Gentle Action: Surviving Chaos and Change

F. David Peat

Introduction

How can policy makers, NGO, institutions, businesses and individuals achieve stability in a world of rapid change and engage in activities that are more appropriate to the situations that surround them? Issues of uncertainty have always existed; as have apparently intractable problems. Yet more recently these issues have been magnified and exacerbated by technologies that allow for rapid transfer of information, large scale economic speculation and fast implementation of policies and actions at a global level. Today they are also viewed from within the wider context of global insecurity and economic uncertainty. Gentle Action addresses such issues. It is an approach in which a subtle action operating in often unexpected ways can produce large effects. Conventional solutions often seem too costly or require too much effort to the point where policy makers and politicians become seriously discouraged. But by acting in somewhat unconventional manner major changes can occur in issues that previously appeared intractable. Gentle action operates by observing the entire dynamics of a situation. It proposes that new organizational structures can arise that are more flexible, sensitive and organic. It fosters an environment in which natural creativity and human talents can flower. It encourages openness, transformation and sensitive awareness.

Out of the new structures and institutions that are discussed in this essay emerge a new form of action, one that unfolds out of the very nature and dynamics of the system, or issue, in question. Such an activity is creative, gentle and highly intelligent and therefore differs profoundly from conventional approaches that tend to be rigid, externally directed and only take a limited account of the whole context in which a particular intervention arises.

Gentle Action provides a new approach to decision making, policy planning and creativity, one that will be especially important in dealing with highly complex systems, organizations in a state of crisis, problems arising from within a rapidly changing context, and policies that must be formulated in the absence of complete knowledge about a particular state of affairs. This new approach will have applications in business, institutions and government, and will be particularly significant when dealing with questions of ecology, economics, social order and global networks. As a natural process leading to growth and healing it will also prove invaluable in psychotherapy and self-development.

The Anxiety of Change

Many rapid changes that are taking place around us. These include globalization, developments in technology; fears of terrorism, the instability of the Third World; the rise of the Pacific Rim and a United Europe; the breakdown of inner cities; economics that appear to be out of control with the consequent challenges of inflation, recession and unemployment; spiraling health costs; revolutions in communication technology and information processing; the demands of consumers and special interest groups; threatened species and ecologies; the dangers of global warming and ozone depletion; increasing rates of teenage suicide and drugs use; the transformation of management and the breakdown of conventional institutions.

Governments, institutions, organizations and individuals experience considerable anxiety in the face of such rapid change and feel powerless to ameliorate the problems that surround them. Indeed, it sometimes appears as if their plans and policies, as well as the traditional structures of their institutions, are themselves part of the problem.

In so many cases policies, plans, interventions and other actions, all taken in good faith, have not only failed to resolve an existing situation but in many cases have acted to magnify and render the problem even more intractable. In other cases, the attempt to impose a solution in one location or context has had the effect of creating an even larger problem elsewhere.

Organizations and individuals feel control slipping from their grasp and their natural reaction is to become even more intransigent in their attempt to clamp down on events and exert ever more control. The result is a spiral of control that has literally gone out of control! The realization that plans and policies are ineffective leads to a sense of depression and hopelessness. Faced with the insecurities and flux of the modern world many institutions fall into a state that, where it to be detected in an individual, would be diagnosed as manic-depression!

How did this cycle of anxiety, hopelessness, panic and the desire for ever more control arise? I would argue that it is a paradigm of thought and behavior that originates in our particular view of reality, a view, moreover, that modern science had now demonstrated to be fundamentally erroneous. Thus, when our perception of the world around us is astigmatic, the actions we take become increasingly inappropriate and incongruous. It is only by entering into new modes of perception and acknowledging a new paradigm of reality that more appropriate forms of action can be taken.

The Myth of Control

One of the great themes of Western civilization, a theme of virtually mythic proportions, involves the way in which nature has been tamed and controlled over the course of the last few thousand years. Other cultures and civilizations have, for example, developed the techniques of farming but it appears that only the civilizations that expanded from their Neolithic birthplace in Northern Europe and the Fertile Crescent of the near East possessed the hubris necessary to impose themselves to such a marked extent upon the landscape. Thus, even in prehistoric times, European forests were cleared, marshes drained, vast tracts of land converted to farming, and tracks and

walkways established as human beings sought to recreate the landscape according to their own needs. And, as ever more powerful technologies and social control became available, this path of domination continued.

