

# IMAGE

AN ACTION RESEARCH JOURNAL  
ON  
PERSONAL AND ORGANISATIONAL TRANSFORMATION

THE INSTITUTE OF CULTURAL AFFAIRS and LENS INTERNATIONAL

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## IMAGE

### AN ACTION RESEARCH JOURNAL ON PERSONAL AND ORGANISATIONAL TRANSFORMATION

The Action Research Journal is written to communicate designs, formats and ideas of transformational processes which promote the human factor in private and public sectors. It is published by the Corporate Services Division of The Institute of Cultural Affairs: India for distribution through the Asia Network of ICA and affiliated organisations. These include ICA: India (Bombay, Panvel and Pune), LENS Services Pvt. Ltd. (New Delhi), LENS International Malaysia Sdn. Bhd., ICA: Australia, ICA: Philippines, ICA: Taiwan, ICA: Hong Kong and LENS International Japan.

The Action Research Journal draws on a variety of sources including other ICA world-wide offices and affiliated professional consulting organisations to provide a spectrum of practical tools and constructs that facilitate individual and organisational transformation. We welcome comments and articles from our readers.

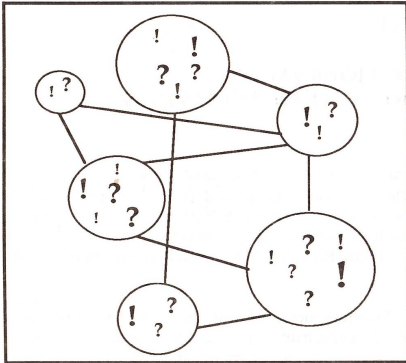
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#### "COLLECTIVE CREATIVITY"

##### TABLE OF CONTENTS

|    |  |   |
|----|--|---|
| 2  | Journal Overview                                 | An introduction to this issue   |
| 4  | Excel: "A Field of Dreams"                       | The history and culture of one Indian company that has capitalized on collective creativity   |
| 6  | Managing the Dream:<br>The Learning Organisation | Charles Handy describes the components and conditions for collective creativity   |
| 10 | Creative Programmes                              | A set of programmes and structures that facilitate creativity in an organisation. A chapter from Edward de Bono's book, <u> Serious Creativity</u>                  |
| 13 | Creative Infrastructure                          | Organisations can promote group creativity through consideration of infrastructure, from <u>The Fifth Discipline Fieldbook</u> , by Peter Senge                     |
| 16 | Creative Workplace Pioneers                      | Some examples of creative work environments, from <u>The Creative Spirit</u> , by Daniel Goleman  |
| 18 | Creating Together                                | The team approach to creativity describing four necessary roles, from the book <u>Creating</u> , by Robert Fritz  |
| 20 | The Millennium Organization                      | A description of the future of organisations that will enhance collective creativity. A chapter from the book <u>The Millennium Organization</u> , by Harrison Owen |

# JOURNAL OVERVIEW



Four and a half years ago we published an Image Journal on "Creativity and Innovation" (Issue #4). We focused at that time on a variety of ways individuals can become more creative and how innovation is the life blood of today's organisation. We are returning to this theme for this issue, but with the emphasis on creating together, building learning organisations in which groups of people build on each others' insights and capacities. We have titled this issue "Collective Creativity".

Over the years of our work in India we have conducted many programmes on creativity. Participants have enjoyed the sessions and have discovered insights into their own creative potential and learned methods of creative problem solving. We have taught de Bono's "Six Hats", and "Six Shoes" and lateral thinking. We have given people "A Whack on the Side of the Head" and keys to their "mental locks". We have played creativity games and opened up the right brain. But, when we have looked for how much these insights are applied in the workplace after the programme, the results are less than encouraging. Conclusion: teaching creativity to individuals to be applied in uncreative group environments is unproductive. So we have stopped doing these kinds of programmes.

In one sense, collective creativity is just one way to understand any organisation's operation. Unfortunately, most organisations are poor at harnessing the potential that comes from group efforts. Not only must organisations recognise the power of synergy that results from team efforts, they must actively develop the culture that will support creative risk taking. The trend has been to promote individual effort and reward individual risk taking in today's technology-driven organisations.

Business process reengineering (BPR), has focused many organisations around getting people aligned with the flow of value-added processes. But it has, at the same time, caused a serious cultural contradiction in which, after an extensive reorganisation and workforce reduction, people fear for their continued future employment. This pervasive fear dampens the creative spirit that exists for collective creativity. With unemployment facing all those who don't "perform" consistently, people tend to look after their self interest first, rather than work in a team oriented way.

My years as a chemist followed by my years with the Institute of Cultural Affairs (ICA), have given me an appreciation of contrasting individual and collective creativity. As a chemist I was expected to develop my own ideas and to diligently pursue their potential. There were times I felt creative and I got a lot of help from my fellow chemists. But it was not a collective creativity.

Work with the ICA, on the other hand, has been a continuous collective creative experience. We worked hard and conscientiously on developing both a climate that honored the individual gifts and maximised the collective potential. We seemed to thrive on impossible tasks and our history is full of stories of groups pulling off "miracles" in our human development projects. The keys seemed to be a deep abiding trust in the basic goodness of people and a willingness to risk together. Everyone felt that their role was critical to any success and all were honored before the entire group. The leadership expected people to create together and demonstrated it with their own style of non-authoritarian direction.

Today we are faced with seemingly "impossible" contradictions in our society. Racial, ethnic and religious differences are turning people into divided camps. One part of society exploits our planet and others try to stop them. "Haves" exploit "have-nots" and competitive markets turn our economic landscape into battlefields of "winners" and "losers". We desperately need to learn collective creativity on a global scale. A spirit of win-win needs to pervade every organisation and every institution. Creative breakthroughs for all of us is the need of the hour. Where to begin? Perhaps if we can foster this spirit of collective creativity within our organisations we can survive. If not, surely we will fail together.

## This Issue

Who ever heard of a multi-million dollar company headquartered in a old cattle shed? What company would have its Managing Director sitting at a desk near the entrance of the company that looks the same as the reception desk right next to it? What company would readily abandon profitable

lines of products to pursue untested market areas? What company would give workers permission to change production layout designs without getting permission from senior management?

This unusual company is Excel Industries, located on a busy street in the Bombay suburb of Jogeshwari. To enter into this facility is to enter a "field of dreams", still alive after more than 50 years of business started by a Parsi family named Shroff.

My wife, Judy, and I recently made a trip (pilgrimage?!) to this unassuming location and were struck by this environment of simplicity and truth. I found myself asking the question, "Would this company be where it is if it was headquartered in a sterile, modern glass office building (even one with neat cubicles and lots of plants) rather than this open-sided cattle shed?" Probably not. The building is a large structure, open to the air with four foot walls and a wooden beamed ceiling covered with Mangalorian tiles with clear tiles spaced to allow sunlight in. Old wooden support columns divided the interior space. The building is surrounded by lush vegetation and inside, green potted plants are scattered about. Clean, neat, very simple tables and chairs make up most of the furniture. The roof is equipped with temperature sensitive sprinklers that run water over fiber mats placed on the roof tiles to cool the building in hot weather. It is the original building the founder rented to start his dream. Newer modern buildings have been constructed by the company next to the "shed", but the company still rents this building and uses it as the headquarters.

We talked with the unassuming Chairman, K.C. Shroff for over an hour. His ideas for future projects were outlined on the blackboard next to his desk. As one chemist to another, we shared a common language and passion for the creative spirit inherent to this scientific discipline. Our conversation ranged over the possibilities for village-focused enterprise development and the role of tropical growing systems of photosynthesis. We listened to his vision of sustainable development systems for rural and urban India. One idea led to another. It was a magical conversation.

This meeting was the inspiration for this issue on "collective creativity". The lead article is the piece Excel Industries produced to celebrate their 50th year of existence. I have titled it Excel: "A Field of Dreams."

Charles Handy has become one of my favorite authors. He is a visiting professor at the London School of Economics and has executive experience in business. In this monograph, *Managing the Dream: The Learning Organization*, Handy shows that to achieve the change needed to survive in the 21st century, organisations will have to embrace a

powerful new theory, a theory of learning.

Edward de Bono has written many books on creativity and has pioneered in introducing new methods of thinking (like lateral thinking) to millions of readers. In one of his latest books, *Serious Creativity*, he examines the way in which creativity can be fostered in organisations. We are reproducing part of one of the chapters called *Creative Programmes*.

*The Fifth Discipline*, by Peter Senge has been a landmark book on learning organisations. Heavily theoretical, it has been followed by a very practical guide called *The Fifth Discipline Fieldbook*. In his introductory section Senge lays out the role of organisational infrastructure for the learning organisation. *Creative Infrastructure* is an excerpt from this part of the book.

A few years back, the Public Broadcasting Network in the United States broadcast a series of programmes on the Creative Spirit. They also published a book by the same name which highlights the main parts of the programme. From this book, by Daniel Goleman, we are reproducing a section from *The Creative Spirit in the Work Place*, which we titled *Creative Pioneers*. It is a series of examples of different companies around the world that have creative work environments.

Creativity in a team setting is what collective creativity is all about. *Creating Together* is a chapter from the book *Creating*, by Robert Fritz. He outlines the assumptions and conditions needed for collective creativity including the roles in the team that different people must assume to facilitate the process.

Finally we have a section of the chapter "The Millennium Organization" from the book by the same name, by Harrison Owen. Harrison is a good friend to many of us and has written extensively on the role of "spirit" in organisations. He describes five qualities that will be essential for organisations operating in the 21st century. These qualities will provide the working environment for collective creativity.

We hope these articles will inspire those who are building learning organisations to design their organisations in such a way that collective creativity becomes a way of life.

Jack Gilles  
Editor



# EXCEL: "A FIELD OF DREAMS"

*Where the mind is without fear and the head is held high: where knowledge is free...*

C.C. Shroff was a brilliant young scientist who passed up a scholarship to England to work on his dream for an independent India that would become self-reliant in the manufacture of its own basic chemicals. He rented a cattle shed in Jogeshwari and nailed up a sign that said Excel Industries and sat at his desk interviewing all those who wanted to sign up for the unknown adventure. His research laboratory was his own kitchen where he learnt to manufacture small useful things like margarine and face cream.

Since there was no licensing (especially to a colony), Shroff worked out his own technologies to produce hazardous chemicals that had been previously imported. Most of these turned out to be cheaper, simpler and as efficient as any, world-wide. He even offered the technology to his competitors, free! He set up manufacturing in England and gained market share because he wasn't driven to maximise profits, rather, profits were seen (and are seen today) as the result of service to a society. So prices were kept low.

His restless mind refused to be confined to the manufacture of a few products. As and when he perceived the need for a new chemical, he would figure out a way to make, to manufacture it and sell it and then move on to something else. The knowledge he gained was made freely available to the Indian entrepreneurs. At the time of his death in 1968, he had made over a hundred breakthroughs in the manufacture of industrial and agricultural chemicals. The sustaining culture lives on in the more than 3,000 employees that constitute the Excel family.

*Where the world has not been broken up into fragments by narrow domestic walls.*

Walk into any Excel factory and you will find an atmosphere of remarkable friendliness and informality. There is no bowing and scraping, no petty tyranny. If a worker needs to talk to a top executive there is nothing to stop him.

