once again approached the researcher for help. This time he referred executives to an expert in organization development and change. Implicit in this referral was the recognition that implementation of technical or structural solutions depends on organizational and human factors that the research and theory do not incorporate. This is not an isolated incident; few management scholars specify the conditions and processes that managers might use to implement their theories, concepts, and methods. Fewer still consider issues of implementation when choosing their research method.

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It took BD a full decade to make significant progress in its efforts to implement transnational management. The opportunity costs of this long delay in implementation are incalculable but undoubtedly large. Fortunately for the company, its competitors were less agile. That will not, however, be true for this company and others as competitive pressures increase the cost and risks of slow implementation.

There are few managers, consultants, and academics concerned about implementation who have not experienced the same wide gulf between ideas and action. Approximately 70% of corporations are disappointed with the effectiveness of total quality management (Spector and Beer, 1994). A similar percentage of companies are disappointed in the results of reengineering efforts (Hall, Rosenthal, and Wade, 1993). It cannot be said that inadequate theory or lack of rigorous research is the cause of implementation failures. Hackman and Oldham's (1980) research on work redesign was not widely or effectively implemented in the 1980s. Kaplan (1994) reports significant implementation difficulties in introducing the "balanced scorecard," an innovation in management control rooted in academic research and theory. The gap between social science research and the formulation and implementation of public policy illustrates the same problem in another field (Lindbloom and Cohen, 1979).

Unless management researchers want to risk being dismissed as irrelevant, even unethical, they will have to take responsibility for specifying how the knowledge they produce and disseminate might be implemented. With attention to implementation, researchers can make a real difference in the affairs of management while at the same time developing more valid theories and contributing to a much needed theory of implementation. Churchman and Mitroff argue that "truth is that which makes a significant difference in human affairs" (Churchman and Mitroff, 1995). They contend that knowledge produced without the intention of making a difference in human affairs is not valid. Following William James, they argue that truth has a strong *process* component and therefore does not happen all at once. The truth of a scientific proposition is not static, Churchman and Mitroff suggest: "Truth happens as a result of the management of human affairs. It becomes true, it is discovered and made true by actions. . . . Or put differently, truth occurs only as a result of human activities for the purpose of solving an important problem" (Churchman and Mitroff, 1995: 5).

It could be argued that some management scholars, notably those in the field of organization development and change, already focus their research on implementation. I would argue, however, that the split between those developing substantive management theory and those who practice and study how knowledge can be implemented and organizations changed prevents us from developing usable knowledge. That is because we fail to learn about the interaction between substantive management theory and process theories, create confusion for the consumers of management research—managers—and ignore the type of failures in implementing research described above.

In sum, there are serious questions about the validity and implementability of most knowledge produced by management scholars and about the ethics of the knowledge production enterprise of which academics and consultants are a part. The following key ideas and research findings bear on the debate.

Research into corporate transformation reveals that such efforts often fail when new management practices are injected into the organization from the top (Beer, Eisenstat,

and Spector, 1990; Schaffer, 1988). Instead, the most successful corporate transformations occur when an ever larger circle of sub-unit managers take responsibility for change. Under these circumstances, new management practices are connected in thought and action to the organization's strategic task and to local organizational realities. Local managers experience the change as a discovery process, not an injection of new knowledge and practices brought in by staff groups, academics, or consultants. Corporate transformation occurs when top management plays an active role in spreading innovations to other sub-units, but in a way that puts the responsibility for diagnosing and changing the status quo on local managers.

It seems clear that for knowledge to be implementable, the root causes of the status quo must be understood and broken down (Beer, 1991; Lewin, 1947). Organizations resist innovations due to mutually reinforcing norms, rules, values, behaviors, and skills of organizational members (Argyris, Putnam, and McLain Smith, 1985). Those members learn which behaviors and skills will be accepted within the status quo and which will not. New behaviors and skills that work enhance self-esteem. The more they elevate self-esteem, the more new behaviors and skills are imbued with meaning. As shared beliefs and values emerge, they demand conformity. Since questioning these values may be threatening or embarrassing to those in power, the status quo is rarely challenged. In short, the factors most critical to implementation of new knowledge are undiscussable, and their undiscussabilty is itself undiscussable (Argyris, 1990).

