

*Work at the MIT Center for Organizational Learning shows  
that developing new organizational capabilities requires  
deep reflection and testing.*

## ***Communities of Commitment:*** **The Heart of Learning Organizations**

**FRED KOFMAN**

**PETER M. SENGE**

**W**hy do we confront learning opportunities with fear rather than wonder? Why do we derive our self-esteem from knowing as opposed to learning? Why do we criticize before we even understand? Why do we create controlling bureaucracies when we attempt to form visionary enterprises? And why do we persist in fragmentation and piecemeal analysis as the world becomes more and more interconnected?

Such questions have been the heart of our work for many years. They led to the theories and methods presented in *The Fifth Discipline*. They are the driving force behind a new vision of organizations, capable of thriving in a world of interdependence and change—what we have come to call “learning organizations.”

*The Fifth Discipline* generated significant interest, but a book is only one step toward bringing a new set of ideas and practices into the mainstream of management. Shortly after the book appeared, a group of us at MIT established the Center for Organizational Learning. The center now involves many organizations—including Ford, Harley Davidson, Electronic Data Systems, Federal Express, AT&T, Philips North America, Herman Miller, Armco Steel, and Intel—seeking major

breakthroughs via partnership between researchers and practitioners.

Two years of intense practice and reflection have gone by. Some pilot projects are beginning to produce striking results. But we also have learned that it is crucial to address the opening questions. We have not found any definitive answers—nor were we looking for them—but, dwelling *in* the questions, we have found guiding principles for action.

Building learning organizations, we are discovering, requires basic shifts in how we think and interact. The changes go beyond individual corporate cultures, or even the culture of Western management; they penetrate to the bedrock assumptions and habits of our culture as a whole. We are also discovering that moving forward is an exercise in personal commitment and community building. As Dr. W. Edwards Deming says, nothing happens without “personal transformation.” And the only safe space to allow for this transformation is a learning community.

So, we are coming to see our efforts as building “communities of commitment.” Without commitment, the hard work required will never be done. People will just keep asking for “examples of learning organizations” rather than seeking what they can do



**Fred Kofman** is an assistant professor of accounting and management at MIT's Sloan School of Management and an associate researcher at both the Center for Organizational Learning and the Leaders for Manufacturing Program. He teaches in such areas as accounting for manufacturing, management accounting and control, and systems thinking for organizational learning.

Dr. Kofman came to systems thinking and organizational learning through an atypical path. This started with a *Licenciatura en Economia* from the University of Buenos Aires and continued with a Ph.D. in economics at the University of California, Berkeley. After concentrating in the design of social mechanisms for several years, he found the abstract approach of game and contract theory unsatisfactory. The search for a more practical framework took him to Berkeley's philosophy department, where he studied cognitive science, philosophy of language, and philosophy of mind.

He has led research projects in such areas as activity based costing, cycle time reduction, and supply chain management at General Motors, Chrysler, Boeing, Electronic Data Systems, Digital Equipment, and other companies.

He received the Sloan Teacher of the Year Award and Outstanding Professor-Graduate Course Award in 1992.

to build such organizations. They will keep believing that the purpose of learning is the survival of an organization rather than its generativeness. And the larger meaning of this work will elude them. Without communities of people genuinely committed, there is no real chance of going forward.

### BUT COMMITMENT TO WHAT?

In this paper we will explore basic shifts in the guiding ideas of contemporary management. We argue that the main dysfunctions in our institutions—fragmentation, competition, and reactivity—are actually byproducts of our success over thousands of years in conquering the physical world and in developing our scientific, industrial culture. So, it should come as no surprise that these dysfunctions are deeply rooted. Nor should it surprise us that our first response, "to overcome these problems" is part of the very mindset that generated them. Fragmentation, competition, and reactivity are not problems to be solved—they are frozen patterns of thought to be dissolved.

The solvent we propose is a new way of thinking, feeling, and being: a culture of systems. Fragmentary thinking becomes systemic when we recover "the memory of the whole," the awareness that wholes actually precede parts. Competition becomes cooperation when we discover the "community nature of the self" and realize our role as challengers to help each other excel. Reactiveness becomes creating when we see the "generative power of language," how language brings forth distinctions from the undivided flow of life.

Together these changes represent a new "Galilean Shift." Galileo's heliocentric revolution moved us from looking at the earth as the center around which all else revolved to seeing our place in a broader pattern. In the new systems worldview, we move from the primacy of pieces to the primacy of the whole, from absolute truths to coherent interpretations, from self to community, from problem solving to creating.

Thus the nature of the commitment re-

quired to build learning organizations goes beyond people's typical "commitment to their organizations." It encompasses commitment to changes needed in the larger world and to seeing our organizations as vehicles for bringing about such changes.

This is a theoretical paper for practitioners. Contradictory as it may sound, there is nothing more practical than a good theory. The problem with "seven step methods to success," "keys to successful organizations," and similar "how-tos" is that, ultimately, they aren't very practical. Life is too complex and effective action too contextual. Real learning—the development of new capabilities—occurs over time, in a continuous cycle of theoretical action and practical conceptualization. The impatient quest for improvements all too often results in superficial changes that leave deeper problems untouched. Herein lies a core leadership paradox: Action is critical, but the action we need can spring only from a reflective territory that includes not only cognition but body, emotions, and spirit as well.

## AREAS OF CULTURAL DYSFUNCTION

Organizations are microcosms of the larger society. Thus, at the heart of any serious effort to alter how organizations operate lies a concern with addressing the basic dysfunctions of our larger culture. We believe that there are three fundamental problems with our current paradigm: fragmentation, competition, and reactivity.

### Fragmentation

We continually fragment problems into pieces; yet the major challenges we face in our organizations and beyond are increasingly systemic.

The analytic way to address a complex situation is to break it into components, study each component in isolation, and then synthesize the components back into a whole. For a wide range of issues, there is little loss in assuming a mechanical structure and ignoring



**Peter M. Senge** is a faculty member of the Massachusetts Institute of Technology and director of the Center for Organizational Learning at MIT's Sloan School of Management. He is the author of the widely acclaimed book, *The Fifth Discipline: The Art and Practice of the Learning Organization*, published by Doubleday. He is also a founding partner of the management consulting and training firm, Innovation Associates.

Dr. Senge has lectured extensively throughout the world, translating the abstract ideas of systems theory into tools for better understanding of economic and organizational change. His areas of special interest focus on decentralizing the role of leadership in an organization to enhance the capacity of all people to work productively toward common goals. Dr. Senge's work articulates a cornerstone position of human values in the workplace; namely, that vision, purpose, alignment, and systems thinking are essential if organizations are to realize their potentials. He has worked with leaders in business, education, healthcare, and government.

Dr. Senge received a B.S. in engineering from Stanford University, an M.S. in social systems modeling and a Ph.D. in management from MIT. He lives with his wife and two children in central Massachusetts.

systemic interactions. But for our most important problems, linear thinking is ineffective. Problems like runaway costs in our health care system or the decline of a corporation's vitality and innovativeness resist piecemeal, analytic approaches. We live in a world that is more like Humpty Dumpty than a jigsaw puzzle: All the king's horses and all the king's men can't put the system together again.

Our enchantment with fragmentation starts in early childhood. Since our first school days, we learn to break the world apart and disconnect ourselves from it. We memorize isolated facts, read static accounts of history, study abstract theories, and acquire ideas unrelated to our life experience and personal aspirations. Economics is separate from psychology, which is separate from biology, which has little connection with art. We eventually become convinced that knowledge is accumulated bits of information and that learning has little to do with our capacity for effective action, our sense of self, and how we exist in our world.

Today, fragmentation is the cornerstone of what it means to be a professional, so much so that we call ourselves "specialists." Accountants worry about the books, operations managers worry about production and inventory, marketing managers worry about customer base, and nobody worries about the business as a whole.

The word *health* has the same roots as "whole" (the old English *hal*, as in "hale and hearty"). Like people, organizations can get sick and die. They also need to be cured and healed. Yet, like physicians who focus only on their specialty, most consultants operate from the analytic tradition. They fragment complex situations into symptoms, treat the symptoms, and rarely inquire into the deeper causes of problems: how we learn and act together with a sense of shared aspiration. Consequently, management experts have very little ability to influence organizational health. All too often, their solutions contribute to a vicious pattern of "programs of the month" that fail and get replaced by the next program of the month.

In business, fragmentation results in

"walls" or "chimneys" that separate different functions into independent and often warring fiefdoms. Product designers, for instance, disregard marketing surveys and "throw the product over the wall" to manufacturing, which finds the design impossible to produce. After making the "appropriate" changes (appropriate in their minds, since they never bother to check back with design) and producing the product, manufacturing "throws it over" to sales. Salesmen find themselves stuck with a low-quality product that does not meet customer requirements. The product gets sent back and departments start blaming each other. This process constantly repeats itself.

In public affairs, fragmentation is making our society increasingly ungovernable. We know the problem as the dominance of "special interest groups" and political lobbies.

Pointing fingers at each other is now a favorite national sport, but recently a new variant has appeared: pointing fingers at the walls. Academics, consultants, and managers unite in blaming the barbed-wire fences separating organizational functions for poor-quality, high-cost products. In response, many companies are trying to "reengineer" themselves away from stovepipe structures and toward horizontal business processes that cut across traditional functions and power hierarchies. While potentially significant, such changes often prove difficult to implement and those that are implemented only "reap the low-hanging fruit."

The reason is that the walls that exist in the physical world are reflections of our mental walls. The separation between the different functions is not just geographic, it lives in the way we think. Redesigns that "throw down the walls" between different functions may have little enduring effect unless they also change the fragmentary mental models that created the walls in the first place.

### Competition

We have become overdependent on competition, to the extent that it is our only model for change and learning.

There is nothing intrinsically wrong with

competition. It can be great fun. It can promote invention and daring. The problem is that we have lost the balance between competition and cooperation precisely at a time when we most need to work together.

In the United States, we tend to see competition among individuals as the ultimate mechanism for change and improvement in human affairs. We continually think in terms of war and sports analogies when we interpret management challenges. We need to "beat the competition," "overcome resistance to our new program," "squeeze concessions from the labor union," or "take over this new market." We have a metaphorical tunnel vision. We rarely think about how the process of developing leaders may be more like parenting than competing, or about how developing a new culture may be more like gardening than a military campaign.

Fascinated with competition, we often find ourselves competing with the very people with whom we need to collaborate. Members of a management team compete with one another to show who is right, who knows more, or who is more articulate or persuasive. Divisions compete with one another when they ought to cooperate to share knowledge. Team project leaders compete to show who is the best manager, even if it means covering up problems for which, ultimately, everyone will pay. Recently, Dr. Deming told a story of a man who discovered he was continually competing with his wife. The man was dumbfounded at the discovery. "Who would want to be married to a loser?" he asked.

Our overemphasis on competition makes *looking good* more important than *being good*. The resulting fear of not looking good is one of the greatest enemies of learning. To learn, we need to acknowledge that there is something we don't know and to perform activities that we're not good at. But in most corporations, ignorance is a sign of weakness; temporary incompetence is a character flaw.

How impossible it would be for a child to learn to walk if she were afraid of falling and looking foolish. Yet, that is exactly what happened in schools that made us feel foolish when we made mistakes, and continues in or-

ganizations that rank our performance on the basis of management-by-objectives.

In response, many of us have developed defenses that have become second nature—like working out our problems in isolation, always displaying our best face in public, and never saying "I don't know." The price we pay is enormous. In fact, we become masters of what Chris Argyris calls "skilled incompetence," skillful at protecting ourselves from the threat and pain that come with learning, but also remaining incompetent and blinded to our incompetence.

Overemphasis on competition also reinforces our fixation on short-term measurable results. Consequently, we lack the discipline needed for steady practice and deeper learning, which often produces few manifest consequences for long periods of time.

The quick-fix mentality also makes us "system blind." Many of today's problems come from yesterday's solutions, and many of today's solutions will be tomorrow's problems. What is most perplexing is that many quick fixes, from cost cutting to marketing promotions, are implemented even though no one believes they address underlying problems. But we still feel compelled to implement these "solutions." We need to show results, and fast, regardless of the long-term, system-wide consequences.

### Reactiveness

We have grown accustomed to changing only in reaction to outside forces, yet the well-spring of real learning is aspiration, imagination, and experimentation.

As children, we accomplish some of our most astounding learning without any external motivation. We learn to walk, we learn to talk, we learn to be human not because we have to but because we want to. Eventually, however, we become conditioned to reacting to others' directions, to depending on others' approval. There is nothing intrinsically wrong with external authority; it would be inefficient to learn about the dangers of fingers-in-plugs experientially. The problem is that our current institutions exercise authority in a way

that undermines our intrinsic drive to learn.

For most of us, reactivity was reinforced on a daily basis in school. We solved problems identified by others, read what was assigned, wrote what was required. Gradually, reactivity became a way of life. Fitting in, being accepted, became more important than being ourselves. We learned that the way to succeed was to focus on the teachers' questions as opposed to our own.

Reactivity is a double bane of continuous learning. First, the attitude, "if it ain't broke don't fix it," prevents the steady improvement of products and processes. Moreover, when something is broken, the immediate reaction is to call an expert—a specialist—to fix it. Regardless of the specialist's success, his intervention will create a black-box mentality that prevents the organization from developing its own capacities for continual learning.

The pervasiveness of a reactive stance in management is evident in the fixation on problem solving. Many managers think that management is problem solving. But problem solving is fundamentally different from creating. The problem solver tries to make something go away. A creator tries to bring something new into being. The impetus for change in problem solving lies outside ourselves—in some undesired external condition we seek to eliminate. The impetus for change in the creating mode comes from within. Only the creating mode leads to a genuine sense of individual and collective power, because only in the creating mode do people orient themselves to their intrinsic desires. It is a testament to how reactive we are that many leaders see the absence of vision as a "problem" to be solved in their company and set about writing and disseminating vision and mission statements as the solution.

It is a small step from the problem-solving orientation to a system of management that is dominated by fear, the ultimate external motivator. This is evident today in the simple fact that most leaders believe that people are willing to change only in times of crisis. This leads to the most pervasive leadership strategy in America—create a crisis, or at least a percep-

tion of crisis. Crises can produce episodes of change. But they produce little learning.

Moreover, management by fear and crisis becomes a self-fulfilling prophecy. Because it *does* produce short-term results, managers see their crisis orientation as vindicated, people in the organization grow accustomed to "waiting for the next crisis," managers' belief in the apathy of the troops is reinforced, and they become more predisposed to generate the next crisis.

## ROOTS OF OUR CULTURAL CRISIS

These problems are deeply rooted. They are not just mistakes we keep repeating—they spring directly from our past successes. The triumph of reductionism and mechanical thinking has given rise to a set of conditions for which they are no longer suited.

Humankind has achieved unimaginable successes in controlling its physical and social environment. We have come a long way since the days in which our ancestors had to defend themselves from other animals, work continually to secure food, and survive in extreme weather conditions. We have learned to create safe dwellings, increase our food supply, harness powerful sources of energy, and provide a level of material well-being beyond that previously available only to monarchs. In doing so, we have continually adapted and changed our environment to our benefit, to the point that today we appear on the verge of modifying the very genetic code that programs our species' development.

But this progress has not been without consequence. The very same skills of separation, analysis, and control that gave us the power to shape our environment are producing ecological and social crises in our outer world, and psychological and spiritual crises in our inner world. Both these crises grow out of our success in separating ourselves from the larger fabric of life. When we begin to understand the origins of our problems, we begin to see that the "existential crisis" of early 20th century philosophy and the "environ-

mental crisis" of late 20th century ecology are inseparable—caused by the co-evolution of fragmentary world views, social structures, lifestyles, and technology.

There are two aspects to the story: one evolutionary and one cultural. The first concerns deep patterns of behavior established in the human organism over millions of years. The second concerns deep cultural beliefs that probably started with the agricultural revolution.

Throughout our history as a species, the primary threats to our survival came as sudden dramatic events: saber-tooth tigers, floods, earthquakes, attacks by rival tribes. Today, the primary threats to our survival are slow, gradual processes—environmental destruction, the global arms race (which continues unabated by the breakup of the Soviet Union), and decay of our nation's educational system and its family and community structure.

We are poorly prepared for a world of slowly developing threats. We have a nervous system focused on external dramatic events. A loud noise or a sharp change in our visual field brings us immediately to alert. Our adrenaline system heightens our awareness and strength. In extreme cases, our nervous system produces a state of shock that filters signals of physical pain, allowing continued reasoning and decision making. The irony is that all of these capabilities become potentially counterproductive in a world of slow, gradually emerging systemic crises. All our instincts are to wait until the gradual changes develop into crises—when it is often too late to take effective action.

Moreover, past threats were external; their causes were outside our control. Today's primary threats are all endogenous, the byproducts of our own actions. There is no enemy out there to blame. As Pogo says, "We have met the enemy and they is us." Nor will blaming ourselves individually help. The causes lie in collective behaviors and unintended side effects of actions that make individual sense. There is no blame, there is no guilt, just a need to think differently.