This lack of barriers is evident in small things, like the way managers and workers have their meals together or in the fact that Excel has not had a single strike in its 50 year history. And also in the manner that Excel nurtures the careers of its people. With the belief that different persons have different skills, Excel's policy is to provide an environment where each one can blossom. Manchu Warli's story is a case in point.

Warli was a poor tribal who joined Excel's Jogeshwari plant as a casual labourer. His lack of education couldn't conceal his intelligence. So he

was sent to work in the laboratory, where he helped mix chemicals and wash out retorts. His quick mind grasped the fundamentals of chemistry in no time. In five years he was working shoulder to shoulder with men who had done their Ph.D's. And in due course, when Excel exported a whole plant to England, Manchu Warli flew out with it as Chief Scientist.

There are many stories like Manchu's at Excel. Everyone who works there is given opportunities to learn, to grow and to discover their true potential. As C.C. Shroff liked to say, "Excel's people are its most valuable assets." And the most valuable are those who know that they can make a real difference to the world and to themselves.

*Where words come out from the depth of truth, where tireless striving reaches its arms out towards perfection.*

A few months after he had set up shop, C.C. Shroff received a frantic call from Stanvac, a large petroleum refinery. An essential chemical could not be imported because of the war. Could he do something? C.C. Shroff thought for a while, then said he could.

He set to work at once: researching, experimenting, streamlining processes, working day and night. Just four days later, he despatched the order. It was as good as the imported chemical and Stanvac was so pleased, it offered to pay a price much higher than normal. C.C. Shroff refused. His costs did not justify the higher price, and he would not take a paisa more than what he felt was due.

This is a pattern that has repeated itself through Excel's history: quick response to a customers' needs, with excellent products at a fair price. To overcharge customers or to give them shoddy goods - even in times of shortage - would be to compromise the integrity of the company.

Excel began as a small family business with a capital of Rs. 10,000, one product and a work-force of precisely three men. Today it has five plants, a turnover of more than 1,250 million rupees with exports touching Rs. 150 million, and a work force of over 3,000 people. It has developed over 125 industrial and agricultural chemicals and improved processes for many others.

All these successes would not have come without a constant effort to improve everything, including oneself. Apart from the research in the laboratory, Excel is researching and attempting to develop its entire organisation. In keeping pace with world-wide changes, new management systems are being tried out, processes are being streamlined.

Yet through all this, some things have stayed the same. Excel still retains the atmosphere of a family business - a vast family, whose members come from

every state in the nation, and who treat each other with affection and respect. Perfection may be an impossible goal, but it is definitely worth striving for.

*Where the clear stream of reason has not lost its way into the dreary, desert sand of dead habit.*

Excel's first product was zinc chloride, a chemical much in demand with the textile and dry cell industries. (It was manufactured from waste Zinc - thus setting a precedent for Excel's policy of converting waste into value).

Other products followed in quick succession: ferric chloride, sodium sulphide, phosphorous pentasulphide... more than a hundred.

Why so many? Partly it was because the country needed these chemicals. Partly, because of the sheer pleasure of solving problems, of making the chemicals everyone else thought were too hazardous. And partly it was because of an unwillingness to be tied down to only one product or process; a refusal to turn stale or complacent.

Excel has always been open to new ideas and opportunities. Its very factories have been designed so that they can easily change from manufacturing one product to something quite different.

The major change of direction was in 1956, when agrochemicals were added to Excel's list of products. For 15 years before, it had handled only industrial chemicals. So this was a difficult step, especially when conventional wisdom dictated diversification into dyes and other lucrative projects. But the country needed agrochemicals.

True to its tradition, Excel decided to ignore foreign knowhow and to tackle the sophisticated and hazardous products on its own. These include such difficult-to-produce chemicals as aluminium phosphide, endosulfan and glyphosate (only a couple of companies in the world make them!).

The results justified the decision. The superiority of Excel's agroproducts made farmers and formulators eager to buy, and today the company is among India's top producers of plant protection chemicals. Best of all, it helped usher in the green revolution. If today crops are blooming where none grew before, Excel can take some of the credit. The new signs of prosperity among farmers are all the more reason for Excel to continue doing unexpected things.

*Where the mind is led forward by thee into ever-widening thought and action.*

Everything is connected. In a country where many people go hungry, where the ecology is under ever-increasing stress, no one can afford to prosper in isolation. Excel has always come forward in times of need. When floods devastated Surat in 1969, it

helped the victims by building as many as 1300 flood-proof, low cost houses. And when famine struck Kutch in 1971, it helped the village women by marketing their skills in embroidery. These and other actions were responses to calamities, but there are also other on-going projects for slum-rehabilitation, community development, etc.

All of Excel's factories are centres of education, where locals from surrounding communities learn to better themselves. On the macro level, Excel is experimenting with a unique educational programme that can eventually reach almost 400 million illiterates.

Ecology, too, is a major concern. For the last twenty years, Excel has been studying the deserts of Kutch and has pioneered work in rain farming, watershed management and wasteland development. Amongst other activities, afforestation and the use of alternative sources of energy are being actively pursued.

It seems both logical and necessary to work in harmony with Nature. After all, as one of the largest producers of agrochemicals in India, Excel has an interest in seeing that the earth stays green.

*Into that heaven of freedom, my Father, let my country awake.*

A free, self-reliant India, a robust country which can stand proudly among the nations of the world - that is the dream which drove C.C. Shroff. "If it can be done elsewhere, it can be done here in India," he used to say, and he proved it.

Today, Excel is going beyond that dream, doing research to produce useful chemicals that have never been made elsewhere and by hitherto untried processes.

As in the past, Excel's main thrust will be towards fulfilling national goals. So it is consolidating its resources. Through backward and forward integration, it will reduce costs and add value to its products, bringing them within reach of the small, marginal farmer and small-scale industrialist.

Some of the new products Excel has ventured into are fire-retardant and water-treatment chemicals, organic soil improvers, tissue culture and speciality chemicals; all products, of which there are very few manufacturers around the world. So Excel will cater to both the domestic and the competitive export market as equals with the best.

Rabindranath Tagore's great poem (in italics) encapsulates Excel's own philosophy and aspirations. Through God's grace and our unrelenting efforts, what he prayed for will come to pass. Excel foresees a wonderful future for the country.

## MANAGING THE DREAM: THE LEARNING

In an uncertain world, where all we know for sure is that nothing is sure, we are going to need organizations that are continually renewing themselves, reinventing themselves, reinvigorating themselves. These are the learning organizations, the ones with the learning habit. Without that habit of learning, they will not dream the dream, let alone have any hope of managing it.

Just as the world has changed, so too has the process of learning. When the future was an extension of the present, it was reasonable to assume that what worked today would also work next year. That assumption must now be tossed out. The world is not a stable state, and particularly not the world of business. We are seeing change that not only accelerates ever faster but also is discontinuous. Such change lacks continuity and follows no logical sequence. During times of discontinuous change, it can almost be guaranteed that what used to work well in the past will not work at all next time around. The old approaches to change are simply too incremental. More than that, they are too slow.

Today we are hearing so much about change that the word is becoming a cliché. Rather than chant change, it is more accurate to say that we all - individuals and organizations - must acquire the learning habit, the new learning habit. It is a habit that changes many of the old assumptions about management. The learning organization is a different sort of place. But it is an exciting one.

### Characteristics of the Learning Organization

The learning organization is built upon an assumption of competence that is supported by four other qualities or characteristics: *curiosity*, *forgiveness*, *trust* and *togetherness*. The assumption of competence means that each individual can be expected to perform to the limit of his or her competence, with the minimum of supervision. This idea is at the core of the concept of the professional. The assumption of competence in professional organizations is also what makes them so interesting to the talented young - a critical factor for those seeking to attract the best people.

For too long organizations have operated on an assumption of incompetence. The characteristics of this assumption are controls and directives, rules and procedures, layers of management and pyramids of power - all very costly. By contrast, the *assumption of competence* promotes flat organizations, with fewer checkers checking checkers. Flat organizations are far more responsive, efficient and cost effective. They put a high premium on early training, on acculturation in their ways and values and on some form of vetting or qualification before an individual is allowed to operate. In these organizations the learning habit starts early.

Competence alone, despite all the prior learning it implies, is not enough to foster the learning habit. It must be accompanied by *curiosity*. Watch a small child learning. The questions are endless, the curiosity insatiable. But curiosity does not end with the questions. Questions beg answers, and the truly curious goes in search of the right answers. This often requires experimentation. This process is encouraged in the learning organization, provided there is an assumption of competence and a licence to experiment within the boundaries of a person's authority.

Because experiments can fail, *forgiveness* is essential. Instead of failures, unsuccessful experiments must be viewed as part of the learning process, as lessons learned. One can also learn from successful experiments. That form of learning needs not to be forgiven but to be celebrated. One company known for encouraging constant experimentation at all levels and handsomely rewarding success is 3M. This company believes in praise, but it also believes in saying thank you to those who tried yet found a particular experiment did not work. Both are important in the learning organization.

None of these things - competence, curiosity, forgiveness or celebration - can foster a learning organization if there is no *trust*. While a person may be highly competent, you will not allow him to be competent unless you trust him. Of course, it is difficult to trust someone you don't know or have never seen in action. A person you know only by name from a memo is not a person to take a risk with. For the learning organization, the implications of this simple human fact are enormous. How many people can one person know well enough to trust them? On the answer to that question hangs the whole design and structure of the corporation.

One solution is *togetherness*. Few, if any, of the problems businesses face nowadays can be handled by one person acting alone. That is fortunate in a way, because curiosity, experimentation and forgiveness need to be shared. Lonely learners are often slow and poor learners, whereas people who collaborate learn from each other and create synergy.

Today we are seeing an increasing number of organizations made up of shifting "clusters" or teams that share a common purpose. The need for togetherness, both to get things done and to encourage the kind of exploration that is essential to any growing organization, creates the conditions for trust. Trust, in turn, improves togetherness.

Groups that are too big to feel any togetherness, or that lack a common purpose to hold them together, will not succeed in developing trust. When that happens, there are those who are quick to reimpose control and direction from the top, to assume incompetence in those below, to discourage experimentation and to withhold forgiveness. These conditions

6

## ORGANIZATION - Charles B. Handy

stifle creativity, making learning very difficult if not impossible.

Despite the presence of trust and togetherness, the learning organization is not a comfortable place for its leaders. It is an upside-down sort of place, with much of the power residing at the organization's edge. In this culture, imposed authority no longer works. Instead, authority must be earned from those over whom it is exercised. This organization is held together by shared beliefs and values, by people who are committed to each other and to common goals - a rather tenuous method of control.

Such an upside-down way of running an organization requires a powerful theory to justify it; in this case, a theory of learning. Real learning is not what many of us grew up thinking it was. It is not simply memorizing facts, learning drills or soaking up traditional wisdom. While these activities may be required in learning, they constitute only part of a larger process.