Despite the universality of this pattern and its consequences for implementation, few management scholars consider organizational defensive routines when they choose their research methods or when they disseminate their knowledge. The most pervasive reason has to do with our conception of management science. Most academics have appropriated the model of natural science in ways that have maintained the separation of science and practice. Following the tradition of logical positivism (Popper, 1959; Hempel 1965; Nagel 1979), management scientists must subject their propositions to disconfirmation. While disconfirmability of propositions is an essential quality of scientific inquiry, it has come to be associated with controlled or quasi-controlled experimentation and/or "hard" data that can be checked by different observers (Campbell and Stanley, 1963; Cook and Campbell, 1979).

In practice, these assumptions about science have led academics and consultants to value research designs in which the researcher is distanced from the subject being researched and in which data are quantifiable. Even in the most applied field-based research, the researcher or consultant maintains the distance prescribed by normal science (Beer, 1982). The researcher collects and interprets the data. Managers are not engaged collaboratively in an open discussion of hidden norms, values, or barriers to implementation. Distance between the research and the subject, it has been argued, causes the researcher to miss important aspects of the phenomena being studied, in particular, managers' real *purpose* and their *tacit knowledge* about why and how they do what they do. That knowledge, according to Schoen (1983), guides the practice of professionals and is accessible to them only through reflection. Researchers and consultants who remain distanced and do not engage research subjects are, therefore, unlikely to have access to this knowledge (Argyris, Putnam, and McLain Smith, 1985; Schoen, 1983).

Consider a report given at a recent research conference. The researcher had used a questionnaire survey of human resource executives to find regularity in the relationship between human resource policies and practices, as reported by them, and company performance. Not surprisingly, correlation coefficients, while statistically significant, were extremely low. It never occurred to the researcher that similar policies in two firms can have very different meanings and effects depending on top management's tacit assumptions about the purpose of the firm and the management philosophy. A questionnaire cannot access these assumptions, and, therefore, the validity and implementability of any theory emerging from this research is in question. Similarly, consultants who interview managers to identify problems and the solutions they recommend to top management are disconnected from tacit or undiscussable knowledge about skills, values, and politics that will prevent implementation. Uninvolved

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in the investigation and the crafting of solutions, managers distrust the consulting process and do not reveal and/or discover the vital factors that govern implementation.

It has been argued that research designs in which the researcher or consultant is in control have the same consequence as autocratic Theory X management: passive and defensive subjects who do not reveal or discover what they are really thinking and feeling (Argyris, 1970). This condition makes it highly unlikely that the managers will implement knowledge produced by the research. They will not learn enough about their own assumptions, beliefs, and behavior—the culture of the organization—to stimulate real change (Schein, 1985).

All this suggests that valid information can be acquired and commitment to implementation can be achieved only if the research subjects are "engaged in public reflection on substantive matters of concern to them" (Argyris, Putnam, and McLain Smith, 1985). But, because organizational members are prone to avoid threatening and embarrassing issues, valid information surfaces only when managers examine the organization's norms of communication (Argyris, Putnam, and McLain Smith, 1985; Argyris, 1993). Indeed, for valid data to emerge from a public inquiry, the researcher may have to confront the research subjects with the defensive routines they use to overprotect themselves and others from the truth. Action science, therefore, requires professionals who have the intervention and interpersonal skills that most academic institutions and consulting firms do not value, teach, or evaluate in promotions.

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Academics' concern with implementation and action is not new (Argyris, 1970; Kilmann et al., 1983). Kurt Lewin et al. (1939) and John Dewey (1929) both designed experiments they intended as alternative models of action and studied them systematically. Action research, in which the researcher and the client jointly engage in moving an organization toward new practices, has been used to develop theories or to make those theories developed through normal science actionable (Walton, 1980; Beer, 1992; Argyris, 1993). Some consulting firms have begun to grapple with this problem, but their efforts to date have had limited success. Consider McKinsey and Company's attempts to respond to criticism that its strategy engagements do not lead to effective implementation. In the mid 1990s, it created a change center aimed at bringing into the firm the professional skills needed to engage clients. A few years later, the center was disbanded and the initiative died. McKinsey's economic model and the culture that supported it blocked commitment to the mission of the change center.