Within our own time, social critics have pointed out that this desire to exert control has led to our distancing ourselves from the natural world. The effect has been for us to place an increasing faith in human reason, science, technology and the effectiveness of plans, directives and policies while, at the same time, to decrease our sensitivity for the complex and subtle nature of the world around us. In short, we tend to stand outside the world, like observers, indulging in constant analysis, making predictions and exerting corrective control when situations do not move in the direction we desire.

When human society and its associated technology were relatively simple and localized, and the resources that it called upon were unlimited, then this pattern of control was relatively successful. But as societies attempt to deal with ever more complicated issues, their boundaries became more open, their resources are found to be finite, the environment fragile, and technologies and world economics become increasingly complex then these conventional approaches simply fail. Ultimately, by virtue of its early success, the desire to dominate grew to the point where it began to subvert itself and, in the process, endangered the whole planet. And increasingly actions taken in one sphere have unintended consequences in another.

Engaging complexity

Over the last decades, however, there have been indications of a remarkable transformation within this traditional vision; a revolution in the perception of ourselves, our culture and the nature of reality that is truly Copernican in its implications. Just as in the 16th century astronomical observations were to dethrone the human race from a central place in the universe, so too in our own century relativity, quantum theory, chaos theory and systems theory, along with new insights in psychology, ecology and economics, have demonstrated the fundamental fallacy of our belief in definitive control. At the same time they are affirming our basic connectedness to the whole of creation.

These scientific insights happen to have come at a time when the world has been experiencing rapid revolutionary change. States have risen and fallen. The notion of government is being transformed. Institutions are questioning their effectiveness. Businesses are desperately searching for new ways of operating. Technologies have developed so rapidly that people are unable to keep up with their implications. The overall effect has been to create a profound sense of anxiety, a fear that things are out of control, that the future is increasingly uncertain and that we have been left with nothing to hang on to. Yet what if this anxiety actually points to an essential truth about the world, that ultimately control and definitive prediction are strictly limited and that we must discover new ways of being and acting?

Our current economic, social, ecological, environmental and institutional systems are now enormously complex to the extent that we may never have complete knowledge about the inner dynamics of such systems, nor the ability to predict exactly or exert total control. In this we can draw on metaphors from the new sciences of quantum

theory, chaos theory, systems theory, and so on which also indicate essential limits to prediction, description and control. It is for such reason that so many of our plans and policies have been unable to meet the complexities of the modern world and why some supposed "solutions" have created even deeper problems and more intractable situations. The myth of eternal progress and control that has lain behind Western civilization can no longer sustain itself. The island of order and certainty on which we have been living has turned out to be not solid land but a rapidly melting iceberg, and we have no alternative but to plunge into the boiling sea of flux, uncertainty and change that surrounds us.

The Dilemma of Action

These are the dilemmas that many organizations find themselves in today, dilemmas that translate into the anxieties and uncertainties faced by many individuals. Programmed by their goals and mission statements, as well as by their very structures, many organizations inevitably seek ways of exerting control and believe that they must always take positive action in the face of uncertainty. Yet increasingly they discover that these actions are inappropriate. And so organizations, institutions, governments, groups and individuals retrench, break apart or in some other way get trapped into a spiral of ineffective decision making, paralysis and anxiety.

These organizations, governments and institutions have been created according to our traditional image of reality; that is, of a world that is external to us, predictable, relatively mechanical, and whose dynamics can be controlled by the application of directed force. As a result, organizations are themselves relatively rigid in their nature, operating from fixed plans, policies and mission statements. Their internal structures are often hierarchical in nature, their lines of communication are limited rather than being flexible and dynamic, and their response to challenge and change is often predictable. In other words, most organizations are far less subtle and complex than the very systems they are attempting to address.

The basic problem facing our modern world is: How can society respond to the flux and challenge of the modern world when all its institutions are inflexible and over-simplistic? When situations move more rapidly than an organization is capable of responding, policies and programs are outdated even before they are put into operation. Rather than acting to render organizations and policies more flexible, the apparatus of modern technology tends to rigidify and entrench the problems and rigidities that already exist within an organization.

