A Systems Thinking Approach



In using a systems approach to cultural change, the skilled OD practitioner recognises that the organisation is a social system – a collection of parts interacting with each other to function as a whole – and that groups generate their own system dynamics, such as deteriorating trust or unhealthy dependence on the leader/manager.

The challenge is to enter the system, complete with its functional and dysfunctional dynamics, and help the group become more effective without becoming influenced by the system.

Any action you take affects the group in multiple ways and has short-term and long-term consequences, some of which may not be obvious. The approach helps you understand how your behaviour as OD practitioner interacts with the group's dynamics to increase or decrease the group's effectiveness.

Implications of a Systems Approach

Treating the entire group as the client/customer rather than only the formal group leader or the member who contacted you increases the chance of having the trust and credibility of the entire group.

Working and intervening congruently with your core values and personal ground rules, you serve as a model for the group. The more that group members learn about how you work, the better they understand how to create effective workplace relationships. By your actions and modeling, you are creating sustainable behavioural change.

The Organisational Iceberg

Overt Components

Job Definitions &
Descriptions
Organisation & Structure
Span of Control and
Hierarchical Levels
Organisational Missions,
Goals and Objectives
Operating Policies and
Practices
Production and Efficiency

The Formal Organisation Above the Surface

These components are publicly observable, rational, and oriented to structural consideration

The Informal Organisation Below the Surface

Covert Components

Emerging Power and Influence Patterns
Personal views of organisations and
Individual Competences
Patterns of Interpersonal and Group
Relationships
Group Sentiments and Norms
Perceptions of Trust, Openness and
Risktaking Behaviours
Individual Role Perceptions and Value
Orientations
Emotional Feelings, Needs, and Desires,
Affective Relationships between
Managers and Subordinates
Satisfaction and Development

Effectiveness Measurements

These components are hidden, affective, and oriented to social and psychological process and behavioural considerations

What is Organisational Culture?

Edgar Schein, Professor of Management at M.I.T. defines organisational culture as:

"Organisational culture is the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems."

In simple terms, organisational culture is the pattern of shared values and beliefs, assumptions and expectations that lead to certain norms of behaviour. Simply...

"It's the way we do things around here."

Indicators of Organisational Culture include:

Cultural Artifacts:

- Visible organisational structures and processes
- Dress code
- Communication patterns and protocols
- Rites and rituals
- Rules (spoken and unspoken)

Espoused Values

- Strategies, goals, philosophies
- Readily offered reasons for the visible cultural artifacts.
- Stated values that are easily recognised by everyone

Shared Underlying Assumptions

 Unconscious, taken for granted beliefs, perceptions, thoughts and feelings

Introduction to Organisation Development

- Usually require some probing to be uncovered through discussion of inconsistencies between artifacts and espoused values.
- Deeply held, ultimate source of values and action.

See www.onepine.demon.co.uk/pschein.htm

What is Change? - Change vs. Transition

Never lose sight of the fact that is not so much that you are starting something new, but it is that you are stopping something old.

Change: An event that is situational and external

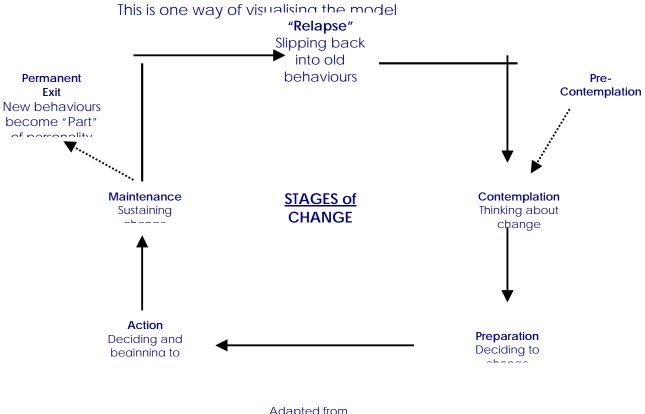
- When the old stops and the new starts
- Work, life event, completion of project etc.