Recently, Beer and Eisenstat (1996, 2000) developed a methodology called Organizational Fitness Profiling in which the scholar-consultant and management co-investigate a company's effectiveness, using data produced by its members. Top managers define the goals, strategy, and values. They then ask a task force of high-performing managers one or two levels below them to collect data about strengths for and barriers to achieving these aspirations. The task force's data are fed back to the top team under special conditions to ensure that the unvarnished truth surfaces. Working together, the top team and the consultant analyze the data and develop an action plan for change using heuristics developed from research and theory in organization design and effectiveness. The top team then meets with the task force for a critique of the analysis and action plan. If the task force disagrees with management's conclusions, they must resolve their differences. And the task force and the top team continue to meet periodically to review the progress of change and make mid-course corrections. The process recycles periodically, allowing the truth about success or failure to emerge over time.

Taking a broad societal perspective, Churchman and Mitroff argue that "the distinction between 'pure' and applied sciences is unethical" because scientists have a moral obligation to put science in the service of humanity's most pressing problems (Churchman and Mitroff, 1995: 22). The knowledge that is produced through the type of process described above is at once *useful* to academics interested in description, understanding, and theory development and *usable* to managers. They are able to implement recommendations that reflect an understanding of their own situation, their business, their assumptions, and their skills and values.

Action science represents the most radical alternative to normal science. Industrial or organizational psychologists concerned with applying knowledge to organizations have offered somewhat less radical solutions (Hakel et al., 1982). For example, Boehm suggests that applied researchers involve the client in defining the problem and planning the investigation, but it is unclear whether the involvement she conceives would reveal tacit or undiscussable knowledge that may block implementation of research findings (Boehm, 1980). The clinical inductive case research approach pioneered at the Harvard Business School proposes to be more practical by starting with a managerial problem, not a theory. But it is not clear that tacit knowledge about norms and values typically surfaces, nor is this research typically part of a managerial process. Ethnography is likely to reveal more hidden and undiscussable data relevant to developing a valid and implementable theory. But it is not obvious how the research can make the knowledge implementable unless the researcher involves subjects in the inquiry. And unless the ethnographer engages organizational members in an inquiry into their defensive routines, the knowledge the researcher has gained about these defenses is inaccessible to the subjects and will block implementation. Some have attempted to deal with implementation issues through the lens of power and politics (Pettigrew, 1982). According to this perspective, a researcher or interventionist interested in implementation must develop power in the client organization. The power and politics approach consciously plays into norms that support defensive routines, however.

If normal science approaches are inadequate for creating knowledge that is implementable, what are the alternatives? How might the relative merits of quantitative, qualitative, and action science approaches be integrated in the context of the epistemological issues raised in this article? Can they be integrated into a single scientific paradigm as suggested by Torbert (1995), and how? The answers to these questions require considerable action research. That is, social scientists working in concert with practitioners will have to experiment with different research designs and forms of relationships in order to develop an inquiry process that integrates scientific concerns about the findings' external validity or disconfirmability with practitioners' concerns about the findings' relevance and implementability.

If normal science approaches are inadequate for creating knowledge that is implementable, what are the alternatives?

Professional schools of business or public administration concerned about developing implementable management knowledge will have to open their institutional policies to inquiry, particularly those policies that govern promotions. For example, how do incentives created by the promotion process discourage professional concern for creating knowledge that meets the test of implementability? Such an inquiry would reveal the underlying assumptions, beliefs, skills, and norms of academics and their institutions that may prove embarrassing and threatening. Only such a process, however, will reveal the truth; that truth is essential to creating implementable knowledge about how schools of business and management might reinvent themselves to create implementable knowledge.