### The Wheel of Learning

This process can best be described as a wheel - a wheel of learning. The wheel has four quadrants that, ideally, rotate in sequence as the wheel moves. The first quadrant consists of the *questions*, which may be triggered by problems or needs that require solutions. The questions prompt a search for possible answers or *ideas*, which must pass rigorous *tests* to see if they work. The results are then subjected to *reflections*, until we are certain we have identified the best solution. Only when the entire process is complete can we truly say that we have learned something. There are no short cuts. This process lies at the heart of individual growth and of corporate success. Too simple, some would say. They should try putting it into practice.

Keeping the wheel in motion in a corporation requires great leadership, immense energy and a belief in the potential for excellence. There is little wonder at the fact that we have no examples of organizations that have got it all right. One reason is that it is so easy for a group or an individual to get stuck in one quadrant of the wheel, forever collecting more information without putting any of it to the test, or experimenting without pausing to reflect. Another pitfall is stopping after one set of tests proves successful, thinking that all the questions have now been answered. Like the wheel, the process is designed to move. To keep the wheel turning, we must continue to be curious, to ask the question again, to expect to find new answers.

The truth is that most of us work with an implicit model of learning that is out-of-date and wrong. We believe that learning is something we pass on from one person to another, by word of mouth or through books. These methods represent only one section of

the wheel - the ideas. To believe that ideas form the whole of learning leads us to ignore, quite unconsciously, the other three sections. By so doing, we stop the wheel, inhibiting growth, change and development - both in ourselves and in those around us.

### Keeping The Wheel Moving

Maintaining constant movement of the wheel is not as easy as it sounds. There are five key concepts which can help to keep it turning: subsidiarity, clubs and congresses, horizontal fast-tracks, self-enlightenment and incidental learning.

*Subsidiarity*. The word itself is rather ugly, but the concept is important. Subsidiarity means giving away power. While no one does that willingly in most organizations, the idea is at the heart of the learning organization. *Subsidiarity* is written in capital letters at the head of its statement of values and beliefs.

In these organizations power is given to those who are closest to the action. The centre then confines itself to such areas as strategic investments, R&D and the information infrastructure - the things which only it can do, or can do best, on behalf of all.

Television and journalism represent two arenas in which subsidiarity is practised. Both provide an opportunity to take responsibility publicly at an early age. It has to work this way because no one in the centre of a television or a newspaper company can specify in any detail what has to go into every programme or on every page. Those in power have to rely on control after the event, which can at times be embarrassing and even expensive. These mistakes are an inevitable part of trust. In good organizations, the mistakes are rare because the people are good; and they are good because they know that they will be entrusted with big responsibilities, including the chance to make mistakes.

Subsidiarity is managed, organizationally, by defining the boundaries of the job. There are two boundaries. The inner boundary defines the essential core of the job, be it an individual's job, a team's or a function's. This part of the job is defined, the roles and responsibilities clear. If these things are not done, then one is seen to have failed. The outer boundary defines the limits of discretion. In between lies the scope for initiative and for personal responsibility.

W.L. Gore, whose company does its best to foster the learning habit, makes a nice distinction between the two boundaries. There are experiments above the water-line, which do little harm if they go wrong, and there are experiments below the water-line, which might sink the ship. The former are encouraged; the latter are outlawed.

In traditional organizations, the space for initiative is limited. Many jobs are all core and no space. The water-line is set very high. Control is tight. There is no initiative without prior permission. In the flexible,

7



responsive organizations that are needed today, the space has to be larger because the centre cannot define in advance the details of every job. Control then has to be after the event - with forgiveness if necessary. This means that each individual or team must understand very clearly which types of initiatives are acceptable and which are not. Everyone has to agree on the definition of success. Control depends more on a common understanding than on budgets and procedures. Shared values reinforce constant and effective communications, all of which are essential if subsidiarity is going to work. The organization that talks together works together.

**Clubs and congresses.** The learning organization must provide opportunities for talking, for meeting and for greeting. Unfortunately, the opportunities for such communication are rapidly decreasing as more and more executives work out of their briefcases. Unlike their predecessors, who did most of their work behind their desks, today's successful executives are away from the office much of the time, meeting with clients, customers, suppliers or advisers. They communicate electronically when they have to and use their offices only as a base.

Costed per hour of occupancy, these offices are horrendously expensive. Rather than maintain private, underutilized space, some say we should turn our offices into clubs - places for "members only" to meet, eat and greet. These facilities include meeting rooms, dining rooms, libraries and rooms equipped with telephones and computers. Members gather here for meetings, to gain access to particular resources and to generally keep in touch. Like much of the new learning, this is upside-down thinking. It builds on the strengths of the club and coffeehouse cultures as a way of encouraging personal and informal communications. Both are vital to a company guided by shared values.

Similarly, large organizations need their congresses. Values cannot be shared electronically via bits of paper. We need to meet one-on-one with the people who share those values to determine whether we also want to adopt them.

**Horizontal fast-tracks.** Competent professional people and flat organizations are both desirable goals, but in combination they can present several challenges. One is that people can become more and more competent about less and less, thereby inhibiting the shared understanding so essential to effectiveness. Another is that as organizations become flatter, ladders to promotion get shorter, creating fewer "conventional" opportunities to reward success.

In Japan such vertical fast-tracks for high performers are almost nonexistent. Instead, they rotate their best people through a variety of jobs in different parts of the organization. The Japanese believe that this practice more than compensates for any loss in spec-

ialist knowledge by increasing each individual's breadth of experience, contacts and overall understanding of the business. Their professionals build their reputations on the variety and quality of the assignments they complete; rewards are based on results more than on a particular grade for the job. Except in very specialized areas, where detailed expertise is required, horizontal fast-tracks are the preferred career paths for the successful, provided always that rewards follow achievement.

**Self-enlightenment.** The Japanese have no business schools, yet their young executives appear well versed in all the concepts of modern management and business. How did they acquire these skills and this knowledge? The answer they give is "self-enlightenment", a polite word for correspondence courses. Young Japanese recruits are expected to take one of the many correspondence courses available to learn what might be called the "language of management." He, and it is still universally "he" in Japan, completes such studies on his own time, although the company will pay for any costs. A good tradition, self-enlightenment continues on throughout the life and career of every Japanese businessman.

Making each individual responsible for his own learning does make sense. If you do not own the question, then there will be no motivation to turn the wheel. Some American corporations capture the same idea in the phrase, "individual initiative and corporate support." In Britain, one advertising agency put this idea into practice. It divided up its training budget and gave its executives a share to spend on professional development, the company's investment in their future. There was one proviso - the personnel director had to sign all cheques for course materials and fees. That proved to be no impediment for these executives. They quickly filled the queues to request the funds, confounding all the cynics.

**Incidental learning.** The quest for knowledge or skills is only the beginning. Self-enlightenment needs to move on to incidental learning. Incidental learning is not the same as accidental learning. Coined by Alan Mumford, professor of management development at International Management Centres, Buckingham, *incidental learning* means treating every incident as a case study from which we can learn.

Such incidents do not occur automatically; opportunities must be created for them to develop. For example, regular meetings of one's group or cluster can be arranged to review recent critical events. It is, in fact, the time-honoured way in which doctors, social workers and other professionals help each other to learn from their experiences. It requires honesty with oneself and with others, a sense of togetherness and trust. Incidental learning is the organization's way to build in time for reflection, the final segment of the wheel. A mentor from outside the organization or

group can enhance the process by encouraging a free and frank exchange without acrimony.

Incidental learning is most appropriate when one is dealing with divergent problems. It was E.F. Schumacher, author of *Small is Beautiful*, who first distinguished between convergent and divergent problems. Convergent problems have right answers: "This is the shortest route to Boston." Divergent problems, such as "Why do you want to go to Boston?" have answers only right for a particular person, time and place.

Once we have moved beyond the basics, all the problems of organizations are divergent, to be solved only by the process of the wheel. This is what makes organizations so endlessly fascinating, and also so difficult. Some 2,500 years ago Heraclitus said that one could not step twice into the same river. The reason for this, according to this ancient philosopher, is that everything is always in motion; nothing stays in the same place. Some truths do not change.

### Driving the Wheel

Theories and concepts are important, but the job of keeping the wheel turning remains the primary task of the true leader. While each will find his or her own way of doing it, *vision*, *encouragement* and *example* will be central to all.

At the beginning of the '90s, companies began to talk increasingly about the need for corporate *vision*. Although unkindly mocked as "the vision thing," the truth is that no one is going to go through the arduous of organizational learning unless there is some point to it. Most people want to share in a task that is bigger than themselves. They want a purpose in life beyond themselves, one which is real versus a thing of rhetoric.

Visions, however, must be earthed in reality. Standards are the currency of vision. But standards need comparisons, which is one of the benefits of competition. Competition sets standards for us whether we like it or not. Benchmarking, a popular new tool, is really only a faddish name for an old habit: learning by voyeurism - spying on your neighbor and then doing it better. In business it means looking for best practices both in and outside of your industry. We would do well to cast our eyes as widely as possible, because good practices can be found in the most unexpected places. Professional partnerships, hospitals and universities, for example, are not obvious places to look for examples of good management, yet they have been running learning organizations for centuries. They have experience to offer and standards of their own, which businesses could learn from.

Learning needs constant encouragement. The best encouragement is the satisfaction of having learned something. Learning feeds on itself. Measuring results can help, because progress is then made visible.

Recognition helps even more. Colleges and schools have ritual ceremonies to honour those who have learned. Organizations need to find their own ways to celebrate their learners, and they need not be costly.

Ultimately, it is personal example which matters most in keeping the wheel moving. The leader who is perceived to be saying "learning is good for you, but I don't need it" will have few followers. Leaders once believed that they had to give out an aura of certainty, of invincibility and conviction. Today there are too many examples of misplaced certainty in both business and world affairs for that stance to inspire confidence. We would rather have a leader who is seen to be open-minded, questions himself and others, searches for ideas, is obsessed with truth and betterment, is ready to take risks, listens to criticism and advice and has a purpose beyond himself combined with an awareness that he cannot do it on his own. Give that leader self-confidence and a sense of humour, and most would be happy to follow his or her example.

### There is No Alternative

People once believed that there was a science and a theory of organizations which, like the laws of motion, would allow us to predict and determine the future. We now know that this is impossible. We have learned that chance happenings, like chaos theory, will trigger chain reactions, that the past will be a poor guide to the future and that we shall forever be dealing with unanticipated events.

Given that scenario, organizations have no choice but to reinvent themselves almost every year. To succeed, they will need individuals who delight in the unknown. The wise organization will devote considerable time to identifying and recruiting such people and to ensuring job satisfaction. Being a "preferred" organization will become increasingly important. One of the things that will set these organizations apart from the rest will be their emphasis on subsidiarity. Preferred organizations will be learning organizations. They will provide opportunities to exercise responsibility, to learn from experience, to take risks and to gain satisfaction from results achieved and lessons learned.

Such organizations will continue to defy conventional wisdom. They will be organizations of consent, not of control. They will be able to maintain a feeling of togetherness despite their size and far-flung locations. They will make many mistakes, but will have learned from them before others realise they occurred. They will invest hugely in their people and trust them hugely and save the salaries of ranks of inspectors. Above all, they will see learning not as a confession of ignorance but as the only way to live. It has been said that people who stop learning stop living. This is also true of organizations.

