

Culture and Complexity: New Insights on Organisational Change

RICHARD SEEL

Conventional approaches to organisational culture and change have been inadequate, partly because they have been based on outmoded models of organisational dynamics. A complexity approach can offer a new perspective which leads to a radically different kind of practice for change agents.

Introduction

There are many approaches to culture and even more definitions. Kroeber & Kluckhohn in their classic review of culture (1952) report 156 different definitions, which they arrange under six different generic headings. In the years since they wrote many other definitions have been attempted and still there is no consensus.

Indeed the whole notion of a definition of culture may be unhelpful since it may lead us to think of culture as a 'thing' or a state which 'belongs' to an organisation. This view is seen in those models which try to distinguish different 'types' of organisational culture. One of the best known is that developed by Roger Harrison (Harrison & Stokes 1992) who writes of cultures as being characterised by 'Power', 'Role', 'Achievement' or 'Support'. Charles Handy developed this idea in a slightly different way in his *Gods of Management* (1995) with 'Club' (Zeus), 'Role' (Apollo), 'Task' (Athena) or 'Existential' (Dionysus).

Although these approaches can be useful I feel that they tend to encourage a rather mechanical view of culture change. For example, the Harrison & Stokes diagnostic invites you to score both existing culture and preferred culture suggesting that once you know where you want to go it is possible to work out a way to get there.

Of course, this is the conventional approach to culture analysis summarised by Wilkins & Patterson (1985) as:

- *Where do we need to be going strategically as an organisation?*
- *Where are we now as a culture?*
- *What are the gaps between where we are as a culture and where we should be?*
- *What is our plan of action to close those gaps?*

This classical OD approach is based on two assumptions. Firstly, that organisations are usually, and preferably, in one *state* or another. This notion was best expressed in Kurt Lewin's famous 'unfreeze—change—freeze' model (1946); implying that the change process requires us to somehow shake the organisation out of its current equilibrium so that we can change it while it is unstable and then let it settle into a new equilibrium state closer to our ideal. And here is the second belief—that, somehow, we can *make* organisations change; that by effective analysis, proper planning and appropriate action we can guarantee an outcome. Yet this conventional wisdom, espoused by so many managers and consultants, needs to be challenged. It seems to me that the evidence for it is extremely thin—we all know that most change

programmes have little lasting radical effect. So perhaps it's time to look for some alternative perspectives which might offer another approach.

Culture as emergence

According to the anthropologist Mary Douglas, culture is not a static 'thing' but something which everyone is constantly creating, affirming and expressing. She writes about, "...the admonitions, excuses, and moral judgements by which the people mutually coerce one another into conformity." (Douglas 1985:xxiii) In this view culture is not imposed from outside but exposed from within; any programme which attempts to change culture in a planned way is likely to miss the mark.

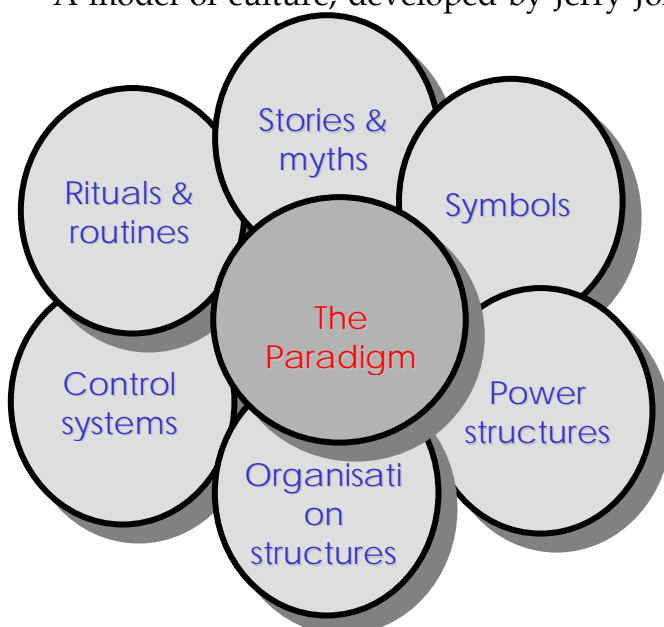
Indeed, as Douglas observes, "...the central issue is not cultural change. The amazing thing that needs to be investigated is cultural stability, whenever and wherever it is found." (1985:xxii). If culture is being created all the time by everybody how is it that we sense it as reasonably stable? I think that we can now begin to answer Douglas' question by using some of the insights of complexity theory, in particular by looking at *emergence*. Indeed my own working definition of culture contains this as a key word:

Organisation culture is the emergent result of the continuing negotiations about values, meanings and proprieties between the members of that organisation and with its environment.

In other words, culture is the *result* of all the daily conversations and negotiations between the members of an organisation. They are continually agreeing (sometimes explicitly, usually tacitly) about the 'proper' way to do things and how to make meanings about the events of the world around them. If you want to change a culture you have to change all these conversations—or at least the majority of them. And changing conversations is not the focus of most change programmes, which tend to concentrate on organisational structures or reward systems or other large-scale interventions.

The cultural web

A model of culture, developed by Jerry Johnson (Figure 1), may help to explain the difference between the two approaches.



Johnson calls his model the 'cultural web' though I must admit that it reminds me more of a flower than a web. The paradigm in the centre is the set of core beliefs which result from the multiplicity of conversations and which maintains the unity of the culture. The 'petals' are the manifestations of culture which result from the influence of the paradigm.