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Commentary

by Lotte Bailyn

Michael Beer wants management and organization research to be more practice oriented. He rightly points out that not only researchers' but consultants' recommendations rarely get implemented in organizations. He calls for researchers to work on a theory of implementation and to build that into their research designs. He emphasizes, in particular, two necessary conditions to accomplish this goal: reduce the distance between the researcher and the object of research; and engage management in the research process. Taken separately, these are not new ideas. But, as Beer rightly points out, it is the combination of these two aims that is critical.

So how does Beer intend to bring these two aspects together? He implores management re-

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searchers "to take responsibility for specifying how the knowledge they produce and disseminate might be implemented." But he has already rightly stated that efforts at corporate transformation "often fail when new management practices are injected into the organization from the top," and that change is more likely when "local management experience the change as a discovery process." Will researchers telling managers how to implement be any different?

And he accurately describes the Argyris approach as requiring the researcher "to confront the subject of the research with the defensive routines they use. . . ." But is this the kind of collaboration that is needed? To "confront"? Even to talk about "defensive routines" is a negative characterization, hardly geared to engaging organization members in constructive efforts to change.

And consider the assumptions underlying his and Eisenstat's Organizational Fitness Profiling, which, based on his own criteria, may not fare much better than the approaches he argues against. "*Top managers* define the goals . . . they then ask a task force of *high-performing managers* . . . to collect data . . . [which] are fed back to the top team . . . [which] together . . . [with] the consultant analyze the data and develop an action plan for change" (italics added). Is this less top-down than current efforts at change? Will this provide the local managers who have to implement the change with the experience of discovery? And what about the front-line employees, where the change will either succeed or be resisted? How do they get involved? To be fair, this process has many good things going for it in terms of ensuring that top management gets accurate information—but that is not the same as providing the conditions required for successful implementation of change.

I agree completely that if our research is to be useful to organizations in their attempts to change, then "social scientists working in concert with practitioners will have to experiment with different research designs and different forms of relationships. . . ." But the guidelines for how to forge such a collaborative partnership have still to be established.

In some ways, the work of a group of colleagues (including Joyce K. Fletcher, Bettye Pruitt, Rhona Rapoport, and me) may help with such guidelines. We are working on a book (to be published by Jossey-Bass) that codifies the method we use in our action research projects in organizations. Briefly, we work with organizations to try to experiment with changing their work practices in such a way that they become more effective, while at the same time increasing the ability of their employees to make choices about the integration of work with the rest of their lives. To do this, we combine interactive collaboration with action research into what we call Collaborative Interactive Action Research (CIAR).

The kind of *collaboration* we have in mind is based on a continuous interplay with our organizational action partners, where we pool our expertise: research analysis that surfaces mental models from us; deep local knowledge from our action partners. The kind of *interaction* we have in mind occurs at every stage of the process, including the experimental stage where our partners try something new at the systemic work practice level. But we have learned, also, the importance of interacting across the organization. We work at the local level, but to achieve the kind of implementation results Beer envisions, middle and upper-level managers need to give solutions-focused input regarding their concerns. Though we have not always been successful in this larger goal, we have had success in creating local work practice change that meets the dual agenda of enhancing work-personal life integration a*nd* organizational effectiveness. We therefore hope that the book, when it appears, may provide the beginning of guidelines on how to meet Beer's goal of making management research implementable.

Response

by Michael Beer

Lotte Bailyn questions whether managers will want to collaborate with scholar/consultants who announce that they will confront them with their own defensive routines. My use of the phrase "confronted by the researcher" was unfortunate. She is right, of course, that human beings do not readily embrace the honest and unvarnished truth when directed at them by a third party without reason or their consent. Through the use of Organizational Fitness Profiling as the intervention in many organizations, Russell Eisenstat and I have learned that managers are likely to accept, even seek, feedback about their leadership under the following conditions: Their organization is facing performance difficulties. The process of feedback is framed as an opportunity to learn what their own employees think about organizational strengths and barriers to implementing the objectives and strategy that they and their top teams have created. They think people and organizational capability matter. And an environment of psychological safety is produced.