## CREATIVE PROGRAMMES - Edward de Bono

I have often mentioned the fear that creativity is going to be killed by systematic techniques or stifled by institutionalizing structures and programs. Talented football or baseball players play on a formal field with formal rules and yet show their talent. The old idea that creativity simply meant freedom from any restrictions made sense only when there was nothing else we could say or do about creativity. Structures and programs are frameworks for encouraging and rewarding creative behavior.

The most important thing about introducing creativity into an organization is to make creativity behavior an "expectation." The paradox is that at first we need to make creative behavior something special and something extra (because otherwise everyone would claim that they were being creative anyway) but then to make it an expectation. But how do you make something an "expectation"? One way is to put that person in a situation where this type of behavior is needed and has to be used to fulfill some task. That is what structures and programs are all about.

In this section I shall be going through a number of possible structures and programs. Some of these are traditional and some are new. There is no suggestion that an organization should attempt to use all of them or even many of them. I am simply setting out possibilities. In general, a structure is something that is more permanent than a program. A formal Creativity Center is a structure, whereas a quality program is a program that runs through existing structures. Nevertheless, programs such as continuous improvement and safety programs may be permanent.

### Suggestion Schemes

Some organizations manage to get a lot out of their suggestion schemes, but in other organizations the scheme is barely in existence. The Japanese have a culture of suggestions. One of the reasons the Japanese schemes work is that people are "expected" to make suggestions and the suggestions are usually considered at the level at which they are made. So shopfloor suggestions come through the quality circles and are considered at that level. In the West, suggestions are all fed into the scheme and then the suggestions are examined at some senior collecting point. This puts a huge load on the assessors, who are reluctant to find time for this work. As a result, "silly" suggestions are discouraged and the scheme is only used by the few who feel they are capable of really serious suggestions.

The reward system is often too remote. Usually a suggestion goes through various screening committees. If the suggestion is eventually put into effect, then a reward is given. Many people do not feel they are ever going to have this type of idea so they do not bother. Furthermore, certain fields, such as engineering, are open to money-making suggestions but in

10

others, like customer service, it is difficult to put a value on a new idea.

It is better to give some "recognition" reward soon after the effort of making the suggestion. People should be rewarded, by acknowledgment, for putting in suggestions - no matter what the quality of the suggestion might be. In order to aid selection and also to indicate to the suggester why an idea has not been used, it is important to indicate that all suggestions must be accompanied by an explanation of why and how that suggestion is going to provide "value."

If suggestion schemes are kept ticking in the background, then many people cease to notice them. Since the scheme is always there, then there is no need to do anything about it today or tomorrow. Since it is possible to focus on everything, there is no need to focus on anything.

It is a good idea to have "short focus bursts." So for two weeks the emphasis could be on "safety" suggestions and this can be hyped with posters, signs, and so on. Then there is no special emphasis for a while. Later there might be another two-week burst directed towards "cost-saving" and this is also much publicized. Then there might be a focus on "energy saving" or "waste reduction" or "process improvement" and so on. Each focus is short and defined. Suggestions for the specified focus are asked for during the allotted time.

It is supposed that people putting in suggestions are using creativity, but there is no deliberate effort to improve creativity skills. It might be possible to make some basic creativity training available to those who asked for it.

### Quality Circles

Where quality circle systems are in place, creative training can be added in order to allow the circles to function more effectively.

It would not make sense to introduce creativity right at the beginning because the members of a quality circle might have a lot of useful suggestions to make using their experience and logical analysis. It is when the yield from these operating methods has started to fall off that creativity training will make sense. Before that such training might be seen as unnecessary and complicating.

The use of creative techniques within quality circles depends heavily on defined creative focuses. There should be a strong emphasis on finding such focuses either within each group or as a general exercise. The setting up of formal Creative Hit Lists could be useful here. The introduction of a creative focus that provides a "problem" that cannot be solved directly is the best setting for the use of the deliberate tools of creativity. Under such circumstances the value of the tools is seen.

It may also be useful to emphasize that while quality involves doing the same thing in a better way,

creativity may involve doing something different. Creativity may also be involved in making improvements in the existing method.

### Quality, Continuous Improvement, and Cost-Cutting

There are a variety of programs concerned with quality management, continuous improvement, cost cutting, and so on. Such programs have their own objectives, structures, and methods. There are times when there are problems to be solved. There are times when it is necessary to find a "better" way of doing something. There are times when it is necessary to generate further alternatives. Sometimes these needs can be supplied by experience, by analysis, or by further information. But there are times when there is a real need for creative thinking. There is therefore a real need to build creative skills into these programs.

When the need for creative thinking occurs, then a person can simply plug in a creative technique. Quite apart from the tool kit of techniques, the attitudes that arise from creative training are important in all such programs. For example, there is the habit of challenging what is being done. There is the willingness to stop at something which is not a problem in order to see if there might be a better way of doing things. There is the willingness to identify the "fixed point" and to search for alternatives.

There is an obvious synergy between creativity and such programs. Sometimes an element of creativity is built into the programs, but this is usually too weak. It is better to introduce a specific element of creative skill that is trained directly as "creativity" and is designed by people with experience in creativity.

### Concept R&D

This is a major suggestion. The idea is that concepts should be treated as formally as technical R&D. Many organizations spend millions of dollars on technical R&D but nothing directly on concepts. Concepts are just supposed to emerge in a haphazard fashion. Yet as technology competence reaches a plateau, concepts are really going to make the difference. The Concept R&D idea is considered fully in another book (*Surpetition*, Harper Business, New York, 1992). At this point it is enough to say that Concept R&D would be a heavy user of creativity and would seek to develop creative skills in all areas.

When organizations begin to set up Concept R&D departments then they will need to take creativity very seriously indeed.

### Creative Hit List

The Creative Hit List is a simple structure that can serve to introduce creativity and to keep it going. It is a formal putting together of defined creative need areas. These are set down as creative focuses or creative tasks. The Creative Hit List should be organized in as formal and serious manner as possible. There may be a Creative Hit List for an individual or a group or a team. There may be a creative Hit List for a

department, a division, or even the whole organization. It is something that the process champion or the Creativity Center should supervise. But there should also be "local" Creative Hit Lists, which can be much more specialized.

There is a tendency to fill up the Creative Hit List with problems. This would then become another problem list. However, it would be unfair to exclude all problems from the list because problems also need creative attention. It is best to aim for a mix of four different item types: Problem (car park is too small), Improvement Task (faster cleaning of molds), Project (design a better display case) and Whim or Opportunity (light switches). Suggestions regarding items on the Hit List can be put together and published (as they are or in summary form). Certainly the most interesting and successful suggestions should be highlighted.

### Cloud "9" File

This structure was developed by a construction company in West Canada. Cloud "9" signifies "dream." The file is a physical file which is circulated around the circulation pattern of executives (or others). There may be several such files circulating and also local files for special areas.

The file should reach a person once every month or every two months. Into this file go the following possibilities:

*Novel Idea.* These are ideas that are not original and may be in use in another organization. But the idea is not yet in use in your organization. These are ideas which can be borrowed or imitated.

*Original Ideas.* These are ideas which are put forward as original. The creator of the idea can append his or her name as wished. These ideas may be related to the focus items given in the field or may build on other material in the file.

*Constructive Comments.* These may be white hat comments that add experience or information to support an idea in the file. There may be yellow hat comments to indicate the value of ideas in the field. There may be green hat comments that suggest alternatives or modifications of the ideas in the file. There should be no black hat comments unless there is also shown a way of overcoming a possible problem.

*New Creative Focuses.* These can be suggestions for new creative focuses. These may be spelled out as problems, tasks, opportunities, and so on. A special place in the field can be allocated to creative focuses so that these can be seen at a glance.

The file is read, added to, and passed on. If the file becomes too bulky then there can be backup files and an index that indicates how further information can be obtained.

There are several values to the Cloud "9" file:

1. A periodic reminder to think creatively
2. The provision of creative focuses about which to think creatively

11



3. Ideas and concepts to react to
  4. A simple channel into which ideas can be placed
  5. The actual value of the ideas and suggestions
- The "channel" value is very important. Many people do not like to have ideas because they do not want the "hassle" of trying to do something about a new idea. The idea actually becomes a burden. What do you do with it? Who do you have to convince? How can you show it works? The Cloud "9" file provides the simplest of channels. If you have a new idea, you just wait until the file reaches you and then you put your idea into the file. There is nothing more that you have to do.

#### Opportunity Audit

Executives are often blamed for making mistakes or not solving problems. But it is extremely rare for anyone to be blamed for missing an opportunity. The result is that very few people want to take the risk of trying something new. If they do try something new and it goes wrong, that is a negative mark on their record. If they never try anything new, they never risk making a mistake. So where is the innovation energy to come from? The late Sam Koechlin, CEO of Ciba-Geigy, once told me he would love to have his managers come to him each year to tell him all the mistakes they had made. If they were making mistakes then at least they were trying new things. He did not see it happening in Switzerland.

The Opportunity Audit is a formal way of requesting executives to put forward the opportunities or new ideas that they have considered during the year. This now becomes an expectation and a task to be performed. Not putting anything in the Opportunity Audit is now a failing - doing nothing is no longer the safest play. So the Opportunity Audit is a structure that "demands" entrepreneurial thinking. The audit should spell out the considered opportunities, what was done about them, and why they were not taken up (or, if they were taken up, the progress that is being made.)

The Opportunity Audit could be used as such or modified to give a Creativity Audit.

#### Regular Creative Sessions

A schedule of regular creative sessions might be set up within a department of a local area. These sessions are scheduled on a regular basis; perhaps the first Wednesday in every month. A fixed time is set; this could be a breakfast meeting or an end-of-day meeting. The agenda is set for each meeting. Individuals can submit suggestions for the agenda. The agenda is circulated to individuals a week before the meeting and individuals are invited to do some creative thinking on their own in advance of the meeting. They might even bring to the meeting formal outputs of ideas and concepts.

The regular creative sessions would be organized

by the "local" process champion. It is better not to call these meetings brainstorming sessions because that could give the wrong impression. The meetings would use "serious creativity" as described in this book.

The value of regular creative sessions is their regularity. This contrasts with setting up an ad hoc session as required. Once the regular sessions are known to be in place, creative focuses can be fed into the sessions. Each session can also seek to tackle one item from the Creative Hit List.

Because the creative session would be limited to a relatively few people it is possible to have several parallel sessions running at the same time or different times. In general, eight people is the maximum number for a creative session.

The organization of the creative sessions, like the organization of the Creative Hit List, Creative Task Sheets, Opportunity Audit, and the rest, is something that can be done by a Creativity Center.

#### Trainers and Training

Obviously, training is an important structure for developing creativity in an organization. In general, there is training which adds a "creativity" element to ongoing training as in training for specific programs. Then there is specific training, the purpose of which is to impart creative thinking skills.

Training is an essential piece in the whole process of creativity within organizations. Without training, creative skills will remain rudimentary. To rely on natural talent or inspiration is very weak and wastes available potential. Training within a strong framework does have a high value, but to regard training as the sole way of introducing creativity in an organization is to expect too much.

#### Facilitators

The use of facilitators (which is part of the Du Pont culture) is an interesting concept. Facilitators are not so much trainers as "process managers." They are invited to a meeting to run the creative process. So they become guides to the use of the specific creative techniques. In this way the participants get to use the techniques in a guided fashion and can build up some skill in the use of the techniques. At the same time the participants can see the processes being applied to matters of great concern to the participants at the meeting. So the motivation and utility are high.