Transition: The experience of gradual, psychological reorientation process – internal

- As we respond and adapt to external change
- Transition may result both from actual change and the awareness that change is imminent – before change starts

Understanding the difference between change and transition may help create a framework for understanding responses to change.

The Stages of Change - The Trans-theoretical Model



Adapted from Procheska & DiClemente (1986)

Pre-Contemplation Stage: here the individual or group has not yet considered the possibility of change. Whatever the issue is, it has not yet been perceived as a problem. (They don't know what they don't know).

Contemplating Stage: the individual or group becomes aware of the problem and is thinking about doing something about it. The main characteristic of this stage is *ambivalence*. The contemplator experiences both motivations to change, and motivations not to change. (They know what they don't know and they wish that you or someone else would deal with it).

Preparation and Action Stage: the Preparation stage is like a window of opportunity. If the individual or group enters into action the change process continues ... otherwise they slip back into contemplation. The Action stage is where the individual or group engages in particular actions intended to bring about change.

Maintaining Stage: this stage is about purposefully sustaining change, because it's easy to have "slips" backwards.

Relapse Stage: in all attempts at behaviour change "relapse" is very common.

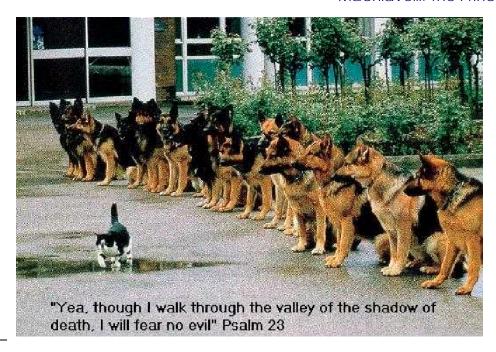
Seven Points Regarding Change

- 1. People feel awkward and ill-at-ease during a change effort
- 2. People will think first about what they have to give up, rather than the enjoyment of embracing the challenge
- 3. People will feel alone, even if everyone is going through the change process
- 4. People can only handle so much change at any one time
- 5. People are at different levels of readiness for change
- 6. People will be concerned that they don't have enough resources
- 7. If you take the pressure off, people will revert to old behaviour

Why Change Requires Courage

"It must be considered that there is nothing more difficult to carry out, more doubtful of success, more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order."

Machiavelli: The Prince



Remember, change is a question of courage.	

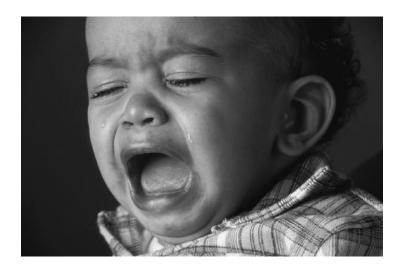
Managing Responses to Change

The task of the OD practitioner is largely managing people's response to the anxiety created by the change process. Your challenge will be to manage the Staff responses and urges to rush the process to get it over with. It is important to remember to:

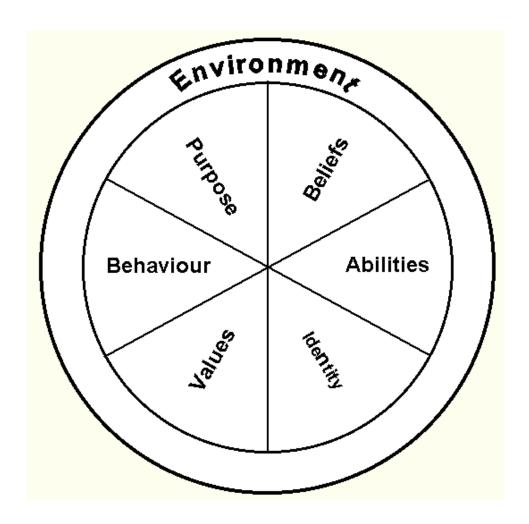
- Engage in the problem solving process versus solving the problem
- Manage complexity, ambiguity and uncertainty
- Avoid command and control
- Go slow to go fast
- Think strategically and be innovative and creative
- Allow order to emerge from the chaos, and

Largely you will have to...