Bailyn also raises questions about whether Organizational Fitness Profiling is any less top-down than other current approaches to change. What about local managers who must implement changes crafted by the top team, even if they are based on feedback from a lower-level task force? What may not have been clear in the one-paragraph description of the process is the assumptions about partnership that are designed into the process. The task force that provides the feedback critiques the top team's plans and partners with them in revising change plans as needed. Moreover, they stay connected with and inform the 100 key people they have interviewed about progress. Finally, the Organizational Fitness Profiling is intended to be a cascading process aimed at each of several strategic business units in a larger enterprise, each learning about how their organization and leadership is or is not aligned with espoused goals, strategy, and values.

Bailyn's description of *interactive collaboration* with practitioners in the conduct of action research about their work practices is exactly the type of innovation in researcher-practitioner co-investigation that I advocate in my article. Codifying the process is equally essential and I applaud this effort. Eisenstat and I are also codifying our own efforts at collaborative inquiry in an effort to make it more accessible to managers and organizational development practitioners. But we may be able to learn from Bailyn and her colleagues how to deepen our interaction with managers. Our work has focused principally on researching and specifying the relationship between top teams and lower levels needed to create a collaborative inquiry. We have done far less in specifying the relationship between us as scholarly consultants and managers needed for a *three-way* learning process.

Eisenstadt's and my research may, however, offer some insights to Bailyn and her colleagues in how to create a collaborative inquiry that encompasses the whole system and involves top management in crafting systemlike solutions. Indeed, profiles conducted in the past several years have shown that too many initiatives driven from the top overload the system and employees. We have worked with management teams to develop a system for resource allocation and utilization in an effort to alleviate this condition—one that is as harmful to work-life balance as it is to organizational performance.

Commentary

by Karen Ayas

I will never forget the conversation I had with Mike Beer more than two years ago, while sitting at the Harvard Faculty Club. It was my first year in the US, and I was struggling to understand the realities of the corporate world and academia in the States. I had many questions to which I could find no plausible answers. I had spent five years in Europe where one could easily choose an academic *and* consulting career and, in many ways, was encouraged to. Besides creating a very intense schedule, such a combination was beneficial to all parties: students, teachers, and companies. I used both theory and practice to teach my classes; students could work on and contribute to real cases.

In our conversation, I told Mike that I was a proponent of action research. "Great" he said. "Me too." Then I told him that I had used action research for my dissertation. "Ooh," he said, "you could never get away with that here." His words shocked me at first. When I inquired further, I discovered that action research was an accepted methodology, but only once you had a tenured faculty position. In fact, you could get away with almost anything once you had tenure. We continued to discuss the pros and cons of action research, and he offered me the paper published here.

To hear him speak as passionately as he did was inspirational to me. Yet I still couldn't understand why there was no way to change the system. In fact, not much has changed since then. There still seems to be a huge disconnect between theory and practice. The belief that academic knowledge is superior to that of a manager or consultant still prevails. If the pursuit of "significant" knowledge is the goal of academic research, genuine collaboration between academics and practicing managers might be a beginning. There is typically little academic influence on the resolution of real and important issues in organizations. One might also argue that there would be fewer management fads if they were derived from sound theory.

In practice, joint knowledge creation or developing effective knowledge sharing among academics, consultants, and managers is extremely difficult. It is constrained by deeply embedded assumptions and attitudes in each community and absence of an institutional infrastructure to support and enable long-term partnerships between them. Research models that emphasize the researchers' detachment will continue to interfere with meaningful partnerships. Pressing business needs will always constrain practitioners' time for reflection or analysis. Working to understand the current reality through the lenses of each community, as Beer proposes, may be a first step in attempting to change the system.

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Management Gurus and Educators

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guru *n* : an influential or revered teacher.
educate *v* : to train the mind and abilities of a person.
train *v* : to bring to a desired standard of efficiency or condition or behavior by instruction and practice.