Some words of caution are needed at this point. There is a danger that the participants come to rely so much on the facilitators that they never try to develop the skills for themselves. Ideally, the facilitators would try to do themselves out of a job.

Learning the creative techniques by applying them to your own immediate problems is not the best way to learn the techniques, because attention is largely on the content of the problem rather than on the thinking

(continued on page 15)

## CREATIVE INFRASTRUCTURE - Peter Senge

Infrastructure is the means through which an organization makes available resources to support people in their work. Just as an architect and contractor of a house must develop mechanisms to get the right building materials and bring them to the site, builders of learning organizations must develop and improve infrastructural mechanisms so that people have the resources they need: time, management support, money, information, ready contact with colleagues, and more.

Organizations seeking to enhance learning have experimented with diverse innovations in infrastructure. For example, in Japan quality management led to organizing front line workers in "quality circles" and setting up various management councils to support quality improvement. The innovations in infrastructure that will support emerging learning organizations encompass a broad range of changes in "social architecture" - including changes in organizational structures (such as self-managing work teams), new designs for work processes, new reward systems, information networks, and much more.

In his classic book *Out of the Crisis*, the eminent quality pioneer W. Edwards Deming suggested his own example of an innovation in infrastructure: "Efforts and methods for improvement of quality and productivity in most companies and in most government agencies are fragmented, with no overall competent guidance, no integrated system for continual improvement." He proposed a general "organization for quality" including a "leader for statistical methodology" reporting directly to top management and local counterparts throughout the organization, "with authority from top management to be a participant in any activity that in his judgment is worthy of his pursuit." The purpose of this leader would not be to dictate the quality techniques, but to make sure that people throughout the organization learned and understood them - such an important task, in Deming's view, that it took precedence over conventional line management.

I first discovered the importance of infrastructure for learning through my experiences with the "group planning" office at Royal Dutch/Shell. Over the past twenty years, there has been a steady evolution of "planning as learning" throughout Shell's worldwide group of 150 operating companies. This evolution has encompassed a broad array of tools and methods, such as scenario analysis and systems modeling. But, more importantly, it has also led to a new understanding of the role of planning as an infrastructure to enhance learning throughout the organization. Planning is no longer primarily a staff function for coming up with the proper "answer" which managers must then implement, but a process "whereby management teams," says former planning head Arie de Geus, "change their shared mental models of their

company, their markets, and their competitors."

During the past twenty-five years, Shell has steadily risen from one of the weakest to probably the strongest of the largest world oil companies. Throughout this period, the planning as learning approach has had first-order impacts on how the company recognized and responded to the turbulent, unpredictable world oil market. For example, Shell responded in a qualitatively different manner from other oil companies to the first round of OPEC oil-price shocks in the early 1970s. It rapidly decentralized operations while other oil companies were centralizing, and it worked hard to make refineries and trading operations more flexible, so that they could more quickly respond to changing availabilities. In the mid-1980s, Group Planning developed a "fictitious" case study involving a sudden drop in the world oil price, and managers throughout the world wrestled with how they would manage under such a change. Mental models that had adjusted to a world of twenty-eight dollars a barrel oil were challenged, and new assumptions had to be explored. As a result, Shell accelerated development of several key technologies to reduce cost in off-shore drilling, technologies which subsequently proved critical when oil prices fell to ten dollars a barrel in 1986 and stayed low in ensuing years.

Because learning is integral to planning, and because planning is inescapable to management, you cannot escape learning at Shell. It is not a marginal activity to be engaged in when one has spare time. In the Shell operating companies that participate, learning is no longer a concern of a handful of "experts" isolated from the mainstream of the business.

This contrasts sharply with many companies which attempt to drive learning through the training and education departments. While ongoing training and education are important, they are less integral to most business operations than planning is. Even though line managers may believe that an initiative pushed by training or human resources is worthwhile, in a world where people are already overcommitted and budgets are rarely abundant, what is not integral to the business often does not get done.

Other examples of learning integrated with the main work of the organization are beginning to emerge. When the Saturn division of General Motors developed its manufacturing facilities in Springhill, Tennessee, one of its first significant innovations was a "learning laboratory" adjacent to the manufacturing line. Called the Workplace Development Center, it was a complete mockup of an assembly line, where engineers and assembly line team members could try out new processes together, with video tape cameras, so people could study their own movements and relationship with the line. Said Saturn President Richard ("Skip") LeFauve: "Teams from the plant solve problems in simulated working conditions. We're



passing on to employees design tools for assembly, manufacturing and synchronous operations. Traditionally, these tools were the property of management and were applied through an industrial engineering department. But at Saturn, they are common property."

At AT & T, Chairman Bob Allen has established a variety of "forums" at different levels within the organization to encourage reflection and conversation about issues shaping the business's long-term health and vitality. This includes a "Chairman's Strategy Forum," which draws together the top 150 managers worldwide several times a year to examine key issues driving the business. In explaining the reason for the forums, Allen says, "We have plenty of infrastructure for decision making within AT & T. What we lack is infrastructure for learning."

These infrastructure innovations are not limited to the largest companies. At a home furnishings manufacturing firm, American Woodmark, the training department has been reshaped so that line managers are the principal trainers, and the content of the training is partly determined by conversations about the future of the organization.

The most important innovations in infrastructure for learning organizations will enable people to develop capabilities like systems thinking and collaborative inquiry *within the context of their jobs*. It matters little if we are masterful at inquiry in training sessions, but can only pontificate in real management meetings; or if we are accomplished in systems thinking exercises but cannot apply them to real work settings. Until people can make their "work space" a learning space, learning will always be a "nice idea" - peripheral, not central.

#### Practice Fields

Following this reasoning, we have focused much of our research at MIT on one potentially significant innovation in infrastructure - the managerial practice field. The underlying idea grows from comparing organizational settings where teams learn reliably with other settings where little team learning occurs. In sports and in the performing arts, two settings where teams consistently enhance their capabilities, players move regularly between a practice field and the real game, between rehearsal and performance. It is impossible to imagine a basketball team learning without practice, or a chamber music ensemble learning without rehearsal. Yet, that is exactly what we expect to occur in our organizations. We expect people to learn when the costs of failure are high, when personal threat is great, when there is no way to simplify complexity and shorten time delays so as to better understand the consequences of actions. Is it any wonder that learning in organizations is rare?

At MIT, we are experimenting with two types of managerial practice fields. Our "learning laboratory projects" are focused on particular issue areas, like new product development and cycle time in complex supply chains. For example, several companies are collaborating at MIT in designing and testing a New Product Development Learning Laboratory.

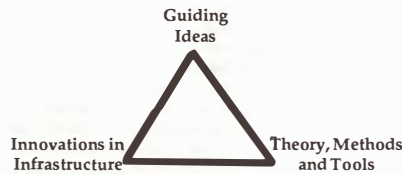
Other practice field projects, the "dialogue projects," focus on the quality of conversation and capability for collective thinking. In some cases these projects take place with intact teams, such as management teams; in other cases, the "teams" are diverse groups of people who need one another to take effective action in a broad area of concern, such as the health care system of a community. The dialogue projects create a different sort of practice field, which is not defined by a set of particular management issues but by a common commitment to generate deeper levels of conversation which can penetrate into whatever issues, both personal and substantive, need to be addressed.

In both types of practice field projects, the overarching principle is to establish a new cycle of learning that connects practice and performance. And, in both types of projects, initial evidence suggests that the practice field concept may, indeed, be a breakthrough in learning infrastructure. At Ford, the learning laboratory is making a significant impact on internal coordination, quality, productivity, and timing in a major new car project.

At GS Technologies, an ongoing dialogue project has led to a profound shift in union-management partnership and consequently the birth of a new organization. The next steps in both projects are to diffuse the practice fields more widely, to further test their merits, and to see if they may indeed constitute significant new infrastructures for *organizational learning*.

#### The Integrity of the Architecture

Leaders intent on developing learning organizations must focus on all three of the architectural design elements. Without all three, the triangle collapses.



Without *guiding ideas*, there is no passion, no overarching sense of direction or purpose. People ask, "Why are we doing this?" or "What's this change in infrastructure all about?" Top management gets fired up about "total quality management," "reengineering" or some other hot idea. Time and resources are poured into achieving intended changes. But, after a year, with little tangible to show for the effort, something else hot comes along and effort is abandoned. Ultimately, the organization remains at the whim of circumstance and external conditions. This happens again and again unless people discover that leadership involves articulating transcendent guiding ideas to which they will stay committed.

Without *theory, methods, and tools*, people cannot develop the new skills and capabilities required for deeper learning. Efforts at change lack depth and are ultimately seen as superficial. For example, the CEO and managers through the organization may espouse a guiding idea about "openness," and the importance of surfacing mental models. But if people do not practice regularly with tools like left-hand column cases, conversations polarize when issues get hot. People withhold their genuine views to avoid uncontrollable conflict, trust erodes, and "openness" is seen as a facade of "nice ideas" inconsistent with what actually happens in the organization.

Without *innovations in infrastructure*, inspiring ideas and powerful tools lack credibility because people have neither the opportunity nor resources to pursue their visions or apply the tools. Changes cannot take root and become part of the fabric of organizational life. Learning is left to chance. It is not managed with the same commitment that other critical organizational activities are given. Efforts to promote systems thinking, reflection, and other learning capabilities have little, enduring organization-wide impact. Infrastructure that is incongruent with guiding ideas can also lead to cynicism. Managers may espouse that "Human beings are intrinsically motivated to learning," but if people feel that they must pursue learning only "on their own time" then they lose faith not just in the organization, but in the idea of learning.

The early days of the quality movement in U.S. manufacturing provide an example of the need for all three elements. In the early 1980s, there was a rush to implement "quality circles," an innovation in infrastructure. However, the quality circle faded quickly. Gradually, we discovered that people working in quality circles needed to learn how to employ new tools and methods so they could begin rigorous analysis, testing, and improvement of their processes. But even then, quality circles (and the quality movement which replaced them) fell short of creating transformative change. They needed the

third corner of the architectural triangle: appropriate guiding ideas to energize and direct organization-wide improvement.

In the case of quality management, three sets of guiding ideas are critical. The first, according to W. Edwards Deming, concerns "constancy of purpose" for the enterprise as a whole. The second has to do with understanding the nature of variation. Lastly, there is a set of guiding ideas that concern human motivation. All human beings, said Dr. Deming, are born with "intrinsic motivation": an inner drive to learn, to take pride in their work, to experiment, and to improve. Without this lasting guiding idea, managers think they must motivate people to study and improve, and that they must keep watch over people to make sure that learning is occurring.

In my judgment, few American firms have grasped all three of these guiding ideas. Consequently, rarely has quality management become the "thought revolution in management" envisioned by Japanese quality innovator Kaoru Ishikawa.

Interestingly, when these three sets of guiding ideas are all present, basic innovations in infrastructure typically occur far more easily and sustainably. Levels of supervisory management are removed and don't return. Quality inspectors are eliminated permanently. Authority to study and improve work processes is pushed down to front-line workers, who embrace it as their own. Guided by an overall philosophy, and empowered by effective tools and methods and by the authority to take action, the quality improvement process then begins to lead to significant change.