... Manage emotions



A Model for Alignment – A Systems Thinking Approach



Potential for Change - Individuals and Groups

OPEN

ARRESTED

CLOSED

A. THE OPEN STATE: Readiness to accept new modes of being.

OPEN thinking strives to remove barriers to allow for the Expression of individual differences without getting locked into habitual patterns or unexamined assumptions.

OPEN thinking anticipates that change is inevitable and shows considerable elasticity without always jumping on bandwagons.

OPEN thinking acknowledges the role that external conditions play in making change easy or difficult for people.

OPEN thinking is usually displayed in good listening skills, a non-judgmental approach to life, tolerance of differences and a lack of closed-mindedness.

When in the **OPEN** state, an organisation functions in ways that remove restraints and allows barriers to change, to be stepped around or through. An organisation will work to change negative circumstances and revise conditions that are obstacles, either within the organisation or outside itself. So long as sufficient energy is available, the healthy organisation changes when alterations in the life conditions demand the use of different coping means.

Such terms as "going with the flow", "keeping all options open, or "getting sorted out" suggest **OPENNESS**.

B. The ARRESTED State: Reluctance to rock the boat.

ARRESTED thinking leads to attempts to live within life's barriers and adjusts to them the best way possible.

ARRESTED thinking is evidenced in undue stress, internal disorder, passive-aggressive behaviours, and other forms of organisational, personal and social frustration.

ARRESTED thinkers reject transformational models of change focusing instead on "fixer-uppers" within the tried and true.

In the **ARRESTED** state an organisation attempts to live within the status quo. The goal here is to make the most of what is, and to do the best under the circumstances, adapting to the Life Conditions that are in existence. The barriers may be adjusted a bit, but basic assumptions remain unaltered. Change efforts are directed to refine, polish and work harder, not smarter.

Other common **ARRESTED** themes are:

- Coming to peace with that which is
- Restoring balance to a rocky world
- Living with the establishment
- Fitting serenely into one's niche in life
- There is talk of "one of these days..."



C. The CLOSED State: This is all there is!

In the **OPEN** state an organisation will entertain possibilities for change as they appear. In the **ARRESTED** state there are fixed speeds to adjust to conditions as they are, but not to change them. In the **CLOSED** state it is on or off. Thinking within the organisation lacks the flexibility even to envision alternatives and instead lock-up, hunkers-down and tries to make the world fit what it can do, according to the values and beliefs it defends. Alternative perspectives are rejected, even cursed and demonised. "My way is the only way a rational person could think" is the belief.

If pushed too far on the **CLOSED** issue, these organisations may experience breakdowns in communication, individuals could exhibit panic behaviour and there may be raging at top management level. It becomes a tight little world which, given enough time could collapse.

Signs of **CLOSED** thinking are:

- The lack of acceptance of, and adaptability to change. Major ideas are washed in the same colour, what's-in-it-for-me? At times laughter, anger and conversational topics appear to be out of context, and behaviour often seems awkward and contrived.
- There seems to be a constant need for individuals to know whether or not they are appreciated and acknowledged.
- The reactions to barriers or to being blocked are extreme, often beyond what is normal for the situation. Only a few people are in the "inner circle". There is an emphasis on "them and us".
- Levels of stress are used as a reason why something should or should not be done. Some individuals become irritable and frustrated easily and quickly. When opinions of staff conflict with those of management, there is a tendency to avoid or negate those opinions. This could be seen as the beginning of a climate of censorship.



Remember to ask:

"Change from what to what and for what purpose?"

Dealing with Complexity - the Leadership Challenge

In complex, uncertain and turbulent times, as a leader the OD practitioner will need to be both a part of the system and apart from the system at the same time.



"Most of the time we use leadership as a synonym for boss or boss-ship. We confuse leadership with leadership position.