This conflict between the nature of our most important problems and our instinctive

ways of thinking and acting is no less catastrophic in organizations. Most of the primary threats to survival and vitality in organizations develop slowly, and they are not caused externally. The problems of General Motors and IBM, for instance, did not arise overnight. Arrogance, insulation, and rigidification developed over decades of success. At IBM, even as the symptoms of decline became more and more apparent, the sustained profitability of the core mainframe products allowed managers and investors to ignore growing signals of trouble. Only when an overwhelming crisis (record losses) occurred was there sufficient alarm to take bold action.

Thus our evolutionary programming predisposes us to seeing external threats and to reactivity. Layered onto it is a culture of fragmentation and competition, and together they hold us captive. But the capacity can be loosened if we begin to understand that our cultural history is but one historical path, a path that could have drifted toward a different present. The first step in exposing this illusory "naturalness" of our present way of thinking is to reflect on its genealogy. As David Bohm, a preeminent quantum physicist put it: "Starting with the agricultural revolution, and continuing through the industrial revolution, increasing fragmentation in the social order has produced a progressive fragmentation in our thought."

There is growing evidence that many pre-agricultural societies were not dominated by fragmentation and competition. The evidence is controversial because it contradicts the established orthodoxy to view ancient societies as having always been like us, but "less civilized."

Thomas Merton wrote of the magnificent Monte Alban culture that flourished in southwestern Mexico from about 500 BC to about 500 AD with "no evidence of militarism or war. . . . Self-realization in such a context implied not so much ego-consciousness of the isolated subject in the face of a multitude of objects as the awareness of a network of relationships in which one had a place to mesh. One's identity was the intersection of cords where one 'belonged.'"

Joseph Campbell spoke of the ancient Indo-European myth of the Goddess who "teaches compassion for all living beings. There also you come to appreciate the real sanctity of the earth itself, because it is the body of the Goddess." Recent advances in archeological research are suggesting that the myth of the Goddess may have predominated throughout central Europe in the late Paleolithic and early Neolithic cultures. These cultures may have been neither warlike nor male dominated, as long assumed. Riane Eisler claims that the period from approximately 5000 BC to 1500 BC was a "remarkably peaceful time," with little evidence of fortifications or implements of warfare. Men and women shared power, and there was an overarching "quality of mind" based on "recognition of their oneness with nature." Such "partnership" cultures were eventually transcended by "dominator" cultures, according to Eisler—the cultures of the "thunderbolt hurlers, like Zeus or Yahweh," according to Campbell. Many now believe that the last broad flowering of partnership cultures in Europe occurred in the Minoan civilization on Crete.

The classic Greek culture and the emerging Christian era mark crucial crossroads that lead directly to the contemporary Western scientific and religious world views.

In ancient Greece, the world was a "cosmos," not an inert environment ruled by the abstract laws of physics. The earth was the space where gods and mortals shared their passion, wisdom, and folly. The Greeks walked with the gods. But classical Greek thought also established the foundation for the "scientific" view—the view that later set man as an observer apart from the world. Two-thousand years later, building on Aristotle's classical category theory, Descartes propounded a rigorous split between subject and object, observer and observed, human and nature.

If classic Greece laid the foundation for justifying the split of man and nature, the Catholic Church institutionalized the split between man and God. According to Elaine Pagels, professor of religion at Princeton, the split lay at the very heart of the foundation of

the church—in fact, it was *the* strategy used to differentiate the sect that eventually became the church from other early Christian sects that had very different interpretations of Jesus' teachings. "What we call Christianity (today) actually represents only a small selection of specific sources, chosen from among dozens," according to Pagels.

In particular, recently discovered "Gnostic gospels," banned as heresy by the early church, are based on belief in the human capacity for direct knowing or *gnosis*. "To know oneself," says Pagels, "at the deepest level, is simultaneously to know God; this is the secret of *gnosis*." "Abandon the search for God," wrote the Gnostic teacher Monoimus. "Look for him by taking yourself as the starting point. If you carefully investigate these matters, you will find him in *yourself*." By contrast, by the second century, the architects of the early church had established a very different view, the church as intermediary between man and God. According to Pagels, "God became accessible to humanity [only] through the church."

Thus were sown the seeds of the fragmentation evident today. Their fruit has grown steadily. "The belief that man was separate from nature," writes Krishnamurti, "evolved into the idea that nature was a resource for man's benefit. Nature became a "resource," a "standing in reserve." We became the masters of the world with a license to exploit it. We stopped living as part of nature and began living with disposable things that were just waiting to be used. "Because we do not love the earth and the things of the earth but merely utilize them," said Krishnamurti, "we have lost touch with life."

## A GALILEAN SHIFT

The analytic model assigns a primary status to the parts and assumes that they exist independent from a whole. This view generates deep inconsistencies that lie behind many of our most pressing social and organizational problems. Its flaws are not surface but structural: David Bohm argues that the quest "to



put the pieces together" is fundamentally futile when operating from a belief in the primacy of parts, "like trying to assemble the fragments of a shattered mirror." Worse yet, the analytic model doesn't accept its contingent status. It adopts the face of necessity and claims universal validity. As Bohm says, "Thought creates the world and then says, 'I didn't do it.'"

Our work at the center began by putting separation and fragmentation into their historical context. This prepared us for the next step: exposing the limits of analysis and developing an alternative paradigm—one that can help to recover the memory of the whole.

As we move forward, we can use three fundamental theses to shift our understanding of ourselves and the world in which we live. Just as Galileo proposed that the earth was not the center of the universe, we are proposing here that parts, ego, and reality are not the center of a more meaningful way of life. Each reflects the fragmented world view we have come to accept. Each needs to be re-examined.

### 1. The Primacy of the Whole

The analytic perspective involves a three-part process: (1) break the system into its component parts, (2) study each part in isolation, and (3) assemble an understanding of the whole from an understanding of the parts. The implicit assumption is that systems are aggregates of parts that interact relatively weakly and in a linear fashion. In this notion of systems, one can restrict attention to the parts and trust that optimizing each one amounts to optimizing the whole.

Decomposition is a time honored way of dealing with complex problems, but it has big limitations in a world of tight couplings and nonlinear feedbacks. The defining characteristic of a system is that it *cannot* be understood as a function of its isolated components. First, the behavior of the system doesn't depend on what each part is doing but on how each part is interacting with the rest. A car's engine may be working just fine, but if the transmission column is detached from it, the car won't move.

Second, to understand a system we need to understand how it fits into the larger system of which it is a part. To use an example of Russell Ackoff's, we will never understand why standard cars have seats for four or five if we look at the physical properties of its elements. Human beings create teleological systems, systems with purpose. To understand the car design, we need to see how it fits into a society of families who travel together.

Third, and most important, what we call the parts need not be taken as primary. In fact, how we define the parts is fundamentally a matter of perspective and purpose, not intrinsic in the nature of the "real thing" we are looking at.

For example, consider an airplane. We might say that it is made of the fuselage, the wings, the tail, and a cockpit. But we might also say it is made of metal parts and plastic parts. We might also say it is made of a right half and a left half, and so on. What makes an airplane cannot be found in the parts—after all, a submarine also has a fuselage and a tail—but in how the parts emerge as distinctions from a coherent whole.

Rather than being objective, what we call the parts is highly subjective. No set of categories is natural or inherent to a system. There is no intrinsic right or wrong. It is a matter of purpose and awareness of choices, and of remembering the genealogy of categories invoked—the distinctions that we now see "out there" arose within a certain tradition and are contingent on it.

Rather than thinking of a world of "parts" that form "wholes," we start by recognizing that we live in a world of wholes within wholes. Rather than trying to "put the pieces together" to make the whole, we recognize that the world is already whole.

At the same time, the systems view recognizes that distinctions enable the observer to draw forth operational worlds. The whole may be more fundamental, but it is unmanageable. For example, the division of labor enabled societies to achieve levels of material well-being that would have otherwise been impossible. Henry Ford would have never been able to build as many cars as fast and as economically

as he did had he not divided operations according to Frederick Taylor's principles.

But, once the workers become "workers" and the supervisors became "supervisors," rigidity sets in. To reestablish fluidity, the capacity for learning and change, we must remember the contingent nature of the distinctions within which we are trapped. We must once again confront the whole. Reflecting on what this means with one another, Martin Buber said:

Even as a melody is not composed of tones, nor a verse of words, nor a statue of lines—one must pull and tear to turn a unity into a multiplicity—so it is with the human being to whom I say Thou. I can abstract from him the color of his hair or the sound of his speech or the style of his graciousness; I can do this again and again; but immediately he is no longer my Thou.

## 2. The Community Nature of the Self

Newtonian physicists were startled to discover that at the core of the atom, at the center of matter there is ... nothing, no thing, pure energy. When they reached into the most fundamental building block of nature, they found a pregnant void—stable patterns of probability striving to connect with other patterns of probability. This discovery revolutionized the physical sciences, initiating the quantum era.

By the same token, we are startled to discover that at the core of the person, at the center of selfhood there is ... nothing, pure energy. When we reach into the most fundamental basis of our being we find a pregnant void, a web of relationships. When somebody asks us to talk about ourselves, we talk about family, work, academic background, sports affiliations, etc. In all this talk, where is our "self"? The answer is nowhere, because the self is not a thing, but, as Jarome Brunner says, "a point of view that unifies the flow of experience into a coherent narrative"—a narrative striving to connect with other narratives and become richer.

We normally think that the individual has a primordial origin and that selfhood is given to each one independent of the cultural or group practices in which that person happens to grow up. But, as Clifford Geertz says, "There is no such thing as human nature independent of culture."

When we forget about the social milieu in which we exist as people, we attain a spurious security and stability. We identify our egos with our selves. We take the contingent features of our current character and reify them into a substantive personality. Thus, we assign a primordial value to our ego (part) and see the community (whole) as secondary. We see the community as nothing but a network of contractual commitments in symbolic and economic exchanges. We think that encounters with others are transactions that can add or subtract to the array of possessions of the ego.

But the constitution of the self happens only in a community. The community supports certain ways of being and constrains the expressions of individuality to certain patterns of behavior—whatever we regard as acting "crazy" or inappropriate expresses our community of origin and upbringing much more than our intrinsic predispositions.

As with all deep cultural assumptions, the assumed primacy of the ego-self hides its contingent status, until we discover a different culture. For example, in many indigenous cultures of southern Africa the common greeting is "I see you." What it means to be a person in such a culture is to be in relationship. When we confront such a culture, where speaking a person's name acknowledges that person's existence, it seems "crazy" to us. After all, for us, the "self" is myself, isolated from other selves.

But a systems view of life suggests that the self is never "given" and is always in the process of transformation. Whenever we do not take the other as an object for use, whenever we see the other as a legitimate fellow human being with which we can learn and change—a "Thou"—we engage in a passionate interaction that can open new possibilities for our being.

### 3. Language as Generative Practice

In our everyday sense of the world, we see reality as "out there" and ourselves as observers "in here." Our Western tradition compels us to "figure out" how nature works so that we can achieve what we want. But what if what shows up for us as "reality" is inseparable from our language and actions? What if we are part of not apart from the world? What if our crisis is, at least in part, a crisis of perception and meaning, springing from a "naive realist" perspective of the observer as one who describes an external reality? What if observation itself is the beginning of the fragmentation?

The puzzle of the "ultimate ground" for knowing has confronted philosophers for a long time. There is a story of the humble novice who asks the great sage what it is that keeps the world from falling through space. The sage responds that the earth stays aloft because it rests on a great turtle. But, the student asks, "What is it that holds the turtle up?" "Why," responds the teacher, "it is because the turtle rests upon another great turtle." "But," cries out the student, "that turtle too must be supported." "Yes, indeed," responds the master, "it is turtles all the way down."

The alternative to naive "realism" is not solipsism, a view that there is "nothing out there," and therefore nothing to be learned, nothing to be valued. The alternative, we propose, is recognizing the generative role of the traditions of observation and meaning shared by a community. We invent structures and distinctions to organize the otherwise unmanageable flow of life. That organization allows us to operate effectively, but it can become a tranquilizing barrier to exploration and creativity. The more efficient a model of the world turns out to be, the more it recedes into the background and becomes transparent. The more successful the model's strategies, the more the map of reality becomes "reality" itself. The danger of success is that the thinking behind it can become entrenched and disregard the necessary context of its effectiveness. When a model loses its "situation" and generalizes its validity to universal categories, it

sooner or later stalls our capacity to deal freshly with the world and each other.

The map is not the territory, but we can only guide ourselves with maps. As cartographers, however, we are far from neutral. Our perceptual apparatus, with its biological, personal, and cultural filters, is actively involved in the construction of these maps. So, where is the territory underlying the maps?

As philosopher Hubert Dreyfus says, "It is interpretation all the way down." The issue is deeper than recognizing that the map is not the territory. We have to face the possibility that we have no access beyond our culture to such a thing as a territory. We only have provisional maps permanently open to revision and recreation.

This may sound nihilistic. If there is no ultimate ground for values, why choose one system over another? Why is democracy better than totalitarianism? Why is anything better than anything else? Why even bother to care? The solution to the nihilistic dilemma comes from a self-reflective principle: Those contexts that display their precarious nature, those contexts that invite revision and recreation are inherently better than those which hide their precarious nature and fight revisionist attempts. The best constructs for explaining and organizing the world will imitate life itself. They will be in a continual state of becoming.

When we fail to recognize this principle, we lose the capacity to understand others. We become rigid. We lose the ability to learn. We lose the child within us who lives in awe and who understands what Einstein meant when he said that the most beautiful experience in the world is "the experience of the mysterious."

### OPERATING PRINCIPLES

As we endeavor to embody these theses in our work at the MIT Learning Center, several operating principles are emerging. These "principles" are neither rigid nor all encompassing. In effect, each grows out of a question, and in many ways the questions themselves may be

the keys to moving forward—questions such as, “What do we mean when we speak of a *learning organization*?”

### **There is No Such Thing as a “Learning Organization”**

Along with “total quality management” and “process reengineering,” “organizational learning” has become the latest buzzword. Just as there is no such thing as a “smart kid,” however, there is no such thing as a “learning organization.” “Learning organization” is a category that we create in language. Like every linguistic creation, this category is a double-edged sword that can be empowering or tranquilizing. The difference lies in whether we see language as a set of labels that describe a preexisting reality, or as a medium in which we can articulate new models for living together.

When we speak of a “learning organization,” we are not describing an external phenomenon or labeling an independent reality. We are articulating a view that involves us—the observers—as much as the observed in a common system. We are taking a stand for a vision, for creating a type of organization we would truly like to work within and which can thrive in a world of increasing interdependency and change.

It is not what the vision is, but what the vision does that matters. In the early 1970s, Alan Kay led the researchers at Xerox PARC who developed the first true precursors to the personal computer. In fact, Kay and his colleagues were pursuing a different vision—they wanted to create the “dynabook,” a fully interactive learning tool which would be as portable as a book. Unfortunately, they failed. The prototype they built was too large and was never produced in volume. It embodied, however, numerous component technologies, such as the “mouse” and an “iconic” interface that we all now know as the “Macintosh” interface—which eventually gave birth to the personal computer industry. That the Xerox researchers failed to produce the “dynabook” is now an obscure footnote in history, for the dynabook vision became, as Kay would say, “a forcing function for change.”

What, then, are the types of changes we are seeking to encourage through pursuing the “learning organization” vision?

### **The Learning Organization Embodies New Capabilities Beyond Traditional Organizations**

We believe a learning organization must be grounded in three foundations (1) a culture based on transcendent human values of love, wonder, humility, and compassion; (2) a set of practices for generative conversation and coordinated action; and (3) a capacity to see and work with the flow of life as a system.

In learning organizations, cultural norms defy our business tradition. Acceptance of the other as a legitimate being—a Thou—(our meaning of love), replaces the traditional will to homogeneity. The ever-surprising manifestations of the world show up as opportunities to grow, as opposed to a frustrating breakdowns for which somebody must take the blame (wonder). People understand that life is not condensable, that any model is an operational simplification always ready for improvement (humility). And when they encounter behaviors that they neither understand nor condone, people are able to appreciate that such actions arise from viewpoints and forces that are, in some sense, as valid as the viewpoints and forces that influence their own behaviors (compassion).

Learning organizations are spaces for generative conversations and concerted action. In them, language functions as a device for connection, invention, and coordination. People can talk from their hearts and connect with one another in the spirit of dialogue (from the Greek *dia* + *logos*—moving through). Their dialogue weaves a common ongoing fabric and connects them at a deep level of being. When people talk and listen to each other this way, they create a field of alignment that produces tremendous power to invent new realities in conversation, and to bring about these new realities in action.

In learning organizations, people are always inquiring into the systemic consequences of their actions, rather than just focusing on lo-

**EXHIBIT 1**  
SHIFTING THE BURDEN

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One of the reasons the myth of the great leader is so appealing is that it absolves us of responsibility for developing leadership capabilities more broadly. Viewed systemically, there is a "shifting the burden" structure: a perceived "need for leadership" (a problem symptom) can be met through developing leadership capacities throughout the group or organization (the "fundamental solution") or through relying on the hero leader (the symptomatic solution). Success in finding a hero leader reinforces a belief in the group's own powerlessness (the shifting the burden "side effect"), thus making the fundamental solution more difficult. The diagram is as follows:



cal consequences. They can understand the interdependencies underlying complex issues and act with perceptiveness and leverage. They are patient in seeking deeper understanding rather than striking out to "fix" problem symptoms—because they know that most fixes are temporary at best, and often result in more severe problems in the future.