Moreover, pursuing all of the elements of the architecture simultaneously generates synergies that do not occur when attention is paid to only one of the elements alone.

(Creative Programmes: continued from page 12)

process itself. It usually makes better sense to learn the techniques on matters with which you are not directly involved and then to switch these skills to your own backyard problems.

#### The Fat/Cat Program

This is a new program designed specifically to introduce creativity in a formal way into organizations. The acronym stands for:

Fixed Assigned Task  
Creative Action Teams

Tasks are fixed and assigned to small action teams. These teams have the responsibility to generate new ideas and concepts on the fixed task. Several teams may be assigned to the same task. There is a specific structure to the program and also provision of the basic training required for the participating teams.

## CREATIVE WORKPLACE PIONEERS -

The need for creativity is changing how the workplace is organized and what people do. These changes center on the use and interpretation of information: the basis for ideas. A company's future depends upon how well it acquires, interprets, and acts upon information.

Today the spread of information technologies - including computers and databases - throughout the workplace is bringing about a sea change in the business world. As Harvard Business School's Shoshona Zuboff observes, companies are attempting to use these technologies to collect data about their own operations in a process of continual learning and self-improvement. These new streams of information should allow companies to constantly refine their products and services, and to upgrade their production, distribution, or marketing. But, as Zuboff says, "smart machines demand smart workers."

Elaborate new technologies are not enough. By themselves, they are like a brilliantly engineered car with no driver or destination. The entire process of gathering and using information is ultimately shaped by workers who are "smart" in the broadest sense: who have fresh perceptions and are willing to ask penetrating questions.

How workers interpret information - how they make sense of it and decide what it means - is as important as the information itself. Interpretation is, in fact, a creative act. But the degree of creativity is influenced by our feelings, including those on the fringes of our awareness. Our belief that we can speak out without fear of retribution, our feeling of being trusted by others, a confidence in our own intuition - all these affect how we respond to the information before us. We need only remind ourselves of the many painful instances, such as the Challenger disaster, when presumably rational executives were - despite adequate information - simply unwilling or unable to take action.

Since creativity draws upon a person's facts and values, upon what is conscious and unconscious, analytic and intuitive, a creative work environment truly requires the enthusiasm and commitment of the whole person. There are many ways in which the creative spirit can find expression in the workplace. The creation of new products is the most obvious, but there are other ways, such as providing better services to customers, innovations in management, improvements in distribution methods, or new ideas for financing the business. Creative ideas can also be used to strengthen the organization itself by, for example, increasing the initiative of workers. One such innovation is the elimination of restrictive and bureaucratic job descriptions that put workers in "boxes" and limit their performance. Another idea is to share all financial information - such as the weekly cash flow - with all of the employees. Elimination of

traditional corporate secrets helps workers to understand the larger reality of the business and encourages them to generate ideas of their own that reduce costs and increase revenues.

### Creative Environment

#### Beyond Hierarchy

One idea is to reduce the negative effects of hierarchy, to "flatten" the corporate pyramid. Businesses are more productive when those at the front lines - in contact with customers - have more responsibility and access to a wider range of information about the whole organization. Employees are allowed to use this information, along with their intuition, to make critical decisions on the spot. A cardinal virtue becomes trust in what people can do, not blind adherence to the "company way."

#### A Safe Haven for Ideas

This means a willingness to let ideas emerge freely and to be receptive to them. It means curbing cynicism and harsh judgments, so that employees feel free to make iconoclastic suggestions and even to ask what appear to be "dumb questions." It requires valuing intuitive as well as analytic approaches to problem-solving, recognizing that emotions and subjective values play a key role in generating new ideas. This demands an atmosphere of respect, an environment where people have the security to share their inspirations with others.

#### More Than Just A Job

A third key idea is to expand the very meaning of work. Within the company itself, the workplace can become a more homelike and humane setting, including amenities such as day care. It can be a physical environment that enlivens the senses, promotes spontaneous interaction among people in different jobs and at different levels, and allows moments for mental relaxation during the workday.

The meaning of work can also change when the company adopts a broader role in the community. By responding to social needs in the community, and by acknowledging that it not only creates wealth but also influences the quality of people's lives, a company can make work "more than just a job." As one executive put it: "It becomes a *movement* rather than just a business."

#### Pioneering Women and Men

These are more than appealing but impractical ideas. They are actually working for business today.

##### • British Business Woman of the Year Anita

Roddick, founder and president of the Body Shop International. An unorthodox business form the start, the Body Shop sells its own line of natural cosmetics. Its products are based on traditional beauty aids, many inspired by Third World cultures, and are developed without animal testing. And the windows of the Body Shop feature posters promoting ecological awareness

## Daniel Goleman

rather than pictures of perfectly made-up models.

At the Body Shop, creativity is primed through constant change. Says Roddick, "Creativity comes by breaking the rules, by saying you're in love with the anarchist." As a manager, her attitude is that "you have to be constantly open to suggestions and you don't have a rhetoric that says you'll listen and then do nothing."

Roddick believes that "a company can be run in a moral way - make money but enhance the spirituality of the workplace. Bringing spirituality into the workplace is very much like saying, 'Why should how I act in my workplace be any different from how I interact with my family at home?' It's making sure the company runs on feminine principles where the major ethic is *care*."

• **Yvon Chouinard** did not set out to found one of the most innovative sportswear companies in the world. Not at all. His company, Patagonia was spawned by his passion for mountain climbing and his need for a good piton, the sharp spike climbers hammer into cliff sides.

"There I was, interested in climbing, and there were no good tools available," Chouinard recalls. "So when I was eighteen I decided to go out and buy a little coal-fired forge and an anvil, some hammers and tongs, to make my own pitons. I tried to improve on the only ones we could buy at that time, ones from Europe. They were made of soft steel, and you could only use them once. So I decided to try to make them out of a much better quality steel.

"I made a few for myself, and then for friends, and then pretty soon I was selling them. So that's it. It isn't that we invented this climbing equipment, but we did a lot of innovation."

Indeed, says Chouinard, the business snuck up on him: "It got to the point where I couldn't make just a few of these every day and call it a business. I had to make more and more, and now we have five hundred people working here."

The casual way Chouinard got into business is completely in character, and is reflected in an unorthodox management style. "I had become a business man whether I wanted to admit it or not, but I decided that if I was going to stick with it, I was going to do it on my own terms," he says. "Doing it on my own terms means breaking the rules."

One of the rules Chouinard breaks is in his decision not to compete head-on with other companies in his industry. "We try to make products that are non-competitive," Chouinard says. "I don't want to make the same product as another company. Then I'd have to compete head-on with quality, price, distribution, advertising - all the normal ways of selling whenever you have a product that's identical to someone else's."

"You can't separate creativity from risk-taking. I

think the best ideas are so whacko, and so ahead of their time, that everybody's going to laugh at them. So people have to feel confident enough to just throw it out anyway, and not be hurt if nobody likes it."

One of the ways the men and women of Patagonia are made to feel comfortable is by having a daycare center on the premises. "A mother can drop her kid off at quarter to eight, go to work, and then come have lunch with her child," says Chouinard. "Or they can just go back and forth to the daycare center all day long. We even have some mothers who let their kids play next to their desk for a while." Isn't that a disruption? Quite the contrary, says Chouinard. "It frees up the parents so that they don't have to worry about their kids all day long. Then they can just concentrate on working. Getting rid of the hassles in people's lives leaves them free to be creative. Whatever we pay to subsidize the daycare center pays for itself a thousand times over through more productivity."

The aim is simple: "The more the workplace feels like being at home, the more people feel they're in a group they enjoy being with, the more people can focus on the particular direction the company wants to go in," Chouinard believes. "It becomes a movement rather than a business, and that makes it extremely productive."

• **Skaltek** of Stockholm, Sweden, designs, manufactures, and sells heavy machinery used by the wire and cable industry. Skaltek's custom-built machines are sold all over the world, and the company's success is due in part to the unusual way it supports the creativity of its workers.

Skaltek's founder, Oystein Skalleberg, was an engineer who had worked far too many years in traditional firms and disliked how they were run. He couldn't stand the competition, the artificial distance between people, and the distrust. He found company secrets and withholding of information from employees distasteful. He couldn't participate in the "defend my box in the hierarchy" corporate mentality.

So Skalleberg left his old firm with the vision of starting his kind of company. At Skaltek, no one has a title that confers some privileged status; everyone has one and the same title, "Responsible Person." There are no cookie-cutter job descriptions, and the workers who build a machine at Skaltek may be the same ones to sell it to the customer. This way, information about the use of the machines can be fed directly back into ideas for improving the machines. As a result, Skaltek workers create a personal bond with their customers.

Perhaps more radical, there's a weekly meeting of all employees, where there's a full report of the previous week's cash flow: sales, expenses . . . everything. Full disclosure, and because everyone knows all the facts about where the money comes from and goes, salaries are set openly and are subject to discussion by everybody.



## CREATING TOGETHER - Robert Fritz

The creative process is often at its most efficient when working with groups. Many people cannot work well together because of their different energies or temperaments. This can happen among all types of professionals, from musicians to engineers, to athletes. Sometimes there is "chemistry," but sometimes there is not. I think this is a fact of life, although the modern trend toward collaboration often assumes that anyone can work well with anyone else. This ideal proposes that all people should attempt to fit into a humanistic mold, and those who cannot are considered "problem children." Yet this may not be the case; often there is simply a mismatch of individuals, so that the whole becomes less than the sum of the parts.

If you are to use the creative process in a team effort, it only makes sense to consider the blend of people involved. Too often some of our largest corporations ignore this simple fact, much to the detriment of everyone involved.

Most work groups do not have the *first step* of the creative process in place, let alone any of the others. If you ask any work group to name the results they are after, they often fail to do so. Many groups laugh when I ask the question "What do you want to create?" "This is so simple, why are we spending time on this?" a few of them say and others think. When they finally attempt to identify the results they want, they often discover they are not on the same wavelength after all. Often they begin to disagree with each other about the results. They had assumed that everyone was working toward the same ends, only to find that each person had a different idea in mind. Only once they clearly establish the end results they want can they begin to organize their actions, energies, and evaluations accordingly. A playwright was asked how he picked a director for his productions. He answered, "I have the director tell me the story of my play. If it matches the story I wrote, we can work. This is very important, because you want everyone on the stage telling the same story!" But too often in work teams, people are not on the stage telling the same story. No wonder they find it hard to create synergy and accomplish success.

When a sports team is in a losing mode, the players often get on each other's nerves. It seems as if they have deep divisions, personality conflicts, and bad chemistry. But when that same team begins to win consistently, suddenly all the problems disappear and everyone loves one another. *When people learn how to create together, it is like a team that has changed its losing streak to a winning streak.* Momentum, energy, excitement, and focus build as the individuals begin to naturally enhance each other. Creating in groups dramatically enhances the ability to create a specific project.