Leadership is a capacity of a human community to shape its future.

Leadership is a collective. Leadership is everywhere."

Peter Senge (Sydney 2006)

OD and Complexity

A man was walking home one dark and foggy night. As he groped his way through the murk he nearly tripped over someone crawling around by a lamp post. "What are you doing?" asked the traveller. "I'm looking for my keys." Replied the other. "Are you sure you lost them here?" asked the first man. "I'm not sure at all," came the reply, "but if I haven't lost them near this lamp I don't stand a chance of finding them."

Most people know this story. For me it is metaphor of science. 'Normal science' in Kuhn's (1962) terms, consists of looking as assiduously as possible in the lit area, perhaps exploring those edges where the gloom is not quite impenetrable. From time to time someone manages to switch on a new light—a paradigm shift, in Kuhn's terms—and a new area of exploration is opened up.

Science is about the art of the possible; it does not deny that the keys may lie in the darkness, it simply does not consider that its job consists of feeling around blindly.

Until recently, the light by which science was working was only able to illuminate simple, linear, systems. The advent of the computer changed things. It is now possible to look at complex systems in two ways: computers can solve previously-impossible nonlinear equations and they can simulate of complex systems by means of models known variously as cellular automata, genetic algorithms, neural nets and so on.

So what is a complex system? The field is still very new and there is no agreement about terms and terminology but the following quotes start to give a flavour:

...a system that is complex, in the sense that a great many independent agents are interacting with each other in a great many ways. (Waldrop 1993:11)

...to understand the behavior of a complex system we must understand not only the behaviour of the parts but how they act together to form the whole. (Bar-Yam, 1997:1)

...you generally find that the basic components and the basic laws are quite simple; the complexity arises because you have a great many of these simple components interacting simultaneously. The complexity is actually in the organization—the myriad possible ways that the components of the system can interact. (Stephen Wolfram, quoted in Waldrop 1993:86)

Complex adaptive systems consist of a number of components, or agents, that interact with each other according to sets of rules that require them to examine and respond to each other's behaviour in order to improve their behaviour and thus the behaviour of the system they comprise. (Stacey: 1996:10)

...the complex whole may exhibit properties that are not readily explained by understanding its parts. The complex whole, in a completely non-mystical sense, can often exhibit collective properties, "emergent" features that are lawful in their own right. (Kauffman 1996:vii-viii)

The task of formulating theory for cas [complex adaptive system] is more than usually difficult because the behaviour of a whole cas is more than a simple sum of the behaviours of its parts; cas abound in nonlinearities... (Holland 1995:5)

...complexity is not located at a specific, identifiable site in a system. Because complexity results from the interaction between the components of a system, complexity is manifested at the level of the system itself. There is neither something at a level below (a source), nor at a level above (a meta-description), capable of capturing the essence of complexity. (Cilliers 1998:2-3).

Complex system characteristics

In the early days of complex systems theory the emphasis was on large networks of simple agents with simple interactions. More recently there has been a realisation that smaller networks of complex agents can show the same kinds of behaviour and can be equally complex.

Complex systems have a number of properties, some of which are listed below:

Emergence

What distinguishes a complex system from a merely complicated one is that some behaviours and patterns *emerge* in complex systems as a result of the patterns of relationship between the elements. Emergence is perhaps the key property of complex systems and a lot of work is being done to try to understand more about its nature and the conditions which will help it to occur.

Relationships are short-range

Typically, the relationships between elements in a complex system are short-range, that is information is normally received from near neighbours. The richness of the connections means that communications will pass across the system but will probably be modified on the way.

Relationships are non-linear

There are rarely simple cause and effect relationships between elements. A small stimulus may cause a large effect, or no effect at all.

Relationships contain feedback loops

Both negative (damping) and positive (amplifying) feedback are key ingredients of complex systems. The effects of an agent's actions are fed back to the agent and this, in turn, affects the way the agent behaves in the future. This set of constantly adapting nonlinear relationships lies at the heart of what makes a complex system special.