Organizations are composed of individuals and here too the conditioning of our society tends to inhibit natural creativity and abilities. Just as organizations have areas of rigidity, limitations also apply to the psychology of the individual. The issue becomes, therefore, one of freeing and fostering the natural intelligence and creativity of individuals and allowing them to operate fully within society, governments and institutions. In other words, how can organizations and individuals transform themselves so that they can become as subtle, sensitive, intelligent and fast-responding as the world around them? How can institutions heal their separation from society; society from the individual; and the individual from the natural world?

Creative Suspension

Paradoxically it is the very effort to change that establishes an internal resistance and rigidity that sustains the blocks that are to be removed. The first step towards transformation lies in an act of "creative suspension" and "alert watchfulness". This is an action that has the effect of relevating and making manifest the internal dynamics, rigidities, fixed positions, unexamined paradigms, interconnections and lines and levels of communication within the organization and the individual.

A form of "creative suspension" is taught to paramedics and rescue workers who have to deal with serious accidents. While a layperson may wish to rush in an "help", a professional will suspend immediate response in order to make a careful assessment of the whole situation and determine how to use resources most effectively. Likewise doctors and paramedics made a visual examination of the wounded before carefully touching and then determining what medical action should be taken.

The nature of this creative suspension is related to other approaches and techniques whereby unexamined assumptions and rigidities are brought into conscious awareness. For example, Sigmund Freud's notion of "non-judgmental listening" as well as various meditative practices. Artists, composers, scientists and other creative people often describe how their work unfolds from a form of creative "listening". These acts of listening and watchfulness have the effect of dissolving rigidities and rendering a system more flexible.

Of course the lights will begin to flash and the alarm bells ring. Like Pavlov's dog an organization is conditioned to react and respond. But what if it does nothing--but it a very watchful way, and this applies not only to organizations but to individuals as well? The first stage will be one of panic and chaos, a flow of commands and information. All of this is not being generated by any external threat but through the internal structure of the organization itself. By remaining sensitive to what it going on it may be possible to become aware of the whole nature of the organization, of its values, the way its information flows, its internal relationships, dynamics and, in particular, its fixed and inflexible responses-- the organizational neuroses and psychoses if you like.

Arthur Koestler suggested that a scientific revolution is born out of the chaos as a paradigm breaks down. It is possible that something new and more flexible could be born out of the break down of fixed patterns in an organization, policy group or individual. Through a very active watchfulness it may be possible to detect its unexamined presuppositions, fixed values and conditioned responses and in this way allow them to dissolve by no longer giving energy to support them. The idea would be to permit the full human potential for creativity within each individual to flower, it would enable people to relate together in a more harmonious way and human needs and values to be acknowledged.

In this fashion the organization or group dies and is reborn. In its new form it becomes at least as flexible and sensitive as the situation it faces. Now, using science, human creativity and the art of working with complex systems it may be possible to perceive a complex system correctly and model it within the organization. This new understanding would be the basis for a novel sort of action, one that harmonizes with nature and society, that does not desire to dominate and control and but seeks balance and good order and is based on respect for nature and society.

Gentle Action explores images of new organizations and institutions that would be able to sustain this watchfulness. In place of relatively mechanical, hierarchical and rule-bound organizations there would exist something more organic in nature. In place of relatively mechanical, hierarchical and rule-bound organizations there would exist something more organic in nature. By way of illustrate one could draw upon ideas and concepts in systems theory, Prigogine's dissipative structures, cooperative and coherent structures in biology, neural networks, quantum interconnectedness and non-locality. In such a way organizations will be able to reach a condition in which they are as sensitive, subtle and as intelligent as the systems and situations that surround them.

New Organizations, New Dynamics

With this increased flexibility, organizations will now be able to internalize and model the complex dynamics of the systems that surround them. Rather than seeking to predict and control, they will now be able to enter the flux of change and engage in those actions that are appropriate to each new situation.

Successful organizations of the future will have more open and organic structures. Their systems of communication will be closer to those of neural nets than to fixed telephone networks. They will draw naturally upon the creativity of their employees and, in turn, employees will be self directed and satisfied by the exercise of their natural creativity and initiative within a caring environment.

But this does not mean that organizations will abandon leaders and managers, for people with flair and the ability to make rapid decisions, inspire confidence and exercise knowledge, intuition and creativity will always be needed. Rather, the dominant stance, artificially enhanced status and negativity associated with the notion of authority will change. New forms of leadership will respect the initiative and autonomy of others so that each person brings their best abilities to a particular task. In an emergency, for example, a natural leader will often emerge yet as soon as the crisis is over that person will go back to carrying out their former tasks. The futurist Robert Theobald referred to this as sapiential authority.