As a result of these capabilities, learning organizations are both more generative and more adaptive than traditional organizations. Because of their commitment, openness, and ability to deal with complexity, people find security not in stability but in the dynamic equilibrium between holding on and letting go—holding on and letting go of beliefs, assumptions, and certainties. What they know takes a second place to what they can learn, and simplistic answers are always less important than penetrating questions.

Developing such organizational capabilities will obviously require vision, patience, and courage. What is the nature of the leadership that will be required to move forward?

**Learning Organizations Are Built  
by Communities of Servant Leaders**

Leadership takes on important new meanings in learning organizations. In essence, the leaders are those building the new organization and its capabilities. They are the ones "walking ahead," regardless of their management position or hierarchical authority. Such leadership is inevitably collective.

Our conventional notions of leadership are embedded in myths of heroes—great individuals severed from their community who make their way through individual will, determination, and cleverness. While there may be much to admire in such persons, we believe that our attachment to individualistic notions of leadership may actually block the emergence of the leadership of teams, and ultimately, organizations and societies that can lead themselves (see Exhibit 1). While we wait for the great leader who will save the day, we surrender the confidence and power needed to make progress toward learning organizations.

As the myth of the hero leader fades, a

new myth of teams and communities that can lead themselves is emerging. In 1983, successful grassroots community organizers from around the world gathered for a unique meeting in the United States. This group of "Gandhis of the world" produced a beautiful articulation of this new leadership myth:

Our times are increasingly characterized by the awakening of the human force all over the planet, expressing itself in popular movements, grassroots communities, and local organizations. This world force is a new kind of leadership capable of synthesizing the expressions of groups and organizing for action. Leadership from and of the group—and from the least among us—is the hope for change in our time.

The emergence of collective leadership does not mean that there are no "leadership positions" like CEO or general or president in learning organizations. Management hierarchies are often functional. But the clash of collective leadership and hierarchical leadership nonetheless poses a core dilemma for learning organizations. This dilemma cannot be reconciled given traditional notions of hierarchical leaders as the people "in control" or "in charge." For this, then, implies that those "below" are not in control. A hierarchical value system then arises that, as Analog Devices CEO Ray Stata puts it, "holds the person higher up the hierarchy as somehow a more important being."

Alternatively, the dilemma can become a source of energy and imagination through the idea of "servant leadership," people who lead because they chose to serve, both to serve one another and to serve a higher purpose.

Servant leadership offers a unique mix of idealism and pragmatism. At one level, the concept is an ideal, appealing to deeply held beliefs in the dignity and self-worth of all people and the democratic principle that a leader's power flows from those led. But it is also highly practical. It has been proven again and again in military campaigns that the only leader whom soldiers will reliably follow when their lives are on the line is the leader

who is both competent and who soldiers believe is committed to their well-being.

As such leadership communities begin to grow, how will learning begin to be integrated into work?

### **Learning Arises Through Performance and Practice**

It was common in native American cultures to set aside sacred spaces for learning. So too in our organizations today, learning is too important to leave to chance. It will not be adequate to offer training and hope that people will be able to apply new insights and methods. Nor will help from consultants be sufficient to bring about the fundamental shifts in thinking and interacting and the new capabilities needed to sustain those shifts. It will be necessary to redesign work if the types of ideas developed above are to find their way into the mainstream of management practice.

We believe that a guiding idea for redesigning work will be virtual learning spaces, or what have come to be known at the Learning Center as "managerial practice fields." The learning that occurs in sports teams and the performing arts is embedded in continuous movement between a practice field and a performance field. It is impossible to imagine a chamber music ensemble or a theater troop learning without rehearsal, just as it is impossible to imagine a championship basketball team that never practices. Yet, that is exactly what happens in most organizations. People only perform. They rarely get to practice, especially together.

Several design principles come together in creating effective managerial practice fields: (1) The learner learns what the learner wants to learn, so focus on key managerial issues. (2) The people who need to learn are the people who have the power to take action, so focus on key operational managers as opposed to staff. (3) Learning often occurs best through "play," through interactions in a transitional medium where it is safe to experiment and reflect. (4) Learning often requires altering the flow of time: slow down the action to enable reflection on tacit assumptions

and counterproductive ways of interacting; or, at other times, speed up time to reveal how current decisions can create unanticipated problems in the long term. (5) Learning often requires "compressing space," as well as time, so that the learner can see the effects of his or her actions in other parts of a larger system. (Computer simulation and related tools may be needed for principles 4 and 5.) (6) This transitional medium must look like the action domain of the learners. (7) The learning space must be seamlessly integrated into the work space for an ongoing cycle of reflection, experimentation, and action.

If learning becomes more integrated into how we work, where does "work" end and "learning" begin?

### Process and Content Are Inseparable

Because our culture is so caught up in separation, we have been led, according to David Bohm, "to seek some fantasy of action...that would end the fragmentation in the content (of our thought) while leaving the fragmentation in the actual process of thinking untouched." So, for example, executives seek to improve fragmented policies and strategies without addressing the fragmented and competitive relationships among the managers who formulated the strategies and policies. Consultants propose new process-oriented organizational designs without addressing the modes of thinking and interacting that cause us to focus on things rather than processes in the first place. Management educators treat either "technical" issues like operations, marketing, or finance, or behavioral issues like organization culture, decision making, or change.

In our normal ways of looking at things, the content or issues we are interested in are separate from the processes we might use to learn about them. Yet, this very separation may be the primary obstacle to potential breakthroughs in situations where content and process are inseparable. For example, early in one of our Learning Center field projects, the team began to address the company culture of punishment for bad news. But, rather

than blaming the "culture" or "management," the members of the group explored their own reactions to hearing about problems, especially from subordinates. They began to surface their fears about mistakes and their automatic reactions and defensive responses, like heightened competitiveness or a tendency to cover up the problems. Gradually, they reached some deep insight into their "culture of punishment" and their own role in sustaining it.

If indeed it is possible to progress toward learning organizations, what are some of the reasons we might resist such changes?

### Learning is Dangerous

Learning occurs between a fear and a need. On the one hand, we feel the need to change if we are to accomplish our goals. On the other hand, we feel the anxiety of facing the unknown and unfamiliar. To learn significant things, we must suspend some basic notions about our worlds and our selves. That is one of the most frightening propositions for the ego.

The conventional notion of learning is transactional. There is a learner who has a certain way of operating and a certain knowledge. If this knowledge proves to be incomplete or ineffective, the learner has the ability to drop part of it, change some of it, or add some new ideas to it. This may be an accurate description of how we learn to find better bargains or make better investments, but it fails to get to the heart of the type of learning involved when we are questioning deep beliefs and mental models.

The problem with this view is that the self is not separate from the ideas and assumptions that form it. Our mental models are not like pieces of clothing that we can put on or take off. They are basic constitutive structures of our personality. For all intents and purposes, most of the time, we *are* our mental models.

The learning required in becoming a learning organization is "transformational learning." Static notions of who we are must be checked at the door. In transformational learning, there are no problems "out there" to

be solved independent of how we think and act in articulating these problems. Such learning is not ultimately about tools and techniques. It is about who we are. We often prefer to fail again and again rather than let go of some core belief or master assessment.

This explains the paradox of learning. Even when we claim we want to learn, we normally mean that we want to *acquire* some new tool or understanding. When we see that *to learn*, we must be willing to look foolish, to let another teach us, learning doesn't always look so good anymore.

It is little coincidence that virtually all spiritual disciplines, regardless of culture or religious setting, are practiced in communities. Only with the support, insight, and fellowship of a community can we face the dangers of learning meaningful things.

#### **THEORY IN PRACTICE: THE WORK OF THE ORGANIZATIONAL LEARNING CENTER**

The "liaison officers" of the MIT Learning Center are individuals from each participating company who work together to reflect on what we are learning and to translate these reflections into improved management practices for the center. It was in this group that we first began to realize that building learning organizations was grounded in developing leadership communities. A core question has occupied us throughout this year: "How do such communities form, grow, and become influential in moving large organizations forward?"

Ford's Vic Leo has suggested a three-stage "architecture of engagement:" (1) finding those predisposed to this work, (2) core community-building activities, and (3) practical experimentation and testing.

#### **Predisposition**

It is easy to waste time attempting to bring about changes with people who do not want, or are not ready for, such changes. When the

liaison officers reflected on how they became involved in systemic thinking and organizational learning, we discovered that there were aspects of each person's background that made that person predisposed. In some cases, it was academic training. In others, particular work or life experiences. In all cases, they were deeply drawn to the "systems perspective." They needed no convincing that much problem solving in organizations leaves deeper sources of problems untouched, and that the roots of these difficulties lie in how we think and how we interact. They were skeptical of conventional strategies for organizational improvement—reorganizations, training, management programs, speeches from "on high." Predisposition is important, especially in the early stages of building momentum when there are few practical results to point to.

Those not predisposed to systems thinking should not be excluded, but they may play less important roles at the outset. Over time, many people who are initially confused, threatened, or nonresponsive to systems thinking and learning often become the most enthusiastic supporters. If they are not included, because they raise difficult questions or disagree with certain ideas, what starts as a learning community can degenerate into a cult.

#### **Community-Building Activities**

How those predisposed begin to know each other and to work together involves an ongoing cycle of community-building activities and practical experimentation. The former must be intense enough and open-ended enough to foster trusting personal relationships and to lay a foundation of knowledge and skills. The latter must offer realistic starting steps in applying new knowledge and skills to important issues.

For example, at the Learning Center, a five-day introductory course explores the tools, methods, and personal dimensions of the "Galilean Shift." There is practice with systems thinking tools and dialogue, and with reflecting on and articulating personal vi-



sions. Just as important, the course often results in what the liaison officers called a "piercing experience," where the systems perspective begins to take on a deeper meaning and the nature of the journey ahead becomes clearer.

Moreover, it is a journey that we are all taking together. There are no "teachers" with correct answers, only guides with different areas of expertise and experience that may help along the way. Each of us gives up our own certainty and recognizes our interdependency within the larger community of practitioners. The honest, humble, and purposeful "I don't know" grounds our vision for learning organizations. In this sense, the five-day introductory course begins to forge the vessel within which the learning center staff and the company managers begin to operate as a community.

This vessel is reinforced and expanded through a variety of other meetings and communications media, including electronic mail, bulletin boards, and research documents. Especially important are semiannual "systems applications conferences," originally organized for reporting on projects underway in participating organizations. These large gatherings, which typically involve 100 to 150 people, have become an ongoing dialogue rather than a one-way reporting on various projects. Remarkably, we are finding that the more we organize around dialogue, and the less we plan out elaborate agendas, the more we accomplish. (Note: For more information on dialogue, see subsequent articles by William Isaacs and Edgar Schein in this issue.)

### **Practical Experimentation and Testing**

Ultimately, what nurtures the unfolding community most is serious, active experimentation where people wrestle with crucial strategic and operational issues. In our work at the center, we undertake learning projects in conjunction with groups of managers who have taken the five-day introductory course. Most projects focus on key issues, because of the resulting motivation for learning and because of

the potential for significant improvement in business results.

Currently, two types of "practice field" projects are underway: dialogue projects and learning laboratory projects. Dialogue projects focus directly on the deeper patterns of communication that underlie whatever issues are being confronted by a management team.

Learning laboratory projects focus on specific areas such as new product development, management accounting and control systems, and services management. Here are some examples.

A team at Ford, responsible for creating the next generation Lincoln Continental, is also creating a New Car Development Learning Laboratory. The project has two interrelated objectives: to improve the effectiveness of the team in its current project and to develop better theory and tools that will lead to broader systemic thinking in product development at Ford.

One of the most daunting tasks in car product development is to balance autonomy of component engineering teams with optimal design for the car as a whole. For example, many component teams, such as electronic fuel handling and climate control, place demands on the car's electrical system. If every component team optimizes its own efforts, the total load can exceed the capacity of the alternator. Trying to convince each team separately that it should sacrifice accomplishes little; it may only raise fears that other component teams will then be able to command more of the alternator capacity.

This is actually an example of a general systems phenomenon called "tragedy of the commons." The term refers to situations in which there are common resources upon which all depend, like a commons for grazing sheep. Individual incentives, such as one family's efforts to increase the size of its flock, will eventually destroy the commons for all. Using system archetypes, Ford's team has been able to conceptualize the particular interdependencies involved in achieving an optimal total vehicle electronic system. They also have identified other basic "commons" that recur in all car development efforts. They are develop-

ing a general approach that can lead to early identification of commons and to establishment of specific management mechanisms to assure that commons are not "overgrazed."

At the same time, the team is developing a new car. Early returns show unprecedented levels of internal coordination. For example, at a recent checkpoint, the team had a level of "parts on time" twice the average.

Another example of a learning project is Chrysler's use of system dynamics computer simulation to introduce "activity-based costing" throughout the organization. The project's goal is to create an experiential laboratory where the users of the new system can reflect on the shortcomings of current accounting methods and the improvements of activity-based information. So far, Chrysler has used the laboratory in five new implementations, with all operations managers ranking an introductory session above 90 (ranking goes from 1 for terrible to 100 for best seminar ever attended).

Our one-year program, the learning laboratories, and dialogue projects all spring from the Galilean shift; all follow the operating principles articulated earlier in this paper. In all cases, what started as a "practice field" has led to penetrating insights into critical business issues. The practice fields are gradually becoming integrated into everyday company activities. When we started the pilot projects, we had a vision of transforming organizations through learning processes focused on significant business problems. We saw practice fields as a place where teams could meet to reflect on structures, identify counterproductive behaviors, experiment with alternative strategies, and design solutions for actual work settings. The core of the projects, in our minds, were "management flight simulators," computer simulations based on systems thinking. The simulators would enable managers to "compress time and space" so as to better understand the long-term consequences of their decisions and to reflect on their assumptions.

The management flight simulators are powerful tools that have shown their worth repeatedly, but the projects are yielding something more. We are finding that the no-

tion of practice fields was far more radical than we originally believed. When people have a transitional medium where they can relate to each other safely and playfully, where they can openly explore the most difficult and "undiscussable" systemic issues, they begin to see their learning community as something precious. "People will misunderstand what we are doing as problem solving," said one senior manager recently, "when in fact we are creating a new way of managing."

## CONCLUSION

Building learning organizations is not an individual task. It demands a shift that goes all the way to the core of our culture. We have drifted into a culture that fragments our thoughts, that detaches the world from the self and the self from its community. We have gained control of our environment but have lost our artistic edge. We are so focused on our security that we don't see the price we pay: living in bureaucratic organizations where the wonder and joy of learning have no place. Thus we are losing the spaces to dance with the ever-changing patterns of life. We are losing ourselves as fields of dreams.

We believe that to regain our balance we must create alternative ways of working and living together. We need to invent a new, more learningful model for business, education, health care, government and family. This invention will come from the patient, concerted efforts of communities of people invoking aspiration and wonder. As these communities manage to produce fundamental changes, we will regain our memory—the memory of the community nature of the self and of the poetic nature of language and the world—the memory of the whole.



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Taking Flight: Dialogue,  
Collective Thinking and  
Organizational Learning

William Isaacs

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*A report from the Center for Organizational Learning's Dialogue Project lays out a promising new way of promoting collective learning and dealing with lingering conflicts—in union-management relations, among urban leaders, and in South African politics.*

## ***Taking Flight:*** Dialogue, Collective Thinking, and Organizational Learning

WILLIAM N. ISAACS

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*I think there is a beginning to dialogue, but I do not think there is an end.*

—PRESIDENT OF LOCAL UNION,  
UNITED STEELWORKERS OF AMERICA

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Commenting on the G7 Summit in July of 1993, former Israeli Foreign Minister Abba Eban noted that the attending leaders "bring an extraordinary concentration of power, but their meetings don't seem to produce anything." His core observation: "Perhaps it's because each of the leaders is thinking individually, not collectively."

Given the nature of global and institutional problems, thinking alone at whatever level of leadership is no longer adequate. The problems are too complex, the interdependencies too intricate, and the consequences of isolation and fragmentation too devastating. Human beings everywhere are being forced to develop their capacity to think together—to develop collaborative thought and coordinated action.

This capacity is also rapidly becoming ac-

knowledged as central to management effectiveness. According to Alan Webber, former editor of the *Harvard Business Review*, conversation is the means by which people share and often develop what they know. He says, "the most important work in the new economy is creating conversations." In fact, some writers have gone so far as to conceive of organizations themselves as networks of conversation.

During a single conversation, a management team may navigate through a variety of forms of group talk, each with its own effects on the quality of the team's results. Unfortunately, most forms of organizational conversation, particularly around tough, complex, or challenging issues lapse into debate (the root of which means "to beat down"). In debate, one side wins and another loses; both parties

maintain their certainties, and both suppress deeper inquiry. Such exchanges do not activate the human capacity for collective intelligence. Dialogue is a discipline of collective thinking and inquiry, a process for transforming the quality of conversation and, in particular, the thinking that lies beneath it.