Can people learn to create as a group? People learn the creative process through organizational applications. This approach teaches each person the

creative process, and how to use it with one another. The work group establishes the major results they want to create and describes the current reality that is relevant to each result. They then generate action steps that are designed to move from the current situation to the desired result. Usually these people find they can work effectively with each other, and they further develop their collective creative process each day while on the job. In other words, they can expand their ability to create at work while simultaneously creating. The nature of management also changes in this process. Rather than attempting to manipulate each person into productivity, the manager coordinates the strategic actions of the individuals. To put it metaphorically, not only does the individual know how to row, but the team knows how to row together. The collective energy is focused, and the impact leads to higher performance and greater involvement.

When a group is formed by people who know how to create, real chemistry can happen. John Coltrane, the legendary jazz musician, was once asked how he managed to perform with such inspiration night after night. He said, "When I get to the gig, there is McCoy Tyner (pianist), and Elvin Jones (drummer), and Jimmy Garrison (bassist). They begin to play, and the inspiration takes care of itself."

Working with other people can be a wonderful experience in the creative process, or it can be so oppressive that it can resemble group therapy. Even worse, it can seem as if you were suddenly being thrown into a story by Kafka. When it's good, it's great; but when it's bad, it's horrible. The fact of the matter is, most people have not been taught to create; consequently, they do not do well when working in groups. Much of the management literature doesn't help them to create, and courses on "creativity," with their complete misunderstanding of the creative process, take people further away from the creative process. Is it any wonder that many people end up loving humanity but hating people? Their experience when working with other people often has been like a series of bad relationships: together, they have managed to bring out the worst in everyone.

### Roles When Creating Together

There are four special roles in the creative process. These roles have a special place when creating in groups, especially when an entire organization is using the creative process. The roles are collaborators, amplifiers, technicians, and supporters. **Collaborators** are those people who join together to make a creation. The creation may be a specific project, such as a film or a building, or it may be something more general, such as a company. Collaborators are involved with forming and defining the concept of the creation, evolving the concept into a

vision, defining the ongoing current reality that is relevant to the vision, and managing the entire creative process. Each collaborator increases the scope of the vision, so that the total vision is greater than the sum of its parts.

The collaboration may be either consensual or hierarchical in nature. It is currently in vogue to glorify consensual forms and disparage hierarchical ones. This is unfortunate, because hierarchical collaboration, in which there is a chain of command and levels of responsibility, is a powerful and effective means when creating in groups. Walt Disney Studios, Jim Henson's Muppets, most film and record projects, and the U.S. space program are all examples of hierarchical collaboration.

In terms of the creative process, consensual collaboration, in which general agreement about all major decisions is a prerequisite, is actually more difficult than hierarchical. The somewhat strange, often romanticized, notion of having to seek consensus at all costs seems to come more from philosophy than from the pragmatics of creating.

Creators know not to base their decisions on whether to be hierarchical or consensual on humanistic or other philosophical ideals. Rather, they make a practical decision based on which form will do the most good.

**Amplifiers** are those people who can add to the power of the creative process, while not expanding the scope of the vision itself. Just as the word suggest, they can amplify, make louder and stronger. This role is very much appreciated by the collaborators but often misunderstood by onlookers. Those who serve in the role of amplifiers help the collaborators bring the vision into reality more effectively. They may have played no part in conceiving the vision, yet they use their skills and natural commitment to the vision to help make the result easier to create. Collaborator and amplifier is the most common relationship between a writer and her editor. The studios of Michelangelo, Raphael, and Leonardo da Vinci created some of the greatest art known to civilization through the relationship between the collaborators (master artists and patrons) and amplifiers (other member artists and apprentices). While collaborators expand the scope of the vision, amplifiers expand its magnitude. By nature, some people are collaborators and others amplifiers, while others are both.

**Technicians** hold an important role. Their role is separate from that of the collaborators and the amplifiers because they do not need to be committed to the vision. While their "spiritual" connection to the vision is not as involved as it is for collaborators and amplifiers, they are fully appreciated as members of the organization. Through the professional services they provide, they play an invaluable role in

the final realization of the vision. Technicians may include recording engineers, book designers, advertising and public relations people, consultants, computer technicians, and camera and lighting people.

**Supporters** are similar to technicians except that their role is less technically based. They play a valuable role in the creative process through the support they provide - whether as a receptionist, building maintenance worker, administrative assistant, or even volunteer. Like the technicians, supporters do not need to manifest commitment to the vision, although their role does not preclude it.

These four roles are extremely important when creating in groups, especially large groups. The most vital relationships are among the collaborators, the amplifiers, and the collaborators and amplifiers together. This is not to say that the technicians and supporters are unimportant; they are essential, but often they do not share the love of the vision that the collaborators and amplifiers have. Because of this, more types of people can successfully join the ranks of technicians and supporters than those of collaborators and amplifiers.

Making these role distinctions can be helpful, particularly if technicians and supporters begin to be promoted into the ranks of amplifiers and collaborators. In many organizations, however, the transition from supporter or technician to collaborator or amplifier is not well managed, and the depth of caring that collaborators and amplifiers have can become watered down. All this can lead to a less powerful creating team. Let me be more specific. Organizations often are started and led by collaborators, who then attract amplifiers. Then the technicians and supporters are hired to add to the creative ability of the organization. The driving force in the beginning may be a great love of the company (which is one creation) or the actual business of the company (which is another creation). Yet, as the organization expands, more people are invited to play essential roles - roles that require collaboration or amplification. Sometimes these new people do not share the caring of the founders or current leaders; they may know all the right words, but they may miss the true meaning. Slowly the organization can drift away from the vision, and a self-preservation mentality may begin to dominate. The vision becomes an icon, instead of a living reality. People may pay homage to it, but for many, it is really the continuation of their employment that is first and foremost in their minds.

If an organization is expanding, it can be incredibly useful to realize who is fulfilling each role, since each role is essential to the success of a corporation. This awareness can help expand the collective power of the creative process as well.

# THE MILLENNIUM ORGANIZATION -

One of the more interesting aspects of the story of evolution is the way in which conditions toxic to one species become fundamental preconditions for an emergent species. Way back in the beginning, when there were only plants, carbon dioxide was the breath of life, and oxygen a waste product. Fortunately the earth at that time was bathed in a virtual sea of carbon dioxide, so why worry about a little oxygen pollution? Eventually the balance shifted, and what started out as paradise if you happened to be green and stuffed with chlorophyll, became highly toxic and close to lethal. What to do? Create an animal, something that loved oxygen and excreted carbon dioxide.

It has been a workable tradeoff ever since, although at the present moment, things do seem to be getting a little out of hand, what with the greenhouse effect and holes in the ozone layer. Be that as it may, there is a lesson here even if our rendition of evolutionary theory is not the most elegant. The lesson is this: when the environment becomes toxic for one life form it is reasonable to anticipate the emergence of a new one which will make virtue out of necessity and opportunity out of a mess.

So we might ask ourselves what sort of organizational life form might possibly be emerging to take advantage of a highly toxic environment for the old way of doing business? If the loss of control and presence of high levels of chaos are problematic for the old style business, we would then expect some chaos-eating wonder creature to make positive use of what is obviously an abundant potential resource.

It is a testimony to the powerful and deep resources of human consciousness, by whatever name, that such a new organization is in fact emerging out of the ooze. It would be nice if somebody could take credit for its design and propagation, but I think the Millennium Organization has emerged as a natural, one might almost say inevitable, response to the conditions of our existence. The appearance has not been without pain and difficulty, and there are more than a few who doubt its presence or hope it will go away. But it is really here and growing.

## Characteristics of the Millennium Organization

The fundamental character of the Millennium Organization is revealed in its celebration of life as an Open System. It is constantly engaged in dialogue with the world around, and indeed the difference between the world and the organization is, more often than not, a matter of perception. Inside and outside become relative, and sometimes meaningless terms, boundaries a matter of focus and convenience rather than hard determination. Business is done through a process of co-creation in which ongoing collaborative relationships are the norm, and winning and losing, as zero sum games, are relegated to an earlier, more barbaric period. Competition is by no means

banished, but it is competition for the larger purpose of realizing potential and actualizing latent gifts, and not to vanquish or destroy the opponent.

The defining characteristics of the Millennium Organization are more a matter of style than substance. The way things are done is infinitely more critical than the size or structure of the operations. Such organizations may be no more than two or three people gathered together to accomplish some purpose, or a cast of thousands with a similar intent. Curiously enough, Millennium Organizations apparently work the same way no matter how many people are involved. While there may be a lower limit of two, I am not sure there is any upward limit, a positive advantage given that there are in excess of five and a half billion of us here on the planet, with more arriving daily. Somewhere along the line we are going to have to get organized.

As for structure, the guidelines seem to be anything that works. Over time, and often at the same time, a whole multitude of organizational structures put in an appearance. The geometry is as varied as the tasks that confront us, and the question is never what is the one right structure in some abstract sense, but rather what structural array will get the job done. Everything from circles to steeply ranked hierarchies has a place. There are even times when important things get done in the absence of any visible structure at all.

The noncritical nature of size and structure will disturb those (most of us) who have made a life work searching for the perfect structure and optimal size. However, compared to several other factors, size and structure in the Millennium Organization make a marginal difference in terms of impact, effectiveness, and overall performance. There are five critical qualities to consider: 1) High Learning, 2) High Play, 3) Appropriate Structure and Control, 4) Genuine Community, and 5) Primacy of Spirit.

## High Learning

Thomas Kuhn, in an extraordinarily influential, brief book entitled *The Structure of Scientific Revolutions*, makes the distinction between what he calls *High Science* and *Normal Science*. High Science is what gets done at those moments of paradigm shift (it was Kuhn who created the whole notion of paradigm), when an old world view passes from the stage and a new one takes its place. Rather than progressing by logical steps incrementally arrived at, High Science functions all in a rush with grand intuitive leaps. Very messy, very exciting, and absolutely at the core meaning of Breakthrough. Normal Science is what you do upon arrival, neatening up the mess, so to speak. It is essential, but not very exciting.

Borrowing a leaf from Kuhn's book with some modification, I offer High Learning as the first

## Harrison Owen

characteristic of the Millennium Organization. It is learning of a special sort, fully responsive to the chaotic conditions of the environment and the essential nature of the Millennium Organization as an Open System. When the borders are open and the environment chaotic, organizational dissolution is a constant possibility. Unless there is a mechanism that will convert chaos into something useful. As you might suspect, the mechanism of High Learning, and the convert of chaos is creativity and innovation.

Chaos, while painful, has the positive attribute of opening up any situation in new and different ways. When the old order goes, and new one has yet to arrive, the interim state may be a mess, but it is also a momentary revelation of what lies at the depths. Under everyday circumstances, the essence is hidden by a smooth veneer of normalcy. But when chaos strikes, the veneer is ripped to shreds, and we have the opportunity to see things as they really are.

Metaphorically, it is as if a powerful hurricane passed through and all the foundations were revealed through the work of the wind and the tide. Gale-driven walls of water have cut to the quick, and there in the bright light of day, we see the buried power lines, water pipes, and sewer mains. Not a pretty picture, but instructive nonetheless.

The advent of chaos in our organizations has a similar effect. When everyday normalcy is truly gone, we are left with the fundamentals. There is no escaping the elemental questions: Who are we? What are we doing here? Where are we going? In other more pleasant circumstances, such questions are answered automatically, if they are even asked. "Of course we know who we are! Haven't we been in business for many years? We are doing what we have always done, and why should we do anything different?"