Complex systems are open

Complex systems are open systems—that is, energy and information are constantly being imported and exported across system boundaries. Because of this, complex systems are usually far from equilibrium: even though there is constant change there is also the appearance of stability.

The parts cannot contain the whole

There is a sense in which elements in a complex system cannot 'know' what is happening in the system as a whole. If they could, all the complexity would have to be present in that element. Yet since the complexity is created by the relationships between elements, that is simply impossible. A corollary of this is that no element in the system could hope to control the system.

Complex systems have a history

The history of a complex system is important and cannot be ignored. Even a small change in circumstances can lead to large deviations in the future.

Complex systems are nested

Another key aspect of complex adaptive systems is that the components of the system—usually referred to as *agents*—as themselves complex adaptive systems. So an economy is made up of organisations which are made up of people which are made up of brains, which are made up of cells—all of which are complex adaptive systems.

Boundaries are difficult to determine

It is usually difficult to determine the boundaries of a complex system. The decision is usually based on the observer's needs and prejudices rather than any intrinsic property of the system itself.

For instance, the boundary of an individual human being may appear easy to determine but a little more thought will show some of the ambiguities. For instance, are clothes inside or outside the boundary? If someone stares at you across a room or crowded train, especially in a lustful or aggressive way, have they invaded your boundary? When do waste products, such as hair or nail clippings, cease to be part of the body (certainly, those who practise magic feel that they remain within the boundaries)?

We often hear of groups having 'strong' or 'weak' boundaries but without any clear sense of the meaning. I believe that it is possible to gain some clarity by considering *connectivity*. I hypothesise that an individual agent can only have a certain number of connections to other agents (with human agents this number will change according to the state of the individual and also the state of the environment). We can then think of the strength of a group's boundaries as the proportion of connections which are made within the group—the greater the proportion, the stronger the group boundaries. If all connections are made within the group it forms a closed system.

Further Reading

The following booklist contains books related to the field of Organisation Development. You may find this material interesting or you may want to make it an element of your continuous learning program. The list is by no means comprehensive and you are invited to explore the shelves of libraries and bookshops for inspiring titles (and share what you find).

The Fifth Discipline Fieldbook

Peter Senge, Richard Ross, Bryan Smith, Charlotte Roberts, Art Kleiner Nicholas Brealey Publishing Limited 1994 ISBN 1-85788-060-9

The Dance of Change

Peter Senge, Art Kleiner, Charlotte Roberts, Richard Ross, George Roth, Bryan Smith Nicholas Brealey Publishing Limited 1999 ISBN 1-85788-243-1

The Art of Systems Thinking

Joseph O'Connor, Ian McDermott Thorsons 1997 ISBN 0-7225-3442-6

Organisational Learning ∏

Chris Argyris, Donald A.Schon Addison-Wesley Publishing Company 1996 ISBN: 0-201-62983-6

Good Business: Leadership, Flow and the Making of Meaning

Mihaly Csikszentmihalyi Hodder and Stoughton 2003 ISBN 0 340 73972 X

The Living Workplace: Soul, Spirit and Success in the 21st Century

Ann Coombs Harper Business 2001 ISBN 0 00 20044-X

The Organisational Behavior Reader

David A. Kolb, Joyce S. Osland, Irwin M. Rubin Prentice Hall Publications 1995 ISBN 0-13-21-3653-8

Complexity Theory

Complexity: The Emerging Science at the Edge of Order and Chaos

Waldrop, M. Mitchell 1993 (1992).

London: Viking.

The Hidden Connections

Fritjof Capra Doubleday 2002 ISBN 0-385-49471-8

Leadership and the New Science: Learning About Organization from an Orderly Universe.

Wheatley, Margaret J. 1994 (1992). San Francisco: Berrett-Koehler.

Appreciative Inquiry: An Innovative Process for Organization Change

Whitney, Diana & Schau, Carol 1998. "

Employment Relations Today. Spring, pp 11-21.