What makes dialogue (as we are now defining it) unique is its underlying premise: that human beings operate most often within shared, living fields of assumptions and constructed embodied meaning, and that these fields tend to be unstable, fragmented, and incoherent. As people learn to perceive, inquire into, and allow transformation of the nature and shape of these fields, and the patterns of individual thinking and acting that inform them, they may discover entirely new levels of insight and forge substantive and, at times, dramatic changes in behavior. As this happens, whole new possibilities for coordinated action develop.

Our standard way of thinking suggests that coordinated action occurs when different people reach a shared agreement, then create an "action plan." Dialogue proposes that some levels of coordinated action do not require this rational planning at all. In fact, some of the most powerful forms of coordination may come through participation in unfolding meaning, which might even be perceived differently by different people. A flock of birds suddenly taking flight from a tree reveals the potential coordination of dialogue: this is movement all at once, a wholeness and listening together that permits individual differentiation but is still highly interconnected.

At The Dialogue Project at MIT, we have begun to learn how to nurture this coordination in the context of diverse organizations and social systems—including a steel mill with a troubled labor-management history, an entire healthcare community in the Midwest riddled with competitive antagonisms, South African professionals and leaders, managers in corporations, and a group of urban leaders in a major U.S. city. This discipline, which involves reflection on ways of knowing, on language, and on the embodied experience of meaning, turns out to have exceed-

ingly practical applications, and suggests equally powerful applications for cultivating learning within organizations.

This article reviews our emerging theory of dialogue and reports on early evidence of its impact in practical settings.

## DIALOGUE: A WORKING DEFINITION

The word dialogue comes from two Greek roots, *dia* and *logos*, suggesting "meaning flowing through." This sense of the word stands in stark contrast to what we normally think of as "dialogue"—a mechanistic and unproductive debate between people seeking to defend their views against one another. In dialogue, as we use the term, people gradually learn to suspend their defensive exchanges and further, to probe into the underlying reasons for *why* those exchanges exist. However, this probing into defenses is not the central purpose of a dialogue session: the central purpose is simply to establish a field of genuine meeting and inquiry (which we call a container)—a setting in which people can allow a free flow of meaning and vigorous exploration of the collective background of their thought, their personal predispositions, the nature of their shared attention, and the rigid features of their individual and collective assumptions.

Dialogue can be initially defined as a *sustained collective inquiry into the processes, assumptions, and certainties that compose everyday experience*. Yet this is experience of a special kind—the experience of the meaning embodied in a community of people. All organizations, even dysfunctional organizations, are full of a rich store of meaning—it is what produces the commonality of behaviors across any complex organization, and what gives communities the power to torment and stifle their members. Yet often that meaning is incoherent, full of fragmented interpretations that guide behavior, yet go untested and unexplored.

If people can be brought into a setting where they, at their choice, can become con-



**William N. Isaacs** is the director of the Dialogue Project at MIT's Organizational Learning Center, which is part of the Sloan School of Management. Funded initially by a grant from the W.K. Kellogg Foundation, The Dialogue Project has conducted action research experiments on dialogue and organizational learning in a variety of settings around the world.

Dr. Isaacs received his doctorate from Oxford University. His research has focused on the perils of shared ideals, dialogue, and organizational learning. For the past seven years, Bill has consulted with senior management of *Fortune* 500 companies and leaders in communities and in health care systems.

scious of the very process by which they form tacit assumptions and solidify beliefs, and be rewarded by each other for doing so, then they can develop a common strength and capability for working and creating things together. This free flow of inquiry and meaning allows new possibilities to emerge. This capability exists in every community, but in most organizations it is dormant. Dialogue allows it to be awakened.

Unlike most forms of inquiry, the inquiry in dialogue is one that places primacy on the whole. Dialogue's aim is to take into account the impact one speaker has on the overall system, taking into account the timing of comments, their relative strength, their sequence, and their meaning to others. Dialogue seeks to unveil the ways in which collective patterns of thinking and feeling unfold—both as conditioned, mechanistic reflexes, and potentially as fluid, dynamically creative exchanges.

*Dialogue* is an old term. Some evidence suggests that human beings have gathered in small groups to talk together for millennia; to claim this is a new art is a mistake. Indeed, it is because dialogue is, at its core, very natural to human beings that there seems real possibility for its use in modern settings, despite a range of institutionalized barriers.

### Dialogue vs. Consensus

In consensus building, people seek some rational means to limit options and focus on the ones that are logically acceptable to most people. Often, the purpose of a consensus approach (the root of the word means "to feel together") is to find a view that reflects what most people in a group can "live with for now." This assumes that shared action will arise out of a shared position. This assumption is questionable. While consensus approaches may create some measure of agreement, they do not alter the fundamental patterns that led people to disagree at the outset. Consensus approaches generally do not have the ambition of exploring or altering underlying patterns of meaning.

By contrast, dialogue seeks to have people learn how to think together—not just in the



sense of analyzing a shared problem, but in the sense of surfacing fundamental assumptions and gaining insight into why they arise. Dialogue can thus produce an environment where people are consciously participating in the creation of shared meaning. Through this they begin to discern their relationship to a larger pattern of collective experience. Only then can the shared meaning lead to new and aligned action.

For example, in 1992, the labor and management representatives from a troubled steel company in the Midwest realized that, if their company was to survive intensified competitive pressure, they would have to find a way to resolve intractable differences between them—differences they had maintained for more than 30 years. They turned to dialogue to explore those differences, to see what sort of mutual learning they could create, and to discover whether that might lead to performance differences in the mill. At that time, representatives from both sides could barely speak without shouting at each other or walking out at the first signs of anger. Less than one year later, the two sides have grown so accustomed to talking together that they regularly make joint presentations—not as “first management speaks, and then the union speaks,” but as presentations made by a third entity that contains both management and union. This particular group has transformed an intense adversarial relationship into one where there is genuine and serious inquiry into taken-for-granted ways of thinking. It’s significant that the allegiances to management and union have not disappeared. Dialogue, instead, has given birth to a metaphorical container—with their steel mill background, these people call it a “cauldron”—that is large enough to contain the allegiance to union and management within it.

In a recent presentation by this dialogue group to 80 managers from a variety of companies, one union participant said, “We have learned to question fundamental categories and labels that we have applied to each other.” A manager in the audience shot up his hand and said, “Can you give us an example?” “Yes. Labels like *management* and *union*.”

The manager’s face registered evident surprise. Perhaps, in his company, no one would have even voiced the fact that these labels existed, for fear of raising questions about “class” and “worth” and “status” that people would be afraid they couldn’t confront. The union president is articulate about what has changed:

... they hired me from the neck down. They never hired any of us from the neck up... I was given the opportunity to say and do and make things happen myself and voice my opinion. And you know, I didn’t do too bad. I was shocked with some of the things that I actually said, that came out of my mouth. Things that we couldn’t have done several years ago.

In another setting, we brought together major health care providers for a city—the CEOs of the major hospitals, doctors, nurses, insurance agents, a legislator, and technicians. The group was, in effect, a microcosm of the healthcare system. Within that setting, people were able to mutually inquire into some of the underlying assumptions and forces that seem to make this field so chaotic. Said one senior physician during a session, “I am struck by my schizophrenia: the difference between how I treat my patients and how I treat all of you.” In another session, participants confronted the collective pain levied by the inhuman demand that they should assume responsibility for all the illness of a community.

In these sessions, this group has begun to inquire openly about underlying—and deeply taboo—subjects, such as feelings of self-protection and anomie among health care professionals, and how these feelings, themselves, are a key source of the counterproductivity inherent in the healthcare system; they lead to costly isolation, misplaced competitiveness, and lack of coordination. Dialogue produces insights into collective challenges that can alter people’s ways of thinking and acting in their systems.

By focusing on underlying thinking, dialogue appears to be directed away from pro-

ducing results. This perception, however, may stem from our expectations about *how* common direction and results are produced. One story, recently told to the author, illustrates the power of a dialogue-like kind of exchange.

In the late 1960s, the dean of a major U.S. business school was appointed to chair a committee to examine whether the university, which had major government contracts, should continue to design and build nuclear bombs on its campus. People were in an uproar over the issue. The committee was somewhat like Noah's ark: two of every species of political position on the campus. The chairman had no idea how to bring all these people together to agree on anything, so he changed some of the rules. The committee would meet, he said, every day until it had produced a report. Every day meant exactly that—weekends, holidays, everything. People objected: "You can't do that." He insisted, "Yes we can. We will continue to meet. If you can't be there, that's okay."

The group eventually met for 36 days straight. Consistent with our emerging theory of dialogue, for the first two weeks, they had no agenda. People just talked about anything they wanted to talk about—the purpose of the university, how upset they were, their deepest fears, and their noblest aims. They eventually turned to the report they were supposed to write. By this time, people had been drawn quite close to one another.

To the surprise of many, the group eventually produced a unanimous statement. They agreed that the university should gradually phase out the building of weapons. This was not a consensus process in the traditional sense, in that the dean did not seek to find common ground among the competing views, or insist on agreement by compromise. What was striking was that they agreed on a direction, but for different reasons. Some felt the laboratories were extremely expensive and administratively complex; others felt the presence of the weapons was morally wrong. An important lesson showed itself here: people did not have to have the same reasons to agree with the direction that emerged.

## DIALOGUE AND ORGANIZATIONAL LEARNING

The discipline of dialogue is central to organizational learning because it holds promise as a means for promoting collective thinking and communication. Three factors point to the need for new levels of practical improvement on this score:

First, organizations today face a degree of complexity that requires intelligence beyond that of any individual. To solve problems in complex systems, we must learn to tap the collective intelligence of groups of knowledgeable people. Yet in the face of complex, highly conflictual issues, teams typically break down, revert to rigid and familiar positions, and cover up deeper views. One result of this is "abstraction wars"—people lobbing abstract opinions across meeting rooms, without exploring what the opinions of others mean. Another result is "dilemma paralysis"—people find themselves stuck: raising the issues leads to polarization; failing to raise these issues means ineffectiveness is likely to continue.

Second, most of the current efforts at fostering collective thinking and learning in organizations backfire. While all organizations are continuously learning, some seem to be supporting learning that maintains a dysfunctional status quo. Paradoxically, our very efforts to produce learning can be counterproductive. The Challenger disaster is one of many sad examples of how organizations (in this case, a network of organizations working with NASA) can learn systematically to distort information and block communication channels, despite rigorous attempts to avoid this. Carefully defined procedures and checkpoints did not stop people from withholding their doubts and preventing or delaying productive debate about possible dangers; they were following "official" protocols and unofficial face-saving rules.

One antidote to problems of this sort has revolved around efforts to promote learning by introducing "vision" and "values" into the daily lexicon and practice of managers. Yet organizations that use ideals in this way are particularly susceptible to creating behavioral

rigidity; people make "ideal-images" of these same values, of themselves, and of their performance. These images devolve into superficial ideology and blind people to the numbing self-deception and enormous dilemmas they create for people seeking to live up to them. And when organizations learn a pattern that produces breakthrough results, they often become locked into that same trajectory, staying with it even after it begins to head toward downfall.

The work of The Dialogue Project indicates that breakdowns like these are reflective of a broader crisis in the very nature of how human beings perceive the world and take action in it. To address this crisis, humankind will require radically new approaches. The essence of the crisis is based in the fact that people have learned to divide the world into categories in thought and make distinctions within those categories. Though these categories are a natural mechanism to develop meaning, we have a tendency to become almost hypnotized by them, forgetting that we created them. We act mindlessly, as if our assumptions and categories of thought were perfectly representative of reality. Our own creations, our thoughts, take on a seemingly independent power over us. Perhaps most striking is the realization that we do this collectively. Organizational learning will not advance substantially, it seems, without a collective discipline for inquiring into this subtle and yet profoundly influential domain.

A central and serious manifestation of the crisis of perception is the problem of "fragmentation" in thought, as described by Fred Kofman and Peter Senge in "Communities of Commitment." (See lead article in this issue.) We have divided our experience into numerous isolated bits that seem to have no connection to one another. As a result, specialists in most fields cannot talk across specialties. Nowhere does this fragmentation become more apparent than when human beings seek to communicate and think together about difficult issues. Rather than reason together, people defend their "part."

Yet recent developments in both quantum theory and cognitive science make strong

cases to support the notion that perceiving the world in terms of separate fragments is based in a fictitious way of thinking. In quantum theory, the discovery of what Neils Bohr called the "quantum wholeness" suggests that there is an irreducibility of observer and observed when it comes to looking at small particles of matter. According to quantum theory, light can behave like a particle or a wave depending on how you set up the experiment. What you perceive, in other words, is not determined by independent external properties of "parts" of reality, but is a function of the ways in which you try to perceive that reality. At the most fundamental level, the work of dialogue rests upon an understanding that noted physicist and author David Bohm and others found articulated in quantum physics theory. As Bohm puts it:

...fragmentation is now very widespread, not only throughout society, but also in each individual; and this is leading to a kind of general confusion of the mind, which creates an endless series of problems and interferes with our clarity of perception so seriously as to prevent us from being able to solve most of them...

The notion that all these fragments are separately existent is evidently an illusion, and this illusion cannot do other than lead to endless conflict and confusion.

The practice of dialogue focuses on uncovering and inquiring into the feedback loop between our internal interpretive structures (our tendency to name events in certain ways) which then influence the world and (eventually) our internal structures. It seems increasingly clear that our perceptions and thought can literally create our worlds. Bohm and Edwards give the example of walking down a dark street late at night, where one might see a shadow, suddenly finding one's heart pounding and breath quickening. Naming the perception of the shadow as an attacker leads us to behave in particular ways; when we discover it is only a shadow we relax. Our internal interpretation of an external stimulus produces a physical response. We

constantly do this in our worlds, naming external stimuli in certain automatic ways and responding to them, all the while directly producing our own internal experience of them.

Finally, to understand the pervasive nature of fragmentation, it is important not to think of fragmentation as a problem and dialogue as its solution. Fragmentation is a condition of thought, and dialogue is one tentatively demonstrated strategy for stepping back from the way of thinking produced by fragmentation and incorporating another way of thinking. Dialogue is an attempt to perceive the world with new eyes, not merely to solve problems using the thought that created them in the first instance.

### Dialogue and Triple-Loop Learning

One approach to ameliorating these problems within the field of organizational learning attempts to help individuals and organizations examine and change the underlying assumptions, or the theories behind their actions. Instead of merely trying to improve along a particular set of standards or dimensions, "double-loop" learning (a concept developed by Chris Argyris and Donald Schon) focuses on the assumptions underlying these standards.

An organization that *does* successfully modify some of its underlying values or standards has thus achieved a remarkable result. The consequences of this can be impressive. The mini-mill phenomenon in the American steel industry is one example: an industry based on large scale integrated mills has been transformed by powerful competition and now accepts a premise that would have not have been considered 15 years ago: that success and quality can come from small, flexible mills. But the question remains as to whether such organizations have actually learned about the underlying reasons that rigidity and limited assumptions ruled at the outset. Without learning about learning at this next level, the cycle is likely to repeat itself.

Gregory Bateson used the term "learning III" to describe this form of learning about the context of learning. It could also be called

"triple-loop learning." If Argyris and Schon's "double-loop learning" answers the question, "What are alternative ways of seeing this situation that could free me to act more effectively?" triple-loop learning would answer the question, "What is leading me and others to have a predisposition to learn in this way at all? Why these goals?" Double-loop learning encourages learning for increasing effectiveness. Triple-loop learning is the learning that opens inquiry into underlying "why's." It is the learning that permits insight into the nature of paradigm itself, not merely an assessment of which paradigm is superior.

While this type of learning may seem abstract or risky, especially when people understand how vulnerable it might make them feel, experience has begun to show that it can be quite practical and actionable by managers and employees in organizations, and that it can have a transformative and creative effect on their lives.

### THE THEORY OF DIALOGUE

To create an operational theory of how a reflective learning process—dialogue—can produce "triple-loop" learning, we began by drawing on the work of three key Twentieth-Century thinkers. The philosopher Martin Buber used the term *dialogue* in 1914 to describe a mode of exchange among human beings in which there is a true turning to one another and a full appreciation of another person, not as an object in a social function but as a genuine being. Psychologist Patrick Dé Mare suggested in the 1980s that large group "socio-therapy" meetings could enable people to engage in understanding and altering the cultural meanings present within society—to heal the sources of mass conflict and violence or ethnic bigotry, for example.

David Bohm, with his understanding of the changing view of the nature of physical matter, suggested that this new form of conversation should focus on bringing to the surface, and altering, the "tacit infrastructure" of thought. Bohm suggested that as groups of people learned to watch and articulate the as-

sumptions and pressures inherent in individual and collective thought, they might catch and alter their self-defeating and self-deceptive processes.