Reference to traditional and indigenous societies shows how leaders are elected in response to specific tasks and crises. Their authority does not arise by virtue of a particular fixed position that could be filled by a cipher. Rather individuals are chosen to give leadership during a particular emergency or in order to carry out a given mission, and their authority arises from the confidence that is placed in them by the group. In a similar way leaders will always be called upon in the new organizations and as the particular challenge of a given situation changes so too the internal structure of the organization will transform and particular individuals will be free to adopt new roles.

Enhanced and more effective communications will take place in these new organizations. There is currently a great interest in what has been called the "Dialogue Process", sometimes associated with the name of David Bohm. The idea of a "learning organization" and of "creative learning" has been proposed by a variety of experts, including Peter Senge. One could also draw upon the Native American process of arrival at consensus through the flow of active meaning around the

traditional circle. To take this particular example, a flow of meaning differs in its inherent dynamics from the conventional approach in which formal agreement is reached through discussion and argument. For, rather than a fixed decision being drawn up and circulated at the end of a meeting, each person leaves the discussion knowing what he or she must do - even if circumstances should happen to change in the meantime. New organizations will therefore place their emphasis upon flexibility, creativity, intelligence and the ability to meet an unending challenge of change.

Gentle Action

I have adopted the term "Gentle Action" for the new types of activities and actions that can be taken by an organization that is sensitive to the dynamics of its surrounding environment. It is a form of minimal and highly intelligent activity that arises out of the very nature of the system under investigation.

Actions and reactions that proceed from conventional organizations, plans and policies tend to be relatively mechanical in nature and are usually directed towards what is perceived, and often in a highly limited way, as "the source of the problem". Moreover, the greater the effect required, the stronger would be the action that is imposed. By contrast, gentle action is subtle in nature so that a minimal intervention, intelligently made, can result in a major change or transformation. The reason is that such action makes use of the dynamics of the whole system in question. This could be compared to the way in which a proponent of the Japanese Martial Arts makes use of an opponent's strength to defeat him. Rather than using violence, or dissipating energy, the Martial Arts expert directs small movements and leverage in order to focus the opponent's own momentum and energy in a new direction. In a similar fashion gentle action acts in a highly intelligent and sensitive way to guide and refocus the energies and the dynamics of the system in question.

Another image of gentle action would be the minimal movements made by a person in the sea in order to remain afloat. Floating occurs, not through the expenditure of energy or violent movements, but rather by remaining aware and sensitive to the movement of the sea and the position of one's own body and thus, by making tiny movements of the arms, legs and hands, the body can preserve its orientation. Surfing and skiing can probably be thought of in this way.

Action in Action

A number of examples of this sort of action can be given:

New Gourna
During the first half of the twentieth century Egypt normally imported concrete frame housing from Europe. However the architect Hassan Fathy pointed out that this was not only a costly process for the rural poor but did not fit well into the cultural fabric of the Middle East. His solution was to return to an ancient tradition and build houses, mosques and public buildings out of mud and straw. Despite objections that houses would be washed away in the spring rains Fathy build the peasant village of New Gourna Village near Luxor. Not only did he demonstrate the possibility of cheap housing for the poor but also trained villagers in the techniques for build their own

houses. He later expressed his ideas in the book "Architecture for the Poor: An experiment in rural Egypt".

Vietnam
A group of Italian business people discovered that the best way to help the street children in Vietnam was not through grants or charity but to give them the skills to open up their own small business - for example, repairing bicycles.

A School or a Well?
A group of business people in England wished to encourage education in an African community. Their natural conclusion was to donate funds to build a school. However the community told them they had no need for a school building, children could sit under a tree and learn. The real issue was the lack of a well. The children had to walk a considerable distance to collect water for the community. By donating money to build a well the children would now have free time to sit and learn.

Heifer International: Not a Cup but a Cow
Dan West was a relief worker during the Spanish Civil war giving out milk to refugees. The idea struck him that it would make more sense to provide people with a cow rather than handing out of cup of milk. In this way Heifer International was born. Today the organization donates livestock to poor areas in 47 countries, also providing training in the care and upkeep of animals. In turn, the offspring of these animals are passed on to other members of the village.