As usual, a dictionary fails to reveal the nuances of meaning involved in current usage. There are no pejorative implications in calling someone an *educator*, but there are frequently (but not always) derogatory implications in calling someone a *guru*. This is certainly the case, for example, when Micklethwaite and Wooldridge (1996) refer to gurus as "witch doctors." The term *guru* has become more popular in management circles than *educator*. Witness four recent books: *The Ultimate Book of Business Gurus* (Crainer, 1998), *Management Gurus* (Huczynski, 1996), *The Witch Doctors* (Micklethwaite and Wooldridge, 1996), and *The Guru Guide* (Boyett and Boyett, 1998).

In management circles, *guru*, in its widely used, pejorative sense, is someone who promotes a panacea or fad and, in some cases, founds a cult. Gurus produce *doctrines* that attract *disciples.* The doctrine defines which problems are meaningful and what are the acceptable solutions to them, and discards everything else as irrelevant. Thus, gurus put thinking to rest; they provide all the relevant questions and answers, and their coverage pretends to be comprehensive. What they expect from followers or disciples is loyalty, no questioning of their outputs or manipulation of them. They expect their followers to proselytize and, at most, to expand, extend, and illuminate their outpourings.

The appeal of gurus lies to a large extent in the simplicity of their doctrines. They are simple no matter how complex are the problems at which they are directed. They provide a life raft to those managers who are incapable of handling complexity.

In other than managerial circles—for example, politics and religion—the guru's disciples not only tend to form a cult but also become fanatics, treating non-believers as enemies, often ones to eliminate. Terrorism is the most extreme form of adherence to a guru.

In the political and religious arena, gurus tend to be aggressive against "the enemy." But in business circles, this is rarely the case, largely because there are so many gurus competing for followers that no one can dominate the minds, let alone the emotions, of potential followers. In politics and religion, the number of competing gurus is seldom more than two or three.

Educators stand in sharp contrast to gurus. Educators do not try to halt thinking but to initiate it. They want their students to carry the ideas they present beyond their current generality and application; they encourage students to question and modify without constraint. They want students to treat their solutions as beginnings, not ends. Gurus lead into; educators lead *out of.* Gurus provide ready-made solutions, but educators provide ways that one can find solutions for oneself. This is reflected in an old Chinese proverb that says if a fish is given to a starving man, he will soon be hungry again, but if he is taught to fish, he will never be hungry again. The former is the guru's way; the latter is the educator's. The output of a guru is a closed system of thought, closed to external influences and not subject to change; the output of an educator is an open system of

thought, open to external influences and subject to change. A student can have many educators, but a disciple can generally have only one guru.

Educators try to transmit a way of thinking and a way of conducting inquiries. And they do not pretend that these are the only ways. Among other things, they recognize that differences in personality lead people to select different ways of thinking and behaving. Some try to bridge the differences between the outputs of different educators. There is no bridging to be done between gurus.

Effective educators do *not* teach. Teaching usually obstructs learning. Managers learn what they use to manage while on the job, not in school. Experience is a better source of learning than others, even teachers. However, good educators facilitate the learning process, enable the student to learn more rapidly and effectively, and motivate the student. To a large extent, they do so by making learning *fun.* Gurus do not consider fun to be a necessary condition to progress; educators do. In this regard, most teachers are more like gurus than effective educators.

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The Social Life of Information, John Seely Brown and Paul Duguid, Harvard Business School Press, 2000

Review by Etienne Wenger

Some books just had to be written.

And *The Social Life of Information* is one of them. The promises and prophecies of what the book calls the "infoenthusiasts" range from overoptimistic (technology can solve all social ills) to apocalyptic (this ends the world as we know it). Such "tunnel vision" results in an "infocentric" design approach, which ignores the broader social context in which information "lives."

Someone had to publish a strong reminder that even if technology is to transform the world, for better or for worse, the processes by which this transformation takes place are not merely, or even primarily, technological. From this perspective, the concerns of a good designer go beyond a focus on information: "The ends of information, after all, are human ends. The logic of information must ultimately be the logic of humanity" (page 18).