While each of these thinkers has stressed important dimensions of dialogue—Buber's emphasis was on "being," Dé Mare's on cultural meaning, Bohm's on thought—the development of a theory of dialogue remains in an embryonic stage. In our research project, we have been exploring ways of combining elements of these theories and producing dialogue in the world, examining its impact in action, and in so doing, extending the theory behind it.

To understand dialogue and its contribution to collective learning, one must explore the domain of collective thought, and in particular, the underlying processes that seem to govern it. This opens an inquiry into the nature of "tacit thought" as it is held by individuals and collectives.

Most people know how to ride a bicycle. Once you learn, you never forget. But trying to explain how you ride could cause you to fall off! Philosopher Michael Polanyi called this "tacit knowledge." You know more than you can say. Other examples include our knowledge of how to digest, and how (without consciously thinking about it) to follow the roads that lead to our workplace. Finally, and most importantly, our use of language is tacit—and collective. People who communicate share an understanding not simply of words, but of how to form words to make meaning.

As Bohm conceived it, dialogue would kindle a new mode of paying attention, to perceive—as they arise—the assumptions taken for granted, the flow of the polarization of opinions, the rules for acceptable and unacceptable conversation, and the methods for managing differences. Since these are collective, individual reflection would not be enough to bring these matters to the surface. And since reflection, by its nature, looks back at what has already taken place, it is innately limited for anticipating assumptions, opinions, rules, and differences that are only now emerging. The mindfulness embodied in dia-

logue involves awareness of the living experience of thinking, not reflection after the fact about it. For us to gain insight into the nature of our tacit thought, we must somehow learn to watch or experience it, in action. This work would require a form of collective attention and learning. Dialogue's purpose is to create a setting where conscious collective mindfulness can be maintained.

## CREATING FIELDS OF INQUIRY

Dialogue is a discipline that conducts "field experiments"—i.e., experiments that attempt to make conscious the underlying field in which different frames and different choices for action emerge. The notion of a "field" of influence can be traced to one of the pioneers in the study of groups and social interaction—Kurt Lewin. Lewin noted that human association could be understood as shared fields, with forces that could be measured and influenced. Though seemingly ephemeral, fields are obviously tangible forces: a current of electricity running through a wire creates, as a byproduct, a weak magnetic field that is invisible and yet has impact.

Our emergent dialogue theory and practice builds on this notion, claiming that shared tacit thought among a group comprises a field of "meaning" and that such fields are the underlying constituent of human experience. As these fields are altered in a variety of subtle ways, their influence on peoples' behavior changes too. In many cases, the social fields in which people live are unstable and incoherent. That is, there are many different "tacit programs" in motion, in conflict, leading people to hold images of the world that they experience as literally true and obvious. The images that one person holds might be very different from the images held by his or her neighbors. People also tend to defend these images, particularly under conditions of threat and embarrassment. This creates organizational defensive routines of the sort articulated by Argyris. An unstable social field supports defensive routines.

Based on his work in quantum physics, David Bohm has compared dialogue to su-

perconductivity. In superconductivity, electrons cooled to very low temperatures act more like a coherent whole than as separate parts. They flow around obstacles without colliding with one another, creating no resistance and very high energy. At higher temperatures, however, they began to act like separate parts, scattering into a random movement and losing momentum. Depending on the environment in which they operate, electrons behave in dramatically different ways. The field in which the electrons operate changes.

When confronting tough issues, people act more like separate, high-temperature electrons. Their associations are unstable and incoherent, in the sense that they collide with one another at times. Dialogue seeks to alter this by producing a "cooler" shared environment, by refocusing the group's shared attention. When this takes place, people can spend time in high-energy interactions with reduced friction, without ruling out differences between them. Negotiation tactics, in contrast, often try to cool down interactions among people, but do so by bypassing the most difficult issues and narrowing the field of exchange to something manageable. They produce somewhat cooler interactions, but lose energy and intelligence in the process. In dialogue the aim is to produce a special, "super cooled" environment in which a different kind of relationship among the parts can come into play.

Traditional forms of inquiry focus on the nature of the parts of the system and their causal interrelationships. Following the analogy here, this might be called "hot inquiry." Dialogue can permit the emergence of a form of inquiry that requires a new repertoire of collective attention called "cool inquiry." Cool inquiry focuses people's attention on collective thought and shared assumptions, and the living social processes that sustain them.

### **The Practice of Dialogue**

Dialogue poses several paradoxes in practice. While it seeks to allow greater coherence to emerge among a group of people (not necessarily agreement), it does not impose coher-

ence. Beginning a dialogue exposes another paradox: while the process encourages people to have a shared intention for inquiry, it does not have an agenda, a leader, or a task. Dialogue does require a facilitator initially, who can help set up this field of inquiry and who can embody its principles and intention. But by deliberately not trying to solve familiar problems in a familiar way, dialogue opens a new possibility for shared thinking.

### **Dialogue in Action: Case Study in a Steel Mill**

The case of the steel mill provides examples of all these facets of dialogue. The management-union structure that prompted the dialogue effort still exists, but participants can stand beside it with far more perspective. This plant has experienced the pain of intense downsizing typical of much of the American steel industry. From 5,000 employees in 1980, the largest plant now has shrunk to fewer than 1,000.

When we entered the scene in 1992, we heard stories about confrontations in which people had thrown chairs at one another or stormed out of meetings, slowed down work, and called each other names. Both union and management were skeptical about the possibility of genuine reconciliation—and vociferous about the lack of trust that they felt for the other. Competition from mini-mills, however, had forced them to recognize the need to cooperate. Consequently, they had recently agreed to a participative total quality improvement process, formed joint committees to solve problems, and set up an individual reward system for cost-saving improvements.

In our earliest conversations, held separately with labor leaders in one group and senior managers of the plant and division in the other, we explored ways each group was projecting blame for problems onto the other. There people developed an initial grasp of inquiry skills, such as how to detect an abstract statement and invite people to explain their thinking. We introduced the set of initial guidelines for our time together shown in Exhibit 1.

The metaphor of a "crucible" emerged in these conversations as a powerful influence

**EXHIBIT 1**  
**INITIAL GUIDELINES FOR DIALOGUE**

- Suspend assumptions and certainties
- Observe the observer
- Listen to your listening
- Slow down the inquiry
- Be aware of thought
- Befriend polarization

on the initial thinking and connection of all parties. Steelmaking involves intense heat and pressure under control; this was an image for dialogue that made immediate sense to the steelworkers. Human intensity under control allows forces to be brought to bear and change to be wrought. Typically, however, there is no "container," or field, in which such changes can be made. The steel mill participants still sometimes speak of how a meeting got "hot," that someone was "burned." The heat analogy refers to intensity of human exchange. One central concern was how to create a setting where the intensity of years of adversarial relationship could be transformed.

Eventually both groups met together. In the initial two-day gathering, people found that talking together was not as horrendous as they had expected. They began to relax and say what was really on their minds, expressing their worries, their concerns, their beliefs about the business. But they did this in ways that sparked old conflicts. Someone went "ballistic" and people began to feel that all was lost.

To manage this intensity, we asked people to step deliberately into their anger, and to step back from their collective (and hopelessly stuck) reasoning. To achieve this, we created a map of their interactions, then sought to "suspend" the map—to look at it without trying to fix it, but simply to see it together, and see its impact on the organization.

Together, we succeeded in seeing the conflict as a patterned behavioral response in the group's shared field, and allowed it to change. This proved to be a turning point:

members of the group gained insight into (and to some degree arrested) familiar conflicts that previously they had felt helpless to change. This encouraged people to, as one manager subsequently put it, "play along."

Following this two-day session, the group agreed to meet once every two weeks in an open setting. At each meeting, the group sits in a circle, and each person is typically given a chance to say something about what is on his mind. There is no agenda and no effort to solve problems directly. Topics emerge. People learn to see how others are thinking and feeling about critical plant matters and about each other. They learn to inquire into the nature of the assumptions behind their thinking. This free flowing exchange has not only allowed new insight, it has altered fundamental assumptions about the union's relationship to the business. The union president, speaking about the progress they have made, put it this way:

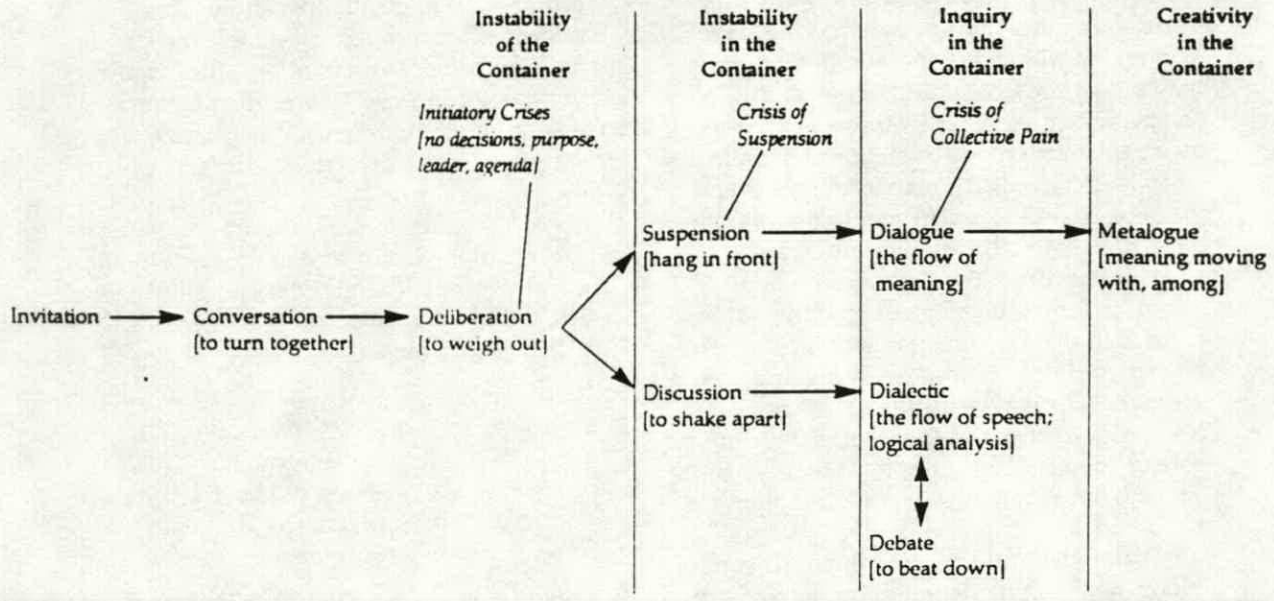
When we first started...the only thing that we ever talked about was the past: How you've screwed me in the past. How you've lied to me in the past. How you went from 5,000 workers down to 1,000. How you've promised us job security and right on down the line. You know, we don't hear that any more. That went away. That's gone. Now we're looking at the future....

People report change of this sort across the group. A manager in one session said:

I was very antsy about this at first—to dedicate that much time, a half a day every other week—I thought Lordy, that's a lot of time. But what we've done is to dedicate the time, to slow down and then create a space to listen to each other so that people can collectively learn the values of a lot of various people as opposed to the same people.

Perhaps the most dramatic effects of this are evident not in the dialogue sessions themselves, but in all other activities. For the first

**EXHIBIT 2**  
EVOLUTION OF DIALOGUE



time managers and union personnel have been talking together and thinking about their business. This has evoked a sense of mutually seeing one another's opinions as valid and as part of a single system.

Over the months, there has been a remarkable change in the pattern of relationship and quality of inquiry among this group. After one recent session, a union man said, "you know, I can't tell who is on what side anymore." Initially the union men would never disagree with each other publicly, in front of the managers. Their story was singular: all the problems in the plant were the manager's faults, and any new program or plan was essentially intended to take advantage of them. Now, some months later, they openly disagree and inquire with one another, and they challenge one another to think together, instead of separately.

One critical factor in this group has been the openness of the CEO, who participates fully in the dialogue meetings. He has demonstrated a profound willingness to learn, and to admit publicly when he makes a mistake. As he put it, "The process became a

method of exchanging thoughts and realizing that none of us have *the* answer, but together we might have a better answer."

**LEVELS AND STAGES OF DIALOGUE: THE DEVELOPMENT OF COOL INQUIRY**

Mapping the evolution of dialogue through time has been one of our initial research aims. We have attempted to articulate a practical theory of dialogue by naming elements of this process and identifying the individual behaviors and collective skills that seem to compose it. A central factor in this has been to uncover the concrete ways dialogue requires the creation of a series of increasingly conscious environments or fields of inquiry. These environments, which we have called "containers," can be developed as a group of people become aware of the requirements and discipline of creating them. A container can be understood as the sum of the collective assumptions, shared intentions, and beliefs of



a group. These manifest in part as a collective "atmosphere" or climate.

Exhibit 2 displays the evolution of dialogue. One could think of the evolving stages as enfolded within one another. In one sense, they are all present simultaneously, though one may seem dominant. Moreover, a group may pass through one level, then return to a lower level. Passing through from one level to the next seems to entail meeting different types of individual and collective crises.

**1. Instability of the Container.** When any group of individuals comes together, they bring with them a wide range of tacit, unexpressed differences in paradigms and perspectives. The first challenge for participants is to recognize this, and to accept that the purpose of the dialogue is not to hide these differences but to find a way of letting them be explored.

Dialogue requires a container. To some degree in all settings, conflict and "defensive routines" will tend to make the container unstable. To begin a dialogue requires somehow altering these patterns of interaction in a system so that the group of people can directly observe them. In contrast to conventional intervention methods, this does not then lead to deliberate attempts to fix these structures, but only to explore them collectively in a skillful manner. The core of the theory of dialogue builds on the premise that the effect of people's shared attention can alter the quality and level of inquiry possible at any particular time. People can gradually learn to refine their modes of collective awareness to promote increasingly more subtle and intelligent modes of interaction. The process is very demanding, and at times frustrating; it is also deeply rewarding.

Dialogue begins with conversation. The root of the word conversation means "to turn together." People begin by speaking together, and from that flows deliberation. To deliberate is to "weigh out." Consciously and unconsciously, people weigh out different views, finding some with which they agree, and others that they dislike. They selectively pay attention, noticing some things, missing others. At this point, people face the first crisis, a de-

cision point that can lead either to the further refinement and evolution of the dialogue environment, or to greater instability. This "initiator crisis" comes because people recognize that despite their best intentions, they cannot force dialogue to take place. In their terms, they cannot comprehend, much less impose coherence on the diversity of differences of view.

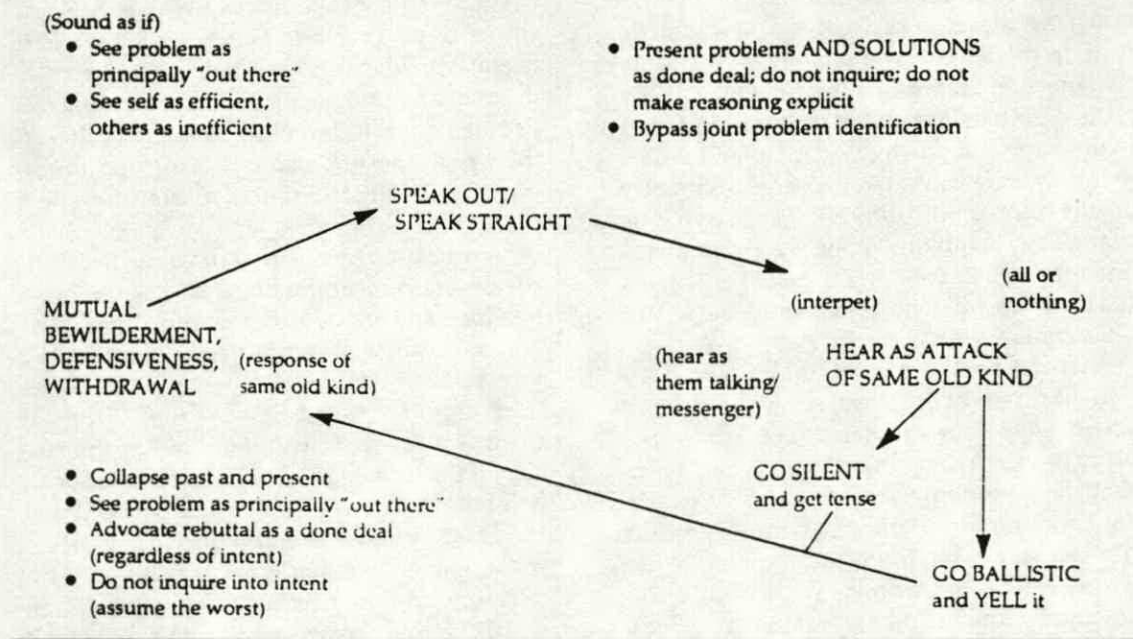
For the steelworkers, the initial experience was of instability and overt hostility, as well as a gradual willingness to step back from the conflict. Said one manager during the first two day session:

I can see the pattern of the old pattern. I can feel it. "We want this and this. . . . Well, no way can you have this and if we give you this, you have got to give us this." And that's two containers. That's us against them.

But gradually people recognize that they can either begin to defend their points of view, finding others as somewhat or totally wrong, or suspend their view, and begin to listen without coming to a hard and fast conclusion about the validity of any of the views yet expressed. They become willing to loosen the "grip of certainty" about all views, including their own.