Gaviotas.
In the early 1970s a group of Columbians (scientists, street children and peasants), dissatisfied with the political turmoil and urban decay, decided to create a new community it what was considered uninhabitable pampas. Their idea was to create a totally sustainable community. One of the prime movers in creating the community was Paolo Lugari who said they wanted to do something for the third world by the third world. "When you import solutions from the First World, you also import your problems. He said that they wanted a chance to plan their own tropical civilization from the ground up, rather than importing models and technology from the Northern countries "as the Peace cord wants to teach everybody".

Thanks to the cooperation of a number of universities, who sent out their students, many ingenious low-tech devices were created. For example, the power generated by the children's swings and teeter-totters, for example, was used to power water pumps. The community also planted many trees so that the surrounding barren land was gradually converted into a forest. Today the community is totally energy independent. They farm organically and use wind, solar power and a wood-power turbine. Every family enjoys free housing, community meals, and schooling. There are no weapons, no police, and no jail. There is no mayor. The United Nations named the village a model of sustainable development.

Grameen Bank
One day Mohammed Yunus, an economist in Bangladesh, spoke to a woman making bamboo stools in a market. She explained that she had to buy the materials from a middle man and then sell back the finished stools to him. Yunus realized that with a small loan of only $25 the woman could be made independent. In this way the idea of

microcredit was born - small loans, given generally to women, who used them to buy things to sell at the market such as sewing needles and thread to become tailors and seamstresses); chicks to grow for meat and eggs to sell (i.e., agricultural loans).

The initial loans were very small amounts of under $100, As the women paid back the loans, they allowed more women to borrow and start businesses. Women were chosen since they were better credit risks than men in these cultures and because they spend their money for better food, clothing and education for their children rather than on imported goods. In this way money stayed within the village which began to prosper. Today Yunus's scheme of microcredits has been adopted in many countries. He was event invited by the US government to set up a microcredit system in Arkansas.

Native American talking Circle
Non-natives often wonder how decisions are made within an Indigenous community. In a talking circle a pipe or feather may be passed around allowing each person to speak in turn. What is discussed are not so much plans or proposals but people feelings, memories, ancient stories. At first sight this appears puzzling until one realizes that a field of meaning is being created which is being owned by the whole group, rather than by the particular individuals who speak. In one sense their remarks are personal, in another they are an expression of the rich dynamics of the group.

At the end no decision is made and no plan agreed upon but somehow each person "knows what to do." Action arises out of the group as a whole, not through the instructions of an elected leader. (Although for certain tasks a leader may be appointed, this authority always exists as an expression of the group and will therefore l vanish once the task has ended.)

If a ceremony is to be held, a building constructed the non-Native will ask the hour when this will happen. "When the time is right" will be the answer. Again "the right time" appears to be an inner sense.

Creative suspension: The King's Cross project.
At first sight the Kings Cross project looks like the epitome of "ungentle action". King's Cross Station is designated as the British terminal for European rail traffic (the station at Charing Cross is only a temporary solution). This led a major European Union regeneration project for the surrounding area, a project in which other vested interests were represented, such as English Heritage, P &O and Railtrack. These extensive plans were drawn up without any consultation at the local level. It did not take into account that the King's Cross area is part of the borough of Camden Town, in essence a village within a city, a very close knit community dating back for centuries and once home to Charles Dickens and the Bloomsbury Group. In addition to housing many small traders who live and work in the area it was also the residence of many of Britain's leading writers, artists and actors.

The outcry against the development project was highly vocal. At first it involved the traditional approaches of protest and confrontation but in the end the promoters of the project were forced to stop and begin to listen to the many voices of the local community. It was at this point of "creative suspension" that the project managers realized that they could not proceed with development in its current form. Only by

working directly with the community and understanding the complexity of the social structure were they able to come up with and new a creative solution.

Changing hospital attitudes
Therese Schroder Sheker is a professional musician, a harpist, who had worked with the dying in Denver Colorado using a system of musical modes inspired by the practices at Cluny 10 C. When she arrived at St Patrick's hospital in Missoula, Montana she discovered that doctors were never present at a death and the hospital suggested the body should be removed and the bed made ready for the next patient within 30 mins. By working in a gentle way, and training others she was able to give people an easeful death, even to the point of being removed from painkillers. Over time she noticed that the doctors began to attend the deaths of their patients and allowed the relations to stay with the body for an hour or so. Now she has radically changed the whole attitude to death in that hospital. In turn her students have entered other hospitals across the state and her movement is expanding across the United States.