Chaos creates the opening to difference, it forces the question, provides the opportunity for learning. Not everyday, normal learning, but High Learning, vaulting from what was to what might be. If the gift of chaos is received, and converted by High Learning from painful incident into a pre-vision of the future, the possibility for fulfillment of organizational potential is well on the way to becoming real. In a moment the greatest threat to the organizational future, chaos, becomes the necessary precondition for that future, made so by High learning. No chaos, no difference, no learning, no future. The Millennium Organization simply cannot survive without chaos, for it is chaos that constantly sends the organization on its way to the future. But how can the organization continue? By what means will we be able to recognize the organization as such? Where is its identity if that identity is constantly in jeopardy, stripped away as chaos ravishes the current forms of organizational life?

The answer is that the identity of an organization does not exist in the formal manifestations, but rather

in the act of manifesting. A journey is not ultimately defined by the end point or way stations, but rather the quality of the journeying itself. Providing that special, recognizable quality is the gift of the next characteristic of the Millennium Organization: High Play.

## High Play

Everybody knows that work and play are rather like oil and water, they do not mix. How, therefore, can High Play be an essential, defining characteristic of the Millennium Organization? Either such an organization is serious or a joke, and if serious it can hardly be playful - or so it seems.

Taking business seriously is our first mistake; or at least it is in an age marked by chaos, populated by Open Systems, and where control, as we used to know it, no longer exists. Were we to take all that is going on with absolute seriousness, it is quite likely that we would lose what sanity we have left. If nothing else, High Play is an antidote to the toxic, high-stakes environment which is our earth. But there is more involved here than simply using humor to get us through the day. Play is one of the most powerful tools in our possession, and certainly not to be equated with the trivial.

High intellectual adventure is pursued in a playful fashion. Only through play can we bring the full power of all our resources to bear on the issue at hand without forming a fixed attachment to some particular outcome.

Living effectively in this marvelous, changing world is impossible with anything less than everything we have physically, emotionally, and intellectually. But with that kind of investment it is quite understandable that we should become attached to, and defensive about, the way we see things. Then the world changes again, and all of a sudden, what seemed so certain is hardly even on the radar screen. If our attachment to what was is unbreakable, we too will disappear from the screen of life. *High Play allows us to take everything absolutely seriously, and then let it all go with a smile.* The alternative is hardening of the intellectual and emotional arteries, ossified fundamentalism, doctrinaire obscurantism, and a variety of other hideous conditions not conducive to a full, meaningful life in the new millennium.

In a slower day, reality appeared unchanging, and a given theoretical construct of that reality might hang about for some time. At the moment realities, virtual and otherwise, along with the maps thereof, change with mind-numbing speed, not only in rapid linear sequence, but also in simultaneity, as reality laps reality to create a multiplicity of realities.

Truly there is more than enough to give you a severe headache, but what does all this have to do with High Play? A short time in any first-class nursery school will provide the answer. Watch carefully as the



Building Block Empires are constructed. Note the considered determination with which each new piece is fitted into place. Listen as the small citizens engage each other seriously in the world of their making. And then, when it is juice and cracker time, appreciate the joyful screams as the towering structure is reduced to rubble. Joy is to be found not in what is or was but in the journey itself, in the process of creation and not in the creature. When a new reality appears (juice and crackers) it is time to let the empire go with gusto. That is High Play.

High Play has been with us forever as one of the better kept secrets hidden in the private preserves of philosophers, scientists, and priests, or at least the good ones who did not take themselves too seriously. It is also available to children everywhere. High Play is available to us all if we will but remember.

#### Appropriate Structure and Control

The Millennium Organization is not without structure. Indeed, it may have many structures sequentially, or even all at the same time. The issue is not structure or no structure, but rather *appropriate structure*: appropriate to the task, the environment, and the people involved.

Neither is the Millennium Organization without control, but control, like structure, is always appropriate to the task, the environment, and the people involved. Never (or at least not for long) is control manifest in an arbitrary fashion as a modern-day version of the divine right of kings.

Structure and control are inextricably related, for control is structure at work. We perceive the presence of structure when we witness the act of control, and both structure and control are simply two elements of the same entity - effective management.

Structure, control, management all have appropriate places in the Millennium Organization, but the word *appropriate* is critical. Structure emerges as a natural expression of the task, people and environment. Control is what you do in and through that structure. Management puts it all together, not as a special prerogative of an elite group of people, but a function to be performed appropriately - potentially by anybody. In the Millennium Organization management is no longer capitalized, as in *The Management*.

The important circumstances may be defined in a number of ways, but a simple one is: the people, the task, and the environment. Every group of people, indeed even the same group of people on different days, will perform a task differently, and so they should. Performing a task requires certain abilities and skills, and no matter how much we seek to standardize work forces, the central fact remains: people are different. We can, of course, pretend that difference does not exist, or seek to eliminate it by shoving everybody into the same box, but neither of these approaches is

terribly effective, and both tend to produce either suboptimization or revolution.

Getting the best from folks requires that they be comfortable in what they are doing. It is not unlike wearing shoes. If the shoes pinch, or are too loose, and you have to be on your feet all day to do a job, no amount of brilliance, motivation, or inspiration will make much difference. The job simply is not going to get done as well as it might.

Structure in the organization is like shoes on the feet, with different shoes for different occasions. Not all are comfortable or appropriate in every instance. Field boots just do not make it at a black-tie dinner. We have to make some choices, and we should do no less in terms of the structure of our organizations. The question is always appropriateness.

As with structure, so with control. No longer is the locus of control conferred by title, but rather by task and function. If you ask who is in charge, the answer is whoever has the ball. And there should be a number of balls in the air at once, there will be a similar number of people in charge.

So it looks like complexity twice confounded one more time, with an abundant possibility for confusion. On the one hand, optimal performance requires multiple simultaneous structures, combined with numerous centers of control. At the same time, the limitation of human intelligence says, "Oh no, that is unthinkable!" Actually, it can and does all work, and the secret is High Play.

High Play enables us to take any given structure or center of control with a grain of salt, a dash of humor, a sense of adventure. In the spirit of High Play, we can have as much fun tearing a structure down as building it up, and the absence of structure is perceived as a marvelous opportunity to engage in creative enterprise. The same may be said for control. It is true that playfulness, as it relates to control, often appears as rebellion, but rebellion at some level is the essence of innovation. We come to understand that no center of control is absolute, even as no structure is eternal and perfect. Both structure and control serve a higher power: playfulness.

From the outside, High Play occasionally appears destructive or even irreverent. Truthfully, it is open season on sacred cows of all sorts, but this does not imply a respect for nothing. Respect, however, is reserved for the joyful process of creation, even as the creatures are happily abandoned, for it is the quality of the journey, and not the way stations and end points that are celebrated.

#### Genuine Community

The fourth characteristic in the Millennium Organization is Genuine Community. It is not the forced, facile, false community experienced at the typical office party. Endurance at such affairs is

possible only through the heavy application of anesthesia, and pasted smiles fall off faces as they pass out - through the door or into alternative consciousness. Then there were those wonderful corporate gatherings when the Boss informed the group that, "We are all one big happy family!" At the time his statement could only be considered a bald-faced lie, or an executive directive aimed at the future, for it certainly had little to do with present reality.

To be fair, we really worked on building community. There were seminars, training programs, books, videos - but it seemed that the harder we tried, the further we got from our intended objective. Truthfully, we really only learned how badly off we were.

And that was our second mistake. We tried. Community does not happen by trying. We are already in community and it is only by continuing effort that we destroy this reality, building walls, guarding boundaries, and creating turf. There was, and probably still is, a rationale for boundary-making, for this is the way we create our individuality and build our egos. But once created, there would seem to be little sense in continuing what is obviously a very painful and destructive pattern of existence.

Here is an interesting question? Why do we continue to struggle for what we already have? *We do not have to make community, we simply have to be it.* And being genuinely in community is one of the outstanding characteristics of the Millennium Organization.

Now you may be asking yourself how this magic might occur. Is it not true that the world is currently divided by controversy and splintered by difference? Of course. But is it not also true that most of the controversy and division is created by folks bound to guard the borders and stay in control? In short, they are maintaining the interesting, but dangerous notion that the borders are real and somebody is in charge. The emperor's clothes all over again.

It is more than possible, indeed likely, that the world as a whole is not ready for participation in the Millennium Organization. Clearly there are places where love, light, and unity have yet to break out. I would argue, however, that there is a trend. The walls are coming down, and we are being forced to learn that our planet is an Open System and no one of us, or any small group, is in charge. I think the evidence grows that a new order is arriving, having nothing to do with changed boundaries and bosses, but rather the elimination of both.

Actually, in the presence of High Learning, High Play, and Appropriate Structure and Control, you simply cannot avoid Genuine Community. It happens, like it or not. The reason is appallingly simple: there is nothing to get in the way. *When structure, and control, stand in the service of learning and play, community is the inevitable result.* Without arbitrary boundaries and barriers, the natural unity of human kind is made manifest.

#### Primary of Spirit

The final defining characteristic of the Millennium Organization is the Primacy of Spirit. Spirit is rather hard to define, but we all know it when we meet. I recognize in these days of crass materialism that a statement about the Primacy of Spirit is risky, outrageous, and definitely unprovable. On the other hand, I do not know anybody who would be interested in proving it, or anything that would be gained if you managed to do so. Ask any coach, sales manager, production team member, secretary - the really important people - about the place of Spirit, and I will be terribly surprised if it does not come out Number One on the list. When the Spirit is up, fantastic things happen. When it is not, you might as well forget it.

The overt presence of Spirit in an organization can be unsettling, especially for those who think they are in charge of maintaining the boundaries and controlling the business. It is not so much that Spirit violates the rules. It simply overlooks them, and plays by its own rules. In the old days, when learning was normal (dull, boring), play was banned, and one structure supreme, Spirit was not only unsettling, it was downright embarrassing. When present it led to such anomalous behavior as *having fun at work*. We all knew that work was hard, unpleasant, and to be avoided at all costs. Fun at work just did not make any sense. After all, what would you do in retirement if you were already having fun on the job?

Strange things happen in the Millennium Organization. Under the conditions of High Learning, High Play, Appropriate Structure and Genuine Community, Spirit has a field day. Having fun at work is expected, and the absence of fun is a clear indication that something is wrong. Hedonism, as the constant pursuit of pleasure, is no longer to be equated with rank debauchery, but even has an ethical content. Should you require authority for such an outrageous notion, remember the counsel of Saint Augustine, "Love God and do as you please."

The primacy and presence of a positive, powerful Spirit is at once pleasant, awesome, and productive. It is pleasant to see people enjoying themselves, awesome to watch their energy, and satisfying to see the results. Compared to other ways of being in organization, it seems almost unbelievable and suggest that there must be some sophisticated, complicated, esoteric new technique at work here. The truth is embarrassingly simple. Things work as well as they do because little if anything gets in the way. Inappropriate, multi-tiered structures, hung over from another day are banished. Ego-driven control freaks have found it useful to seek alternative employment. In short, barriers to doing a job quickly, with excellence and pride, are eliminated. It is an amazing fact: left to themselves good people do good work, and enjoy it. And the Spirit is fantastic.