I can think of few people better qualified to drive this point home than John Seely Brown and Paul Duguid. They understand the subtleties and breadth of the issues, and just as importantly, they are not anti-technologists themselves. This is key. Their own interest in the technology, which comes through as you read, gives credibility to their call for a broader perspective. They are not afraid of the technology and are not putting it down or minimizing its importance. They appreciate the profound transformations that technology in general and information technology in particular can bring about, and their appreciation for this potential allows them to be skeptical without appearing nostalgic or pessimistic.

Central to the whole argument is the concept of social practice as a source of meaningful engagement in the world and the fact that social practices belong to specific communities. By practice here, they do not mean repetitious exercise as in "piano practice" but socially defined ways of approaching a set of problems as in "medical practice." This focus on practices and communities allows the authors to make a series of insightful comments about how information operates in social context.

Organizations cannot be understood merely as mechanistic systems based on information processing. The authors contrast social practices, which people create to get a job done, with processes, which organizations can prescribe. A successful design from this perspective is a dance between practice and process.

Documents are not merely containers for information, but must be considered in terms of the communities where they help shape social practices. The value of many documents, the authors argue, lies not merely in the information they contain, but in their ability to be a vehicle for the formation of communities, as the newspapers were in the formation of nations.

That practices are the properties of specific communities also helps explain why knowledge can be so difficult to share across a given organization and yet so difficult to keep within that same organization. Knowledge is "sticky" because it does not easily move from one practice to another, even within an organization. Yet knowledge is also "leaky" because practices expand across organizational boundaries and thus provide "rails" by which knowledge can easily move around. When researchers at Xerox PARC had invented the modern PC, they could not convince their own management of the importance of their invention. And, yet, fellow practitioners from Apple needed only one visit to realize that they had seen the future and needed to build their next computer with these features. The Mac was born out of "sticky" knowledge that had become "leaky." These social characteristics of knowledge provide an insightful framework for analyzing the functioning and staying power of industrial clusters like Silicon Valley.

The main idea of the book is simple: Information has a social life, which designers and commentators ignore at their (and our) peril. If you already agree, you may feel that you get the point after the first chapter. You may even feel that at times, the book falls prey to its own focus on information, calling for designers to pay attention to the "social periphery" and viewing the social world as "context" rather than as the central phenomenon. As a result, you may find the conclusion overly limited to an exhortation that designers include the social perspective in their efforts, rather than pointing to a broader analysis of the potential of an information-rich society. But these are unfair expectations because they assume that the argument of the book has been made. As I said when I started, this book had to be written. It had to show the limitations of an "infocentric" perspective. It had, therefore, to start with that perspective and open it up.

And this it does well. It is fun to read. It sparkles with anecdotes and historical references, which bring the argument to life. It also covers a vast territory, as the authors set out to debunk one myth after another. The topics range from software agents, to the home office, to the circulation of knowledge in industrial clusters, to the role of the university. Because of that, the book sometimes feels more like a series of essays than a single text. Yet as the authors weave their theme through these different topics, they progressively build a multidimensional case for a social perspective on information. Whether you need to be convinced or are already convinced, you will find gems and insights in every chapter.

Transforming Social Inquiry, Transforming Social Action: New Paradigms for Crossing the Theory/Practice Divide in Universities and Communities, Francine T. Sherman and William R. Torbert, eds., Kluwer Academic Publishers, 2000

Review by Richard Karash

Torbert and Sherman provide a framework that positions the varying paradigms for social science research and illustrate them through cases. In everyday terms, they offer a framework for the sources and methods of knowing.[1] Most directly,

the book is about how universities and academicians connect to the real world, joining theory building more immediately with practice.

The territory is *action inquiry,* which Torbert describes as seeking "not just knowledge of what is generally true in the world outside ourselves, but also what is uniquely true at the present time about ourselves-in-action-with-others." This territory comes under the terms *action science, action research,* and, in this book, *research/practice* (the different terms may reflect variations in emphasis). To me, what distinguishes this field from *science* in general is: (1) the researcher is involved in, not apart from, the system being studied; (2) the research considers real actions, taken to achieve real results, not artificial experimental treatments; (3) the research aims to influence the further course of events, not just to satisfy a future academic reader; and (4) the time frame for inquiry is immediate, not separated in time from the action.