**2. Instability in the Container.** A recognition of this "initiator" crisis begins to create an environment in which people know that they are seeking to do something different from the usual. Groups often begin to oscillate between suspending views and "discussing" them. (The root of the word discussion means "to break apart.") People will feel the tendency to fall into the familiar habit of analyzing the parts, instead of listening for the incoherence of the whole. At this stage, people may find themselves feeling frustrated, principally because the underlying fragmentation and incoherence in everyone's thought begins to appear. They may, for example, tend to defend their views, despite evidence that they may be wrong. They may see their behavior as principally a function of how others think and behave, and discount the ways their own thought deeply influences their experience.

**EXHIBIT 3**  
A CONFLICT MAP



Normally, all this is either taken for granted or kept below the surface. In dialogue, we deliberately seek to make observable and accessible these general patterns of thought and feeling, and more critically, the tacit influences that sustain them.

People begin to see and explore the range of assumptions that are present. They ask: Which are true? Which are false? How far is the group willing to go to expose itself? At this point, people begin to feel as if they were in a giant washing machine. No point of view seems to hold all the truth any longer; no conclusion seems definitive.

This leads to a second crisis, namely the "crisis of suspension." Points of view that used to make sense no longer do. People feel that they can't tell where the group is heading; they feel disoriented, and perhaps marginalized or constrained by others. Polarization comes up. Extreme views become stated and defended. All of this "heat" and instability is exactly what *should* be occurring. The fragmentation that has been hidden is surfacing in the container.

In our healthcare dialogue sessions, at this stage, people began to talk about the long-suppressed "myths" different groups held about each other (physicians and administrators, for example), and the anger that they felt about each other. Though expressing conflict of this sort was traditionally anathema to "caring" people, the group explored it directly—not strictly as a set of interpersonal issues, but as a function of the collective images of one another.

Similarly, in the steel mill sessions, conflict "of the same old kind" emerged. Some participants felt helpless and defeated, others went "ballistic." Yet they did not walk out. They stayed to explore the ways in which they had each contributed to the unproductive dynamics. The facilitators presented them with a "map" of their conflict (similar to that shown in Exhibit 3), then gave them a chance to reflect on it and consider whether to sustain the pattern shown.

Maps of this sort can be used as guides to correct behavior; in this instance, it was used to raise awareness and encourage responsi-

bility for the shared field in which the participants were operating. People acknowledged that this was an accurate reflection of their actions; we placed a copy of the map on the wall. In the very next interchange, the same dynamic appeared again. Several in the group pointed (literally) to the map, and then to the people; it dawned on them and others that they were caught in the same back-eddy of the stream of thought. The dynamic changed in that moment for the group; it has not appeared in that way since. Polarizations still come up, but tend to be handled in a very different fashion.

To manage the crisis of collective suspension that arises at this stage, everyone must be adequately awake to what is happening. People may then avoid taking an internal "vote" about any position—not panic and withdraw, not choose to fight, not categorize things as "this" or "that," but listen and inquire: "What is this? what is the meaning of this?" They do not merely listen to others, but to themselves. They ask: "Where am I listening from? What is the disturbance going on in me (not others)? What can I learn if I slow things down and inquire (to seek within)?" Another union man said in one dialogue session:

At the last meeting, I was very motivated to go and find out what I thought were negatives coming up in the container, what I could do to fix them. And I think some other people did too. I used to have a very significant impulse to attack an issue. I would feel like I would have to at least get my position in, or there was going to be trouble. And I'm not having that impulse — hardly at all anymore....if somebody says something I don't particularly agree with ...it's almost like, so what?

This crisis is where skilled facilitation is most critical. The facilitator, however, is not seeking to "correct" or impose order on what is happening, but to model how to suspend what is happening to allow greater insight into the order that is present.

**3. Inquiry in the Container.** If a critical mass of people stay with the process beyond

this point, the conversation begins to flow in a new way. In this "cool" environment people begin to inquire together as a whole. New insights often emerge. The energy that had been trapped in rigid and habitual patterns of thought and interaction begins to be freed up. People notice, for example, that they differ in their pace and timing of speaking and thinking, and begin to inquire into and respect these facts.

Our experience with a dialogue in South Africa among leading black and white businessmen and women, community organizers, and educators provides an example. We found that people came to the point of reflecting on apartheid in ways that surprised them. They were able to stand beside the tension of the topic without being identified with it. Similarly, the steelworkers recognized that they had far more in common with management than they had previously realized or expected. And they realized that they could inquire together in ways that previously would have surprised them. In the healthcare dialogue, it was at this point that people began to discuss their "god-like" status and stopped blaming others in the "system" for the difficulties they saw.

Sometimes in this phase the flow takes on a powerful and undeniable intensity. Inquiry within this phase of the container is subtle; people here can become sensitive to the cultural "programs" for thinking and acting that they have unwittingly accepted as true. In these later stages of dialogue, the term "container" becomes limiting. It is more accurate to describe it as a kind of shared "field" in which meaning and information are being exchanged.

While people participate, they also begin to watch the session in a new way. One participant from an urban leaders' dialogue in Boston likened this experience to seeing the inside of their minds performing together in a theater. People become sensitive to the ways in which the conversation is affecting all the participants in the group. In particular, they can begin to look for the embodied manifestations of their thoughts.

This phase can be playful and penetrat-

ing. Yet it also leads to another crisis. People gradually realize that deeper themes exist, behind the flow of ideas. They come to understand and feel the impact that holding fragmented ways of thinking has had on them, their organizations, and their culture. They sense their separateness. While people may understand intellectually that they have had limits to their vision, they may not yet have experienced the fact of their isolation. Such awareness brings pain—both from loss of comforting beliefs and from the exercise of new cognitive and emotional muscles. People recognize that their thoughts—in the form of collective assumptions and choices—create and sustain fragmentation and separation.

The "crisis of collective pain" is the challenge of embracing these self-created limits of human experience. This crisis is one that can lead to transformation of fundamental patterns of interaction. Areas in which wholeness is lacking become evident. As they are collectively observed, they change, freeing up rigidity and old habits of attention and communication. Moving through this crisis is by no means a given nor necessary for "success" in dialogue. Groups may develop the capacity for moving to the final level of dialogue over a considerable period of time. It is a deep and challenging crisis, one that requires considerable discipline and collective trust.

**4. Creativity in the Container.** If this crisis can be navigated, a new level of awareness opens. People begin to know consciously that they are participating in a pool of common meaning because they have sufficiently explored each other's views. They still may not agree, but their thinking takes on an entirely different rhythm and pace. At this point, the distinction between memory and thinking becomes apparent. People may find it hard to talk together using the rigid categories of previous understanding. The net of their existing thought is not fine enough to begin to capture the subtle and delicate understandings that begin to emerge. This too may be unfamiliar or disorienting. People may find that they do not have adequate words and fall silent. Yet the silence is not an empty void, but one re-

plete with richness. Rumi, a 13th century Persian poet, captures this experience:

Out beyond ideas of rightdoing  
and wrongdoing  
There is a field  
I will meet you there  
When the soul lies down in that grass  
The world is too full to talk about

In this experience, the world is too full to talk about; too full to use language to analyze it. Yet words can also be evocative, creating narratives that convey richness of meaning. Though we may have few words for such experiences, dialogue raises the possibility of speech that clothes subtle meaning, instead of words merely pointing towards it. I call this kind of experience "metalogue," or "meaning flowing with." Metalogue reveals a conscious, intimate, and subtle relationship between the structure and content of an exchange and its meaning. The medium and the message are linked: Information from the process conveys as much meaning as the content of the words exchanged. The group does not "have" meaning, in other words, it is its meaning. This kind of exchange entails learning to think and speak together for the creation of breakthrough levels of thought, and to know the aesthetic beauty of shared speech. Such loosening of rigid thought patterns frees energy that now permits new levels of intelligence and creativity in the container.

## CONCLUSION

Our experience with the discipline of dialogue suggests that there is a new horizon opening up for the field of management and organizational learning. Several key elements stand out in this respect. First, dialogue is an advance on double-loop learning processes, and represents triple-loop learning. That is, dialogue involves learning about context and the nature of the processes by which people form their paradigms, and thus take action. Second, this field suggests a new range of skills for managers that involve learning how

to set up environments or "fields" in which learning can take place. These environments are "safely dangerous," in that they allow people to risk while feeling safe in doing so. Third, this discipline stresses the power of collective observation of patterns of collective thought that typically speed by us or influence our behavior without our noticing. There seems to be leverage on this score to begin to explore deeply held underlying patterns of association and meaning.

Finally, dialogue is an emerging and potentially powerful mode of inquiry and collective learning for teams. It balances more structured problem-solving approaches with the

exploration of fundamental habits of attention and assumption behind traditional problems of thinking. Traditional modes of solving problems are clearly necessary. However, the same thinking that created our most pressing problems cannot be used to solve them. Unless we find ways of transforming the ground out of which all of our thinking and acting emerges, we are likely to repeat the kinds of entrained errors and produce the unintended effects we now witness. By providing a setting in which these subtle and tacit influences on our thinking can be altered, dialogue holds the potential for allowing entirely new kinds of collective intelligence to appear.



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The metaphor of birds in flight used in the opening section was first suggested by Risa Kaparo.



MULTI



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# MR. LEARNING ORGANIZATION

Peter Senge's goal is merely to change the world by helping people change deeply. His ideas are paying off at companies like Ford and Federal Express. ■ by Brian Dumaine

**O**N A SULTRY summer night, the beat of drums echoes through the ballroom of a grand Victorian hotel. *Bung, bung, a-bong, bung.* A group of revelers swirl in a colorful blur of peasant dresses, beads, headbands, cotton tunics, and Birkenstocks. *Bung, bung, a-bong, bung.* On a large screen, slides of gurgling brooks, seaside sunsets, and lone kayakers flash. *Bung, bung, a-bong, bung.*

A band of time-warped hippies worshipping some primal spirit? Not at all. These men and women, part of a group of nearly 400 who gathered last June for a management conference at Bretton Woods, New Hampshire, hail from some of America's largest corporations and most influential consulting firms. What they're celebrating is the learning organization and its intellectual and spiritual champion, Peter Senge.

This unassuming, soft-spoken MIT senior lecturer and consultant is the corporate equivalent of a medieval crusader—a man who, despite heavy odds against his cause, is obsessed with changing not only corporate America but also the world. Senge, who describes himself as an “idealistic pragmatist,” is hard at work building learning organizations.

But what exactly is this amorphous creature? The idea, which has been around for years as an academic theory, gained broad currency when Senge published his best-selling *The Fifth Discipline* in 1990. In it he writes that a learning organization values—and thinks competitive advantage derives from—continuing learning, both individual and collective.



■ Seeing the big picture: Senge says workers must get more closely in touch with themselves and the world.

Makes sense, but it won't happen unless organization members go through a personal transformation—no more thinking you've got all the answers—and learn to master scientific management tools with odd-sounding names like ladders of inference and systems thinking. It's not easy work, but Senge argues that it's the only way we'll blow away our old, compartmentalized, Industrial Age notions of a job. Says this athletic 46-year-old with red hair and blue eyes, who dresses more like a graduate student than a corporate consultant: “People working together with integrity and authenticity and collective intelligence are profoundly more

effective as a business than people living together based on politics, game playing, and narrow self-interest.”

Besides working with top U.S. corporations like Ford, Federal Express, and Intel, being a director at Innovation Associates, a Cambridge consulting firm, and commanding speaking fees of as much as \$40,000 a presentation, Senge (pronounced SEN-gee) advises government and educational leaders in centers of global change like South Africa. His message: The new challenges of the Information Age demand that not only businesses but also schools and governments radically transform themselves.

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Senge believes this uphill battle is worth fighting: "The human species is profoundly out of balance. If our work has an impact, it will bring us back into the natural order of things. And we might be able to look forward to a world where we'd be proud for our grandchildren to live in it."

Utopian, certainly. But Senge's message of growth and prosperity holds strong appeal for today's business leaders. His research center at MIT, the Center for Organizational Learning, started in 1990, has 18 corporate sponsors, including AT&T, Ford, Motorola, and Federal Express. Each ponies up \$80,000 a year to create learning-organization pilot programs with the help of Senge's people. Says he: "The center is designed to spread ideas, to create a few successful models of the learning organization that can't be ignored." It's doing just that within Ford, Federal Express, and other companies.

**L**IKE ANY INNOVATION, the movement has attracted its share of controversy. And Senge, like a questing knight, knows he has many corporate dragons to slay—known more commonly as people who don't like to change. Despite impressive success with learning-organization principles, Fred Simon, project manager for the Lincoln Continental at Ford, was asked to take early retirement—some say forced out, in part, by managers uncomfortable with the learning organization. At GS Technologies, a Kansas City steel company that had been achieving impressive progress using a technique Senge labels dialogue—not just your normal banter with relevant constituencies—new union leadership passed a motion to ban the practice from the mill floor.

Senge says that he fully expected such real-world resistance and that it will take years to make a truly effective learning organization a reality. Eventually the movement may storm corporate America much like the total quality movement did in the 1980s and re-engineering in the early 1990s, but it won't happen tomorrow. Says Senge: "We're where the quality movement was in the 1940s."

Raised in Los Angeles and the son of a Kodak salesman, Senge went to Stanford, where he studied engineering and became interested in population growth, a topic that got him thinking about the world and big issues like overpopulation, hunger, and the environment. While his work is devoted to improving all that, he tries to lead his personal life in a way that reflects his profes-



At GST, chief Cushman (front) and his team used the learning organization approach to defuse tension between management and union members like John Cottrell (rear).

sional ideals. A lover of the outdoors who dirt-bikes and skis, Senge has for years studied Zen, which has taught him to balance his work and personal life. He has a standing rule not to travel during holiday months without his wife and two kids. When you're talking to him, he never seems as if he's trying to score points but really gives you the sense he's listening, very there in a Zen sense—an important trait for denizens of the learning organization.

When Senge wrote *The Fifth Discipline* in 1990, he laid out the basic ingredients of any such organization, as he defined it. The five disciplines (the fifth is no more important than the rest; Senge just thought *Fifth Discipline* was a nifty-sounding title): systems thinking, personal mastery, mental models, shared vision, and team learning. To radically oversimplify his work, his precepts boil down to the assertions that people should put aside their old ways of thinking (mental models), learn to be open with others (personal mastery), understand how their company really works (systems thinking), form a plan everyone can agree on (shared vision), and then work together to achieve that vision (team learning). That's the skeleton version of a substantial body of work.

None of these concepts are new, but Senge created something powerful by putting them together. Regrettably, on their face the ideas can seem abstruse. Says Stan Davis, a consultant who agrees with many of the principles in Senge's work: "Only a small percentage of the huge number of people who bought the book have read it, and only

a small percentage of those have carried out its ideas." To make the learning organization more accessible to seasoned managers, never mind Joe Lunchpail; Senge and a number of consulting colleagues this June published *The Fifth Discipline Fieldbook*, a much more hands-on work. So far the *Fieldbook* has sold over 70,000 copies, not in the same class as a Tom Clancy blockbuster but in the business world a bestseller.

One thing the *Fieldbook* makes clear is that anyone who wants to be part of a learning organization must first go through a personal change. In particular, if you're the kind of individual who likes to tell people what to do and who is too busy to listen, you must be willing to change yourself. Senge can help. He and his people teach an elaborate set of personal-awareness exercises with names like dialogue, the container, and the ladder of inference (see diagram). But changing people isn't easy, and even Senge knows it. He jokes: "Someone once said the only time paradigm changes occur are at funerals."

Once you've shifted your personal paradigm, Senge says, you must master something called systems thinking, a scientific discipline that helps you understand how organizations work. In 1978, Senge received his Ph.D. at MIT in systems dynamics, a field created some 40 years ago by Jay Forrester, an MIT professor who not only was Senge's mentor but also holds the patents on random-access memory (RAM) computer technology and was instrumental in founding Digital Equipment. Senge believes systems thinking can help people under-



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stand complex interactions of business systems—how, say, marketing, manufacturing, and finance all affect one another. If you explained systems thinking as an equation, it wouldn't be A causes B, but A causes B while B causes A, and both continually interrelate with C and D.

Understanding systems thinking is about as easy as changing your personal paradigm. Says Forrester: "It's like any other discipline, such as law and medicine. You can't learn how to do brain surgery in a three-day seminar."

**T**HE OUTSIDER, faced with such a formidable field to master, might ask, Why bother? Senge argues that the very future of the planet hangs in the balance. On a crisp, breezy September afternoon, sitting in his MIT office overlooking stiff white sails clipping along the Charles, he makes his case: "We live under a massive illusion of

separation from one another, from nature, from the universe, from everything. It's the great liability we've inherited from the Industrial Revolution back through the Reformation. The last 2,000 years of Western culture has been one massive, long, forced march towards increasing fragmentation, toward increasing separation. And that can't continue because we're basically purchasing our standard of living at the expense of our long-term sustainability. We're depleting the earth and we're fragmenting our spirit.