Each One Teach One
Paulo Freire has had a profound effect on the educational theory in the United States and elsewhere. He was most noted for his work amongst the poor, first in Brazil and then in Chile which, thanks to his efforts, experienced a dramatic increase in literacy. In his "Each One Teach One" approach an illiterate person, once taught the skills of reading who then pass them one to others in an ever spreading movement of education. This approach inspired many "grass roots" educational programs across the US and Canada.

Farming City Lots
In New York, Chicago and other cities people began to farm the vacant lots, making the city more attractive and producing food.

Artists and community
The art critic Suzi Gablik documents a number of instances where artists have been directly involved in community. One example is the design of a handcart for use by the homeless.

Knocking on Doors
Gordon and Claire Shippy lived in an inner city of a north of England town. It was an area of burnt out cars, drug dealing and crime. Children could no longer play outside. Despite the efforts of local government the situation did not improve. Then Clair and Gordon came to Pari, read about gentle action, and noticed how the local people knew each other's names, stopped and chatted and even left the keys in their front doors. Returning home they hit on the simple plan of going down their street, knocking on each door and introducing themselves. Soon they were joined by another neighbor and, from the older people, they began to find out the history of their area. It did not take long before an association of householders was formed. Pretty soon they managed to block off direct traffic access to their area, the drug dealers left, the area was cleaned up and children now play outside. Their success was so marked that the University of Teesside is using their community as a study. What Gordon and Clair found particularly rewarding was the unity between the traditional householders and

the new Muslim immigrants, working side by side to pressure the local government into making improvements.

One Person can Make a Change

One of the most discouraging aspects people sense about the modern world is that they really don't count, that in the face of multinational corporations and big governments a single individual can do little about changing the world. One voice will never be heard amongst millions. One appeal will never touch the hearts of those in the board room. and so a general apathy develops. A significant side effect is that in many countries fewer people are turning out to vote or attend public meetings. Some may look back to that mythic time of the "swinging sixties" with its dreams of new freedoms, student protest and social and educational experiments but for most it is a time long buried in history, as remote as the dreams of the French and American revolutions.

Yet one person can make a difference as this story, told by Edy Altes in his book *A Heart and Soul for Europe*, Van Gorcum, Assen, The Netherlands, 1999), illustrates. It began with a new approach to warfare in which strategists pointed out it it is far more effective to wound a soldier than to kill one, since a wounded soldier requires an infrastructure for support and therefore uses valuable time and manpower which diminishes an army's overall effectiveness. Far better, these strategists argued, a host badly wounded soldiers than mass graves of dead ones. One approach to this end is to use laser weapons capable of blinding soldiers at 1 km. Not only would a blinded soldier need help from his comrade but the fear of being blinded when going into battle would be considerable. A number of articles and television documentaries appeared but did little to dissuade nations to abandon this approach until a 76 year old Dutch woman wrote to Altes *"I have never belonged to any peace movement or taken part in any action but this cannot be done"*. She decided to act as a lone individual and ended up starting a petition that was sent to the Dutch Minister of Foreign Affairs. The end result of this one woman's reaction was that the Netherlands signed the 1995 "Protocol on Blinding Laser Weapons to the CCW Convention" to prohibit the use of laser weapons specifically designed to cause permanent blindness. One person can make a change.

Conclusion

In each of these cases traditional solutions already existed: solve inner city decay through federal and local government intervention schemes; import a food aid program for the starving; improve social and economic conditions by giving loans to businesses that already have a credit rating; solve illiteracy through government spending for training professional teachers and opening schools;develop housing schemes for the homeless by subcontracting to established manufacturers of prefabricated houses; take actions based on pre established policies and existing government committees. Yet in each case there turned out to be a more effective solution, a much cheaper one, and one that empowered the communities directly concerned. Such solutions emerged by suspending the traditional reflex to take action and becoming sensitive to the meaning and structure of entire situation. In this way the "problem" was able to speak directly and suggest its own solution.

Scientific Metaphors

Social and economic systems can exhibit enormous complexity. Certain of their aspects, however, have been modeled by the currently fashionable approach know as "chaos theory", or more accurately the dynamics of non-linear systems. While human systems exhibit much wider variety and depend upon such factors as meanings, belief and anticipation of events, it is sometimes helpful to explore scientific metaphors for physical systems. A number of examples are given below which may help to illuminate the underlying nature of gentle action.