For me, the book's value is in what it says about the practice of action inquiry, and the most interesting parts are a framing chapter (chapter 5) and a later essay on "The Call to Bridge Knowledge and Action" (chapter 13), both by Torbert.

In chapter 5, Torbert distinguishes seven social science paradigms, each with distinctive aims and points of view. For example, the dominant paradigm for scholarly research has the distinctive aim of predictive certainty (valid, certainly) and usually emphasizes "randomized sample, experimental, hypothesis testing studies." This paradigm often separates the research from actual actions (for "cleanliness") and stresses the value of an objective observer who does not influence the system under study. I recognize in Torbert's description the layperson's understanding of the "scientific method." Its limitations are obvious.

Torbert then explains four richer paradigms for action inquiry that aim to produce theory through investigation of actual experience in ways that rise above these limitations. The richer paradigms assume that the researcher influences the system and is affected by it, recognize the necessity of acting in the moment, involve the people being studied, and aim for learning from real-world actions (rather than from artificial experiments separated from the pressures of the moment). The richest of the paradigms is "Developmental Action Inquiry." Torbert articulates ways of creating knowledge that are academically valid and also available to the people in the midst of the action.

Further, he describes first-, second-, and third-person action inquiry. The conventional scientific method is third person in the sense that researchers consider *them* (some group under study). First-person action inquiry occurs when *I* consider *my own* actions, thinking, and results. Second-person, in Torbert's language, is when *we* (members of a group) consider together *our* actions, thinking, and results. He encourages us to add first- and second-person elements to the usual third-person research practices.

Torbert's frame clarifies distinctions that will support a more effective dialogue about obtaining knowledge from action, experience, data, objectivity, and theory building. Why would such a dialogue be important? Managers with whom I work are confused about the ways of obtaining knowledge. For example, it would not be remarkable to hear someone demand, "Show me the data that prove you are right!" Such a request comes from a naïve mental model of the scientific method and, of course, can never be satisfied. That same person, in a different setting, might distrust a data-intensive approach and place greater weight on creativity, instinct, and other sources of knowing. I think we are, as a society, poorly informed about the paradigms for knowing. I see misunderstandings, inconsistencies, and non-robust approaches all the time.

What if leaders and managers internalized Torbert's seven paradigms for knowing? What if they could spot *behaviorism* and know when it might be appropriate? What if they knew when detached observation, data, and hypothesis testing would be effective? And when to call for involved actor/observers, multiple perspectives, reflection into one's own framing, and all the richer tools Torbert describes?

This, in my view, would be the kind of increase in capacity that we are seeking in SoL. The problem is that this is the stuff of philosophy, and I've always found philosophy to be very tough reading! Torbert's chapters require difficult language to address these challenging concepts; the book is not a light or quick read, but the examples and illustrations are very helpful, as are the cases.

The main part of the book, 12 case studies by academicians connected to Boston College, documents admirable efforts to do effective action inquiry in real-world settings, including: a "Leadership for Change" executive program, community organizing, university education, community schools, professional communities of practice, teacher education, training psychologists for new professional roles, juvenile justice, and developing ethical guidelines for social science research. Because the cases' primary focus is action inquiry and because the researchers show themselves as human, with aspirations, successes, frustrations, and sincere reflection, the cases are engaging.

If knowledge is the capacity for effective action, then knowledge stands on two legs: theory and practice. In this book, Torbert contributes to the theory side by framing the paradigms for social science research, and the cases provide good examples of the practice of action inquiry. I recommend this book for anyone serious about understanding the varying paradigms for knowing in social science research.

Note

1. William Torbert is professor of management at Boston College's Carroll School of Management, a founding research member of SoL, and a stimulating friend. Francine Sherman is a faculty member at BC's Law School. Because of my own interests and the SoL audience (and with apologies to Sherman), I emphasize here Torbert's contributions. For more by Bill Torbert, see http://www2.bc.edu/~torbert.