"The symptoms," says Senge, "are pollution, anger, the fear. Our society is pervaded by fear and by the management of impressions. Everything in our culture is about the management of impressions and appearances, from physical fitness to the way we dress. And yet on another level we know it's all bullshit. The things we value in our lives, the people we value in our lives, have nothing to do with appearances. And yet we spend our lives attending to appearances. Company

CEOs spend 90% of their lives making their companies look good for investors, not being good. Managers spend their lives making their little departments look good, not working for the good of the company."

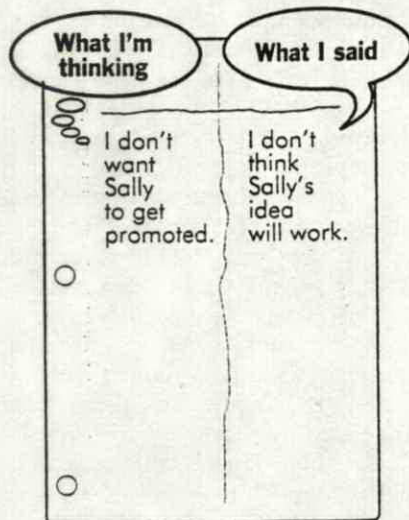
Strong stuff, and apparently quite appealing to people looking for answers with a capital A. That worries Senge. Some participants at the Bretton Woods conference seemed, no doubt about it, very New Age—given to mellow piano music, experimental theater and dance, public explorations of one's most personal feelings. A not untypical statement at the conference: "It's all part of the hologram, and we are whole within it." You might say this was quoted out of context, but just try putting it in context. When asked by this reporter whether she was New Age, one attendee replied: "Well what age would you want to live in?"

Does Senge think his movement is New Age? Asked directly, he replies: "The term

# TOOLS OF THE LEARNING ORGANIZATION

### The Left-Hand, Right-Hand Columns

By writing down in meetings what you really think, you can get in touch with personal biases that get in the way of real work.



### The Ladder Of Inference

Climbing down the ladder helps you discover why you behave the way you do, and thus can keep you from jumping to dangerous conclusions.

I take **ACTIONS** based on my beliefs

I adopt **BELIEFS** about the world

I draw **CONCLUSIONS**

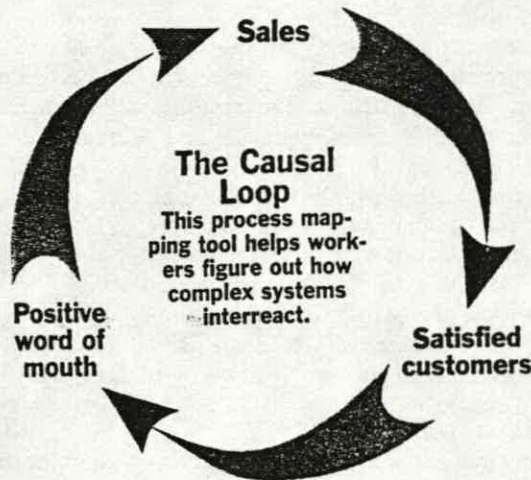
I make **ASSUMPTIONS** based on the meanings added

I add **MEANINGS** (cultural and personal)

I select **DATA** from what I observe

I **OBSERVE** data and experiences (as a videotape recorder might capture them)

**The Container**  
A container is an imaginary, safe place for people to put their anger and fear during meetings. It helps depersonalize conflict and thus diffuses tension.



# BIG THINKERS



MICHAEL ARBAISON

**Fred Simon (standing nearest steering wheel) championed the learning organization at Ford. The approach helped his Lincoln team—but he thinks it was a factor in his early retirement.**

carries a lot of baggage, but yes, Deming always talked about a new economic age. That was his term, and he said that the principles by which success is going to be determined in this new economy will be different. So it's New Age."

Still, Senge fears that being tarred with the New Age label will hurt the careers of those pioneering managers trying to spread the learning organization within their traditional corporations. But maybe Senge worries too much. Says Ford's Simon, a big Senge fan: "Anybody who comes into my office doing a folk dance is fired."

Metaphysics aside, how do learning organization principles work in the terra firma of corporate America? Those who have applied them are impressed. When GS Technologies, which makes steel for mining machinery and mattress coils, turned to Senge in 1990, the company was in deep trouble. Its market was eroding, labor relations were hostile—485 outstanding worker grievances were on file—and head count had been reduced from 5,000 in 1980 to 1,000. CEO Robert Cushman began receiving hate mail every day. Says he: "We had run out of ideas. It don't get no worse."

Around that time, GST asked to join Senge's MIT group and set out on a long,

painful path toward becoming a learning organization. William Isaacs, a senior research associate at the center, had the job of helping GST find out what was at the bottom of all the hostility. He began with a learning organization approach called dialogue, aimed at redressing what Senge believes is an oppressive corporate code of silence. "I believe we suffer every single day in every single business meeting we go to," says Senge. "Part of us is getting killed, is really getting torn apart, but we all live in it, we can't talk about it, we can't even name it. Once people experience what a good conversation can be, they can't believe it. The German poet Goethe said, 'Conversation is the most sublime of human experiences.' And it's true, there's no greater joy."

**O**NE DIALOGUE TOOL the GST people found particularly effective is called the container. The idea is for people in a meeting to imagine a container that holds everyone's hostile thoughts and feelings. As everyone speaks out, putting their fears, biases, and anger on the table, the hostility becomes neutralized; it sits there in the middle of the meeting room in a safe place for all to observe and discuss.

The first time GST used the container, in June 1991, the whole program nearly exploded. Isaacs put 35 managers and union leaders in a room for two days. After a few hours of chat, Isaacs encouraged everyone to express their true feelings, to put what they really believed in an imaginary container for everyone to see and discuss. Before long, the union representatives got hostile, saying this was just another management program to co-opt their power and that management never listened. The managers responded by saying, "That's just what we expected you to say. It's a typical union response."

After the union said management was stupid, and management accused the union of being lazy, Phil Yantzi, a shop steward, exploded in a stream of expletives: "This is the same old @\$% crap I've been hearing for 20 years!" CEO Cushman described the scene as being like a hot caldron of steel where all the hostility was bubbling over.

The meeting nearly broke up at that point, but after both sides slept on it, the participants gathered the next morning and, with the help of Isaacs, discussed why they had become so mad. The group concluded that it was because neither side was really listening. That both sides brought many long-held preconceived notions to the meeting that got in the way of effective discussion. The air cleared, and the two sides were able to put their minds together and begin to solve some important productivity problems.

GST, says Senge, provides a good example of the benefit of creative conflict in the workplace. "The key to unlocking real openness at work," he says, "is to teach people to give up having to be in agreement. We think agreement is so important. Who cares? You have to bring paradoxes, conflicts, and dilemmas out in the open, so collectively we can be more intelligent than we can be individually."

Since GST started trying to be a learning organization, the private company has not only skirted bankruptcy but has watched its sales and profits increase dramatically. But last spring the effort suffered a heavy blow. In retrospect, management says it made the mistake of not spreading the program fast and deep enough. Workers left out of the dialogue grew suspicious and fearful. John Cottrell, the labor leader who had spearheaded learning-organization ideas at GST, was voted out, and the new union leadership, headed by Steve Morrow, passed a motion banning Senge's dialogue from the shop floor. Says Morrow: "Dialogue got different union people to say different things at different times. When you're not speak-

ing with one unified voice, the company can see a split and take advantage of it." CEO Cushman remains devoted to the learning-organization ideal but admits that making it a reality across his company will now take longer.

**S**OME BRAVE SOULS at Ford Motor who have been using learning-organization principles in their division also met resistance—this time from management. Fred Simon, project manager on the new Lincoln Continental, slated for launch by the end of this year, was recently passed over for promotion and was asked to retire early. Whether Simon was done in by jealous peers or was a victim of a major reorganization at Ford isn't clear. He speculates, however, that his fate might have been different if he had taken the time to explain the benefits of the learning organization to key people in the top ranks.

The story Simon would have told them is impressive. His team broke by a wide margin nearly every internal product development record at Ford. Quality defects in the Lincoln prototype were 20% lower than usual for a new car, enabling Simon's team to return some \$65 million that had been budgeted for fixing engineering glitches prior to launch.

Another thing Simon might have explained to his bosses is that at first this learning-organization stuff creates a lot of chaos. When building a new model, a process that takes at least three or four years, automakers typically expect 150 or so engineering problems to be outstanding early in the design stage. Simon found he had over 500. One of his colleagues went to top management, who wanted to know how the Lincoln was going, and said: "If green is go, and yellow is caution, and red is danger, Simon's project is purple." But Simon felt he was on the right track, hoping to solve more problems earlier in the process and therefore avoid costly rework at the end.

Creating chaos isn't as easy as it sounds. In Ford's culture, says Simon, most engineers are afraid to admit they have a problem. They fear people will think they don't know how to do their job, and they dread interference from others who think they know the answer. So they hide the problem, often until it's too late, and that can hold up the whole car design.

To get engineers to discuss problems openly, Simon used tools like the ladder of inference, developed by Senge's colleague at

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MIT, Chris Argyris. The ladder forces people to push aside beliefs that get in the way of work—like never, ever tell the boss there's a problem—and get everyone talking openly about what needs to be done, no matter how serious the snafu. At the top of the ladder is a rung labeled "I take actions based on my beliefs." The bottom rung is observable data and experiences. In between are rungs identifying the steps that lead from data to beliefs: "I draw conclusions," "I make assumptions." The goal is to move people down from the top rung, away from the biases and deep-seated beliefs that keep them from focusing on the bottom rung, the real business problem.

After months of going through the exercise and a lot of screaming, Simon's people began to realize that raising problems was okay. The new openness let them work together more effectively. Simon knew they were ready for next element of the learning organization: systems thinking.

An example of systems thinking Ford used is an idea called the tragedy of the commons, from an essay of that name by

ecologist Garrett Hardin. The idea is that given unrestricted access to shared town commons, farmers would graze too many sheep there, ultimately depleting the grass and ruining grazing for all. Since no single farmer felt any incentive to reduce the number of sheep, everyone suffered. At Ford, Simon found that the engineers who designed the air conditioning, the headlights, the power seats, and the CD player, all working separately, had each made their component such that when used simultaneously they would drain the car battery. That was Ford's tragedy of the commons.

**I**N THE OLD SYSTEM, engineers from the different departments would likely be fighting with one another over who should make the design sacrifice.

After weeks and months of bickering, they'd eventually come to an impasse and have to go to their boss, who would tell one

**"I believe  
we suffer  
every single  
day in  
every single  
business  
meeting  
we go to."**

department to make the sacrifice. The engineers who had to give in would often feel like losers.

Because Simon's engineers understood the tragedy of the commons, they put their heads together and came up with a solution: Raise the car's idle to increase the battery's charge. Of course that lowered fuel efficiency, and the

engineers in charge of that didn't particularly like making such a sacrifice. The difference this time was that the problem got solved quickly and, because it was clear the change was made for the good of the car, no one felt like a loser. Says Simon: "The tragedy of the commons helped us avoid a great deal of political posturing and a great deal of lost time."

Another pioneer, Federal Express, found that attempting to become a learning organization helped it boost the intellectual capital, agility, and resourcefulness of its sales force. The company, which joined Senge's

center at MIT in 1991, is conducting a pilot program for its sales force, which it started two years ago.

Twenty salespeople, who handled some of Federal Express's biggest and most important accounts—GM, American Express, Motorola—spend a couple of days every other month studying the same learning-organization tools that helped Ford and GST: dialogue, ladders of inference, containers, and systems thinking. How big a difference have they made? Customers say that these salespeople are much more attuned to customer needs, don't jump to conclusions so readily, are more willing to hear a customer out, and understand customer dilemmas better. Top managers at FedEx have been so impressed with results that they are rolling out these concepts to more of the sales force.

This spring, Cathy Stopczynski, a FedEx salesperson, used the learning-organization concept to work out sticky problems with one of her customers, Boehringer Mannheim Biochemicals, a German company with U.S. offices in Indianapolis. The com-

pany was getting exasperated by FedEx's service. BMB, as it's called, complained that the courier was taking too long to deliver some of its biochemicals, and the shipments were being ruined. The problem seemed simple, but each side felt frustrated that the bureaucracy was getting in the way of a solution. Says Stopczynski: "I kept asking people at FedEx to help me solve the problem, but they kept saying no."

**D**ESPERATE, Stopczynski told the BMB people about systems thinking and how she thought it might offer a way out. From each company she gathered 25 people from customer service and operations, and convened a series of two-day meetings in Indianapolis and Memphis. Says Patricia Walls, a human-resource manager at Federal Express: "By looking at the problem as a system, they got out of the mode of blaming and finger pointing."

After the group mapped the delivery process using a systems tool called causal loops, it came up with a simple but elegant

solution. FedEx found four points in the package's route where delay was most likely to occur and set up a team of FedEx employees who would immediately notify BMB of the delay and then send the package back to BMB's Indianapolis offices to be repacked with fresh dry ice. BMB estimates that it will save \$1.3 million a year by cutting down on spoiled deliveries and will gain untold amounts in customer good will. Says Rick Conway, a BMB manager: "The team accomplished in two days what Cathy and I hadn't been able to do in two years."

Is the learning organization the answer, the next stage beyond TQM and reengineering? Senge acknowledges that this won't be clear for some time. "If it isn't working, we should stop and do something else. If as many people are starving in the world, if the environmental problems aren't changing, if businesses aren't able to fundamentally serve people better, then we should do something different." Let others accuse him of being Messianic. He knows that occasionally even the gospel may require some editing. **F**



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# Mentoring: A New Model for Building Learning Organizations

*Beverly Kaye and Betsy Jacobson*

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**F**or those organizations wishing to nurture and grow their talent, mentoring programs are nothing new. Be it an informal practice or a formal program, some type of mentoring activity takes place in nearly every organization. Protégés observe, question, and explore; mentors demonstrate, explain and model. Some employees link up with executives who share and facilitate; others never forge a relationship of value. Many organizations leave the mentoring relationship to chance. Others try to formalize it, forcing or recommending a multitude of relationships.

This article offers a new approach, one which builds on the inter-connectedness of some time-tested theories, as well as on some newer assumptions found in the literature on organizational learning. Based on the premise that our old mentoring program need rethinking, we recommend a new way of approaching mentoring that promises more systematic and substantial results.

## **Assumptions Up Front**

An underlying reason for the apparently random nature of mentoring seems to be the inability of many organizations to clearly define the assumptions they have about this subject. What notions do we have about people and organizations that underlie our mentoring efforts? What are the business drivers for it? And, what are the components that make for success? Finding the answers to these kinds of questions, for us, is the first step toward reducing randomness and anchoring mentoring in understood perceptions and values.

When we examined mentoring successes and failures, as well as theories about best practices, some important lessons emerged. These learnings are the building blocks we've used for reframing mentoring in a way that addresses past problems and enhances the learning opportunities (both individual and organizational) that are inherent in any mentoring effort.

Some of the more important building blocks we found are these:

- **Deliberate learning is the cornerstone.** The mentor's job is to promote intentional learning, which includes capacity building through methods such as instructing, coaching, providing experiences, modeling and advising.
- **Both failure and success are powerful teachers.** Mentors, as leaders of a learning experience, certainly need to share their "how to do it so it comes out right" stories. They also need to share their experiences of failure, i.e., "how I did it wrong". Both types of stories are powerful lessons that provide valuable opportunities for analyzing individual and organizational realities.
- **Leaders need to tell their stories.** Personal scenarios, anecdotes and case examples, because they offer valuable, often unforgettable insight, must be shared. Mentors who can talk about themselves and their experiences establish a rapport that makes them "learning leaders".
- **Development matures over time.** Mentoring — when it works — taps into continuous learning that is not an event, or even a string of discrete events. Rather, it is the synthesis of ongoing events, experiences, observations, studies, and thoughtful analyses.
- **Mentoring is a joint venture.** Successful mentoring means sharing responsibility for learning. Regardless of the facilities, the subject matter, the timing, and all other variables, successful mentoring begins with setting a contract for learning around which the mentor, the protégé, and their respective line managers are aligned.

**The new mindset requires expansionist thinking; a broadening and deepening of the issue so that mentoring encompasses groups of employees led by organizational veterans who themselves are tied together with the line managers responsible for the protégé's day-to-day supervision.**

### Who's Minding the Mindset?

Operationalizing these learnings, of course, is another matter. In fact, for most organizations implementing these principles will require a shift in the collective mindset. It also will require building the capacity for organizational and individual learning.

In the past, the mindset for developing mentoring programs was reductionist. The issue of employee development was paired down until it settled into a one-on-one experience between mentor and protégé. The new mindset we're proposing requires expansionist thinking; a broadening and deepening of the issue so that mentoring encompasses groups of employees led by organizational veterans who themselves are tied together with the line managers responsible for the protégé's day-to-day supervision.

Expansionist thinking of this sort will position the mentor as a "learning leader". They won't be seen as a tutor, but rather as someone who works with a group of junior employees in ways that increases their learnings. In this regard, the mentor of the future will work with a learning group of about six employees, so that people who are peers (possibly across functional lines) can learn from each other as well as from their mentor-learning leader.