In the height of summer a river may flow smoothly, but following heavy spring rains, eddies begin to form as different regions of the river move at different speeds. These currents and eddies act to drag on neighboring flows of water. In this way various regions of the river act as contingencies to other region and in this way flow becomes more and more chaotic. Likewise, when fast flowing water encounters a rock, a series of eddies form behind the obstruction, creating resistance and impeding regular flow.

This happens because the water does not move in a cooperative way; rather each tiny region behaves independently, yet exerts its effect as a contingency on immediate neighbor. Contrast this with what happens in a superfluid. There the entire liquid behaves as a whole, no eddies form and when the fluid encounters an obstruction it simply moves around it, as a whole. In this way a superfluid can flow indefinitely without encountering resistance. But how does this occur? The reason is that a very weak and subtle attractive force exists between molecules in the fluid that allows them to cooperate in a holistic way.

Similar cooperative, or coherent, behavior is found in a superconductor. There is also an analogous cooperation in metals at normal temperatures. The electrons in a normal metal have very long-range forces between them. But when each electron makes a small contribution to the collective (this is know as the plasma) it also finds itself relatively freed from the effects of this long-range force. In this way the collective is enfolded within the individual and the individual within the collective. Using electrons in a metal as a metaphor we could say that individual freedom arises by contributing to the overall well-being of the whole. Likewise the continued existence of the whole contributes to the well-being of each individual.

Conventional action could be compared to a stone thrown into a pond. The source of action is external to the system. It creates a violent splash whose effects quickly dissipate as ripples spread out. The reason is that ripples from the splash are distributed randomly and are what physicists would term "out of phase". This means that peaks and troughs in one region do not exactly match peaks and troughs in the other. When ripples are out of phase in this way they quickly cancel each other out.

On the other hand, under special conditions, in what are called "solitons", peaks and troughs remain in phase so that a ripple can move across water with undiminished size for many meters. This is because each peak and each trough are precisely coordinated and exactly in phase. (Soliton waves have been observed to travel, undiminished, for several miles in a canal.)

Let us pursue this metaphor of phase coupling further in terms of hypothetical situation in which a highly sensitive and intelligent correlation of wavelets occurs around the edge of a pond. Wavelets from all around the edge of the pond would then move in a cooperate fashion towards some predetermined area. This effect would arise not through an action that is external to the pond -such as the stone thrown into the pond - rather it arises out of the movement of the whole water. While this example is purely hypothetical it could certainly be simulated on a computer and it appears that the activity of the brain works in this cooperative way, with signals all over the brain converge into one area and spread out again.

In terms of social or economic systems, action would emerge out of the natural dynamics of the whole system, arising in a highly intelligent and sensitive way and consisting of small corrective movements and minimal interventions. Rather than seeking to impose change externally and at some particular point in a system, gentle action would operate within the dynamics and meanings of the entire system.

Applications

The dissemination of this research will be to bring about a new awareness of the inner structure of action and so effect a "change in consciousness". Often such changes are brought about by the catalytic action of a few thinkers and writers. Take for example the notion of "sustainable growth", the Oxford Dictionary of New Words credits the appearance of this term to the nineteen eighties. While the Club of Rome had earlier raised such issues with its report The Limits to Growth it was Bruntland Report Our Common Future (1987) that alerted the world to the dangers of unlimited growth. Today it represents an ideal so widely accepted that it is espoused in the advertising and annual reports of many corporations. We believe that Gentle Action has a similar potential to bring about a major change in attitude at many levels.

Likewise Rachel Carson's book Silent Spring (1962) produced a worldwide concern about the dangers of pollution, which lead to the creation of the environmental movement. Marshal McLuhan's notion of the "global village" led to the notion of "global consciousness", a term that eventually found its way into the mouths of politicians. Likewise the economist Ernst Friedrich Schumacher's book Small is Beautiful (1973)produced a significant change in thinking.

Application of Creative Suspension and Gentle Action can be made within the following fields:

- The structure of businesses, organizations and institutions.
- Policy planning, mission statements, determining goals and values.
- Decision making.
- International Security and conflict resolution.
- Future of communications and office technology.
- Globalization
- Aspects of healing, alternative approaches to medicine such as homeopathy.
- The structure and function of governments and the changing notion of the state.
- Economics
- Environmental and ecological issues