Figure 1. The Cultural Web (Johnson 1992:31)

Most change programmes concentrate on the petals; they try to effect change by looking at structures, systems and processes. Experience shows us that these initiatives usually have a limited success. A lot of energy (and money) is put into the change programme, with all the usual communication exercises, consultations, workshops, and so on. In the first few months things seem to be changing but gradually the novelty and impetus wears off and the organisation settles back into something like its previous configuration. The reason for this is simple, though often overlooked – unless the paradigm at the heart of the culture is changed there will be no lasting change.

Paradigms

A paradigm is a self-consistent set of ideas and beliefs which acts as a filter, influencing how we perceive and how we make sense. The term was brought into common currency by Thomas Kuhn in his famous *Structure of Scientific Revolutions*, first published in 1962. Fritjof Capra adapted Kuhn’s original definition to present it in a form more suitable to the study of organisations:

A paradigm is a constellation of concepts, values, perceptions and practices shared by a community, which forms a particular vision of reality that is the basis of the way a community organises itself. (Capra 1997:6)

As an example of the way a paradigm – especially the paradigm at the heart of a culture – can influence perception and meaning I am reminded of an inquiry I was conducting with members of a major public service organisation into its culture. There was much talk of ‘blame culture’ and a feeling in the room that it would be difficult or impossible to move forward because of this.

I took the pen and wrote “blame culture” on the flip chart. Then I wrote “forgiveness culture” next to it, getting a few nervous laughs in response (they’d never come across the notion of a forgiveness culture before – certainly not in a work context). On the next line I put, “You didn’t do that very well”. Underneath blame I wrote “accusation” and under forgiveness, “opinion”. On the next line, “I hope you do better next time”. This time under blame I put “threat” and under forgiveness “encouragement” (table 1).

	Blame Culture	Forgiveness Culture
“You didn’t do that very well”	<i>Accusation</i>	<i>Opinion</i>
“I hope you do better next time”	<i>Threat</i>	<i>Encouragement</i>

Table 1 Paradigm examples

There are a number of lessons to draw from this example. Firstly, it is the paradigm which has the major effect on our perception: if we believe that there is a

blame culture we will hear the words from that frame. They might have been meant as opinion or encouragement but that is probably not the way they will be heard. Secondly, the prevailing paradigm encourages certain types of behaviour. If everyone believes there is a blame culture it is much more likely that people will behave in blaming ways; in a similar situation in a forgiveness culture (how nice it would be if they were as common) people would be more likely to act in a constructive and encouraging way. Thirdly, the paradigm tends to be self-sustaining. Because I hear the words, "I hope you do better next time" as a threat I accept them as proof there that is indeed a blame culture: "Did you hear that? She just threatened me—that's so typical of the way things are around here." A paradigm is like a self-fulfilling prophecy; there is a kind of circular logic attached to it which makes it hard to break.

I don't want to give the impression that paradigms are a bad thing. On the contrary, without paradigms to help us order and make sense of the world we would be faced with an overwhelming mass of incoming data. It would be impossible to do even the most simple of day-to-day tasks without having to work everything out from first principles each time. It is the very fact that a paradigm acts as a filter which helps make life manageable and gives us a sense of stability in a changeable world.

It is not the existence of paradigms which can cause difficulties but their stability. Even when a paradigm is no longer useful it will tend to cling on, still filtering perceptions in ways which are no longer helpful. Many privatised industries have found this to their cost; their public service bureaucratic paradigms, which served them well in the past, have been hard to shake off.

So where do paradigms come from? They are not imposed by chief executives nor invented by consultants, rather they *emerge* from a multiplicity of interactions between the individuals within the community. Since this is the second time emergence has come up in this article it is time to take a closer look at it.

The nature of emergence

Emergence is one of the key attributes of complex systems. It is both mysterious and commonplace and very hard to define. Kevin Mihata does as well as any:

...the process by which patterns or global-level structures arise from interactive local-level processes. This "structure" or "pattern" cannot be understood or predicted from the behavior or properties of the component units alone. (*Mihata 1997:31*)

Most change in complex systems is emergent; that is to say it comes about as a result of the interactions between the 'agents' in the system. In an organisation the agents are people—themselves complex systems. Complexity theory suggests that when there is enough connectivity between the agents emergence is likely to occur spontaneously.

The concept of emergence is slippery when we try to examine it in detail but some things are becoming clearer. What emerges is a new pattern, at a higher level in the system from the agents which created it, and the new pattern can feed back down to influence the further development of the lower level (figure 2).

Figure 2 may be somewhat misleading since it shows a *big* new pattern emerging. In practice most emergences will be quite small, often appearing to be insignificant. However, appearances can be deceptive since complexity theory suggests that it may take no more 'effort' to create a large emergence than a small one.

The work of Per Bak and his colleagues (Bak 1997) shows that when a system is in a state of *self-organised criticality* it will be subject to changes of all sizes simply as a result of small outside influences. Their example is that of a sand pile, built up by the dropping of a steady stream of individual grains, a bit like the sand inside an egg timer. Once the pile has reached the critical state a single grain of sand dropping onto it may have no observable effect or it may cause a small slippage or even a major avalanche.

The size and frequency of changes follow a *power law*: that is, there are lots of small changes, fewer medium-sized changes and very few large changes. The point, however, is that the size of the response is not dependent on the size of the stimulus. Once the system is in the critical state even the smallest stimulus may cause major changes.

Human systems are a lot more complex than sand piles but there is some evidence to suggest that they, too, can get into this critical state (see Dooley & Van de Ven 1999). If so, this has profound implications for our attempts to change organisational culture. We should move away from trying to change organisations and instead to look at how we might help them become ready for change—to move to a state of self-organised criticality.

Practical implications