Protégés in the learning group will be those who are ready to learn from both the group and the learning leader, and they will be ready for the development assignments created to assist them in testing new ideas and insights in practice. They also will be "high per-



forming learners", people whose capacity and potential enables them to grow through a learning group experience.

A crucial new component in our model is the "development-minded manager" who has ongoing responsibility for the employee. This type of manager is necessary to complete the network of human resources whose commitment to learning — individual and organizational — is vital to creating this new mentoring process. With the inclusion of employees, their managers, and veteran organizational executives, the mentoring effort moves toward a systems approach to learning.

### **Senior and Seasoned: The Mentor/Learning Leader**

The ideal mentor/learning leader is someone who is a senior on a technical or management track, preferably someone from the general manager or director level, and someone who also is concerned with their own learning, the learning of others, and the future of the organization.

The experience which the learning leader brings to the learning group needs to be both broad (encompassing a variety of organizational settings) and deep (encompassing a variety of organizational levels). This allows for insight built from having "been there."

Specific components of the ideal learning leader's track record include:

- Success in one's field
- Contact with a wide network of individuals

- Vast accumulated experience
- Substantial personal or positional power, or both
- A history of fostering development of employees
- Control of substantial resources
- Broad organization knowledge
- Success in managing teams
- A reputation for technical or functional competence

In addition, a number of personal attributes serve the mentoring/learning leader well.

- An ease in being in groups.
- An incisive and quick mind, one which allows the learning leader to cut to the heart of discussions
- The ability to help a group reach the essence of an issue rather than skate along the edge of it
- An emotional openness which prompts speaking from the heart, as well as the head,
- An ability to share with the group in a manner that is viewed as caring and candid
- A sense of humor that enables the learning leader to set a lighter context when relating past experiences that may have seemed devastating at one time.

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At times, however, the learning leader will need to be a skilled socratic teacher who can question and prod individuals in the group to consider instances and issues and arrive at their own conclusions.

Storytelling is a crucial learning leader skill. For this, the leader needs to be able to "tell it-like-it-is" when it comes to the behind-the-scenes aspects of organization decision making. This they do by sharing their own personal feelings as the tale is artfully spun. For

junior employees, each story is an important example. A skilled storyteller can recount experiences in a way that offers up the best example for illuminating an issue at hand.

Sensitivity to diversity also is crucial for learning leaders. On occasion, they undoubtedly will be from very different backgrounds than some of their group members. They will need to approach issues of diversity with candor and understanding, when differences related to gender, race and/or ethnicity might be an issue within the group or in group members' understanding of the organization.

Last, the learning leader needs to be able to pass on an appreciation for paradox that comes from being a savvy insider. Life — inside and outside of organizations — is neither rational nor formula-driven. Often it is not even goal-driven. It is full of competing and conflicting demands. Consequently, as we learn more, we may not know more at all. This kind of awareness and acknowledgment can help more junior people to deal with the ambiguity that prevails just when they thought they "got it!"

### Functions

At base, the crucial shift our model offers is this: In the new mentoring model, learning leaders are **partners** rather than **patriarchs**. As experienced organizational veterans with information and knowledge to offer, our members act as facilitators of group learning and guides for group growth.

In particular, the functions of our learning mentors fall into five categories: guide, ally, catalyst, savvy

insider, and advocate.

**Guide.** By definition, a guide shows the way. He or she never is so far ahead that their followers lose sight of him or her. The guide leads by pointing to opportunities and pitfalls. In no way do they make the individual's decisions.

In the guide function, the learning leader may act as a coach. As coach, the learning leader draws on his or her strategic view of the organization to help others reflect on their attitudes, skills and patterns of behavior as they develop in their current position and their careers.

The effective guide, in part, is a Socratic teacher. Such teaching is particularly popular in law schools. The key is to ask questions that challenge group members to think, analyze, and probe for meaning. The learning leaders encourages, first by probing for group members' thoughts and then by leading them to their own ideas and conclusions. As a result, the group learns how to learn from experience.

**Ally.** An honest ally is essential for a protégé's growth. An ally should be able to appraise behaviors and to demonstrate how others perceive them. When the learning leader acts as ally, individual members of a mentoring group gain a clear view of their strengths and weaknesses.

One function of the ally is as a sounding board. This means listening actively, empathetically, and intelligently. A sounding board provides a risk-free environment for those who want to vent frustrations, share difficulties, and seek out other perspectives.

An ally is a straight talker. This is a highly caring

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role, but it is rarely an easy one to fill. The straight talker is neither critic nor judge, but is a candid and honest friend. This role requires the learning leader to provide specific feedback and personal impressions — favorable and unfavorable — to support an individual's personal growth. Most people never have the opportunity to receive that kind of feedback.

**Catalyst.** A catalyst is the outside force that inspires action. The leader who acts as a catalyst typically says, does, or demonstrates something that becomes the spark to ignite their protégé's initiative.

As a catalyst, the learning leader helps the group see in a new light a vision of the organization and of their futures. She or he helps them look at unanticipated possibilities that they can make happen — rather than concentrating only on what they expect to happen. The catalyst can also be a creative motivator. He or she focuses on stimulating group members to discuss impressions, ideas, visions, and creative concepts that are outside the context of their current work.

**Savvy Insider.** The learning leader is someone who has been around long enough to have "intuitive" knowledge of how things really get accomplished in the organization. She or he knows which avenues really are available for achieving individual goals.

As savvy insider, the learning leader acts as a connector — a kind of a broker who links their protégés with people in the organization who can enhance their learning. The savvy insider is also an information provider. Informal organizational information that comes from an insider's experience helps protégés check the reality of their own perceptions, goals, and plans.

**Advocate.** As group members learn, they begin to see themselves as empowered to propel their own growth and develop their own plans. As they work through that process, the learning leader can help by creating opportunities for specific learning experiences.

One way the learning leader can carry out the advocate function is to champion the ideas and interests of his or her protégés so that the group members gain visibility and exposure. The learning leader is in a good position to capture others' attention and can often do it effectively to benefit group members. Similarly, the advocate

functions as a powerful voice. In this role, the learning leader brings group ideas to the people in the organization who have the authority to implement them.

### **Protégé Activities — Partners in Empowerment**

**Group Composition.** The ideal learning group is comprised of five to seven "high performing learners." These are protégés who have a bright future because they are seen as making important contributions to the organization now and in the future. Typically, their names already are found on succession and continuity planning lists. They have expertise — be it technical or managerial — the organization does not want to lose.

In selecting high performing protégés for a learning group, it is important to consider the interaction and synthesis of the group as a whole. Diversity — among position levels, functions, gender, race, and career goals — serves several purposes. First, a di-

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verse learning group creates a singular opportunity for group members to learn the perspectives of different positions and areas of the organization. Second, it establishes an occasion to build an ongoing peer network that encompasses people who are in contact with a rich variety of organizational sub units and functional work areas. Third, with particular regard to a mix of race and gender, valuable interaction is more likely when everyone in the group does not think alike. Gaining an understanding of different perspectives is as vital to the development of group members as is gaining an understanding of the organization's funding. An important caveat to note, however, is that the diversity objective in a small group generally can be achieved only through deliberate selection. The outcome is not left to chance; it is contrived. This needs to be recognized up front.

### Starting A Group

How do protégé learning groups get going? And how do they really work?

To start a group, prospective mentors need preparatory training about roles and responsibilities. They need to learn where they "fit" in the organizational lives of their protégés — in relation to others in the group and in relation to the protégés immediate managers. Additionally, most learning leaders need some encouragement and practice in the area of storytelling before they can pass on their own experiences in a way that is open, reflective, and "learningful."

They also need to learn about the concept of dialogue as a way to interact in group meetings. In par-

ticular, they need to understand the difference between dialogue and discussion, both of which will be prevalent in learning groups. Peter Senge, author of *The Fifth Discipline: The Art and Practice of the Learning Organization* (1990), has studied the differ-

ences. Dialogue, he says, is "the capacity of members... to suspend assumptions and enter into genuine 'thinking together.'" The goal of discussion, on the other hand, is to make a decision.

Mentoring groups need dialogue because it sparks the creative and free-flowing thought that allows them to share insights and search for meaning.

Dialogue goes beyond any one group member's understanding. According to

Senge, dialogue produces learning when a group begins to see how organizational interactions can undermine people's capacity for breakthrough thinking. A learning group seeks the kind of creativity that dialogue can inspire.

Through the dialogue process, and other group activities that are part of the new mentoring model, mentors learn how to learn from experience. They may be from different areas within an organization. They may not be working toward the same goals on the job. But, when they come together as a group, each protégé must be encouraged to the enhanced thinking that the dialogue process brings about.

Together — with the guidance of the learning leader — group members explore relevant issues and share ideas and experiences. In the process, they increase their capacity for innovative thinking. They do not make decisions.

A learning group typically meets together with the

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learning leader once a month for several hours; again it is important to think in terms of expansion rather than reduction. The learning group agenda is one that is free form and can accommodate any number of topics or concerns. Its process also is free form, in that dialogue and direction can be initiated by anyone in the group. The leader and members share responsibility for the learning every step of the way.

The learning leader is bound to have some qualms about heading a group where format and agenda have little place. After all, learning leaders are people who are accustomed to groups that are problem-driven and task-oriented. They are comfortable in situations where they are responsible for making something specific happen. The idea of shared responsibility for learning moves away from the familiar patriarchal model of relationships to a peer model; and its direction may seem haphazard and vague. Learning leaders need to be convinced that dialogue — a chance to meander, tell stories, exchange concerns and discuss beliefs — has legitimacy and value. And, that dialogue takes one to a higher level of thinking.

For those who have participated as Learning Leaders, this has been eye opening for them. A strength of one-on-one mentoring has been its ability to address individual needs and thoughts as they evolve, in a free-flowing manner with not set agenda or plan. Through dialogue, this continues to be a strength of learning groups.

Empowerment doesn't just happen without help. Groups don't "cleave" without time. Learning Group Members need to make time available for the learning group (without the learning leader) to pull together

and identify its agenda. This is essential in launching and structuring a successful program. Without this independent time, groups can fall back into the "you tell us" mode of operations that is the antithesis of this model.

### **Protégés Back on the Job: The Trench Connection**

It is all too natural for learning group members to slip into a mentality that says, "For these few hours I discuss neat things with interesting people, but then, I go back to my real job." The temptation is to separate the learning group's dialogue from day-to-day work. However, if the learning group is aimed at nurturing the development of its individual participants, each of them need to be experimenting back on the job in ways that link their group dialogues with their work experiences. The fact is, the real learning begins when the protégés go back to their jobs and take on new challenges. It continues when they return to discuss the meaning of those experiences.

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Participants in learning groups have no problem finding challenging new opportunities on the job, and now they have a place to converse about what those opportunities are teaching them. Again, however, a key to the group mentoring process is making the learning deliberate — in this case asking group participants to take on specific development assignments that give them growth opportunities in their workplaces. In this context, three types of assignments should be available:

1. **Platform Assignments.** These are assignments

that allow group members to tryout parts of other jobs — through temporary assignments or short term projects — in order to experience a range of competencies.

2. **On-the-job Assignments.** These are assignments that enable group members to try out new skills and responsibilities while remaining in their current position.
3. **Dedicated Assignments.** These are assignments by which group members are reassigned to a different area of the organization where they will get new exposure and experience.

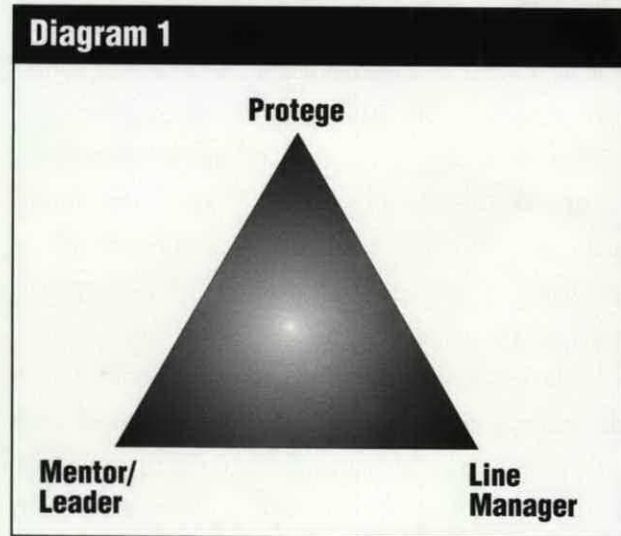
No matter the assignment type, each protégé must be accountable for the work being done. They must live by and with the consequences that go with that responsibility and challenge. In this, the learning leader plays the role of advocate for experimentation.

### The Role of Line Managers

Since learning group activities go far beyond what happens in regular group meetings, it is crucial for the line managers of participating protégés to be committed to the success of the process and prepared to assist in a variety of ways.

Without question, a 1/2 to 2 day orientation of these managers is advisable. In this orientation, line managers should be led through a number of activities to teach them how to help their employees think through the creation of development assignments. They also should explore, in depth, their roles in facilitating development conversations and providing honest feedback.

Whatever the training, it should produce a more "development minded" line manager, someone who is able to be the crucial third component in our new



mentoring paradigm. Line managers are essential, ensuring the learning process by encouraging on-the-job exploration while also monitoring continued responsibility for performance. These managers fulfill a stewardship role in terms of day-to-day direct authority and capacity building, while learning leaders provide a broader and longer view that creates a window to the future for high performing learners. Diagram 1 illustrates our triad, and it's essential interconnectedness.

Among the line managers more important responsibilities in our new model are:

1. Providing personal feedback to learners concerning the values and mindsets they may be defining during group meetings;
2. Cultivating individual abilities both for the current job and for future opportunities;
3. Supporting and designing learning assignments in partnership with the learning leader and the protégé;
4. Endorsing experimentation in a way that applauds new approaches and permits the possibility of mistakes;

**The line managers are essential, enriching the learning process by encouraging exploration on the job while monitoring continued responsibility for the job.**

5. Asking questions — lots of questions — to encourage discussion of what is being learned and how.

### **In Sum: Sharing the Gain**

This new mentoring model can be effective only if each of the key stakeholders treat the effort as a three-way partnership. The learning leader is not the only person with responsibilities in the process. Group mentoring requires a learning partnership that incorporates a range of organizational elements and calls for broad-based commitment.

Learning groups team up learning leaders and protégés. But the work of those groups also must be fully integrated with the work of the rest of the organization. In this context, line managers have vital roles to play alongside protégés and their learning leaders.

The shifts in thinking that allow us to reframe mentoring can — and should — have implications well beyond this particular frame of reference. Those shifts can be summarized as follows:

- Thinking of mentoring as a three party effort, rather than a one-on-one "arranged marriage."
- Thinking of a mentor as a learning leader who facilitates a learning process, rather than as guru who passes down "the word" to a favored individual.
- Thinking of growth as the acquisition of attitudes and capabilities, rather than only the acquisition of skills and behaviors.
- Thinking that development is enhanced by open dialogue and free-form thinking, rather than limited by discussion guided by a set agenda.
- Thinking of developmental assignments, rather than

future promotions, as a way of synthesizing thoughts about next steps in the organizations.

- Thinking of high performing leaders who are supported in taking responsibility for their own learning, rather than protégés who ask their mentors to take charge.

The power of these new mindsets for mentoring will payoff for the organization. Not only

can we expect the outcome of ac-

celerated growth among high

performers, we also can

expect them to develop

networks of peers who

can count on each other

now and in the future as

they find creative ways to

align themselves across unit

boundaries. We also can expect a

widening group of individuals — protégés,

learning leaders, and line managers — who understand the power of intentional learning and its influence on organizational health. Key concepts like "intentional learning", "learning groups", "learning assignments", and "development-minded management" are appropriate for encouraging increased organizational effectiveness. While they may be initiated through a group mentoring program, they can carry over to many other endeavors.

There are significant challenges (areas where usual practices may need to change) involved in operationalizing the learning group concept of Mentoring. And these challenges pose questions for all partners in the process. For example:

• Can senior veterans slow down enough to pass on their stories?

• Can peers learn to compete with and support each other at the same time?

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- Can line-managers come to believe that employee development influences financial health?
- Can we realize that attitudes aren't just "personality", but are relevant to success?
- Can reflection on assignments become a measure in performance reviews?

The organizations that — as an alternative to one-on-one mentoring — are beginning to experiment with a model like the one we've described are finding many more questions to be asked and answered. However, since the process celebrates ongoing learning, it is appropriate that some questions are not answered too readily. We learn as we continue to stretch. As we reach for more answers we also continue to add new questions.

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**Beverly Kaye** is a management consultant with over 20 years experience and a specialty in Career Development. She is President of BDA, a consulting organization, and the co-founder of Career Systems, Inc., a career development publishing company. Beverly is a long-standing member of NTL.

**Betsy Jacobson** is an international management and organizational development consultant with her own firm based in San Diego, California. She is a sociologist with an advanced degree in business and management. Betsy has experience in both the private and public sector. She provides a wide range of consulting and training services which include: career and life planning, leadership and executive development, and consultation in processes for learning, organization change, functional and cross functional team development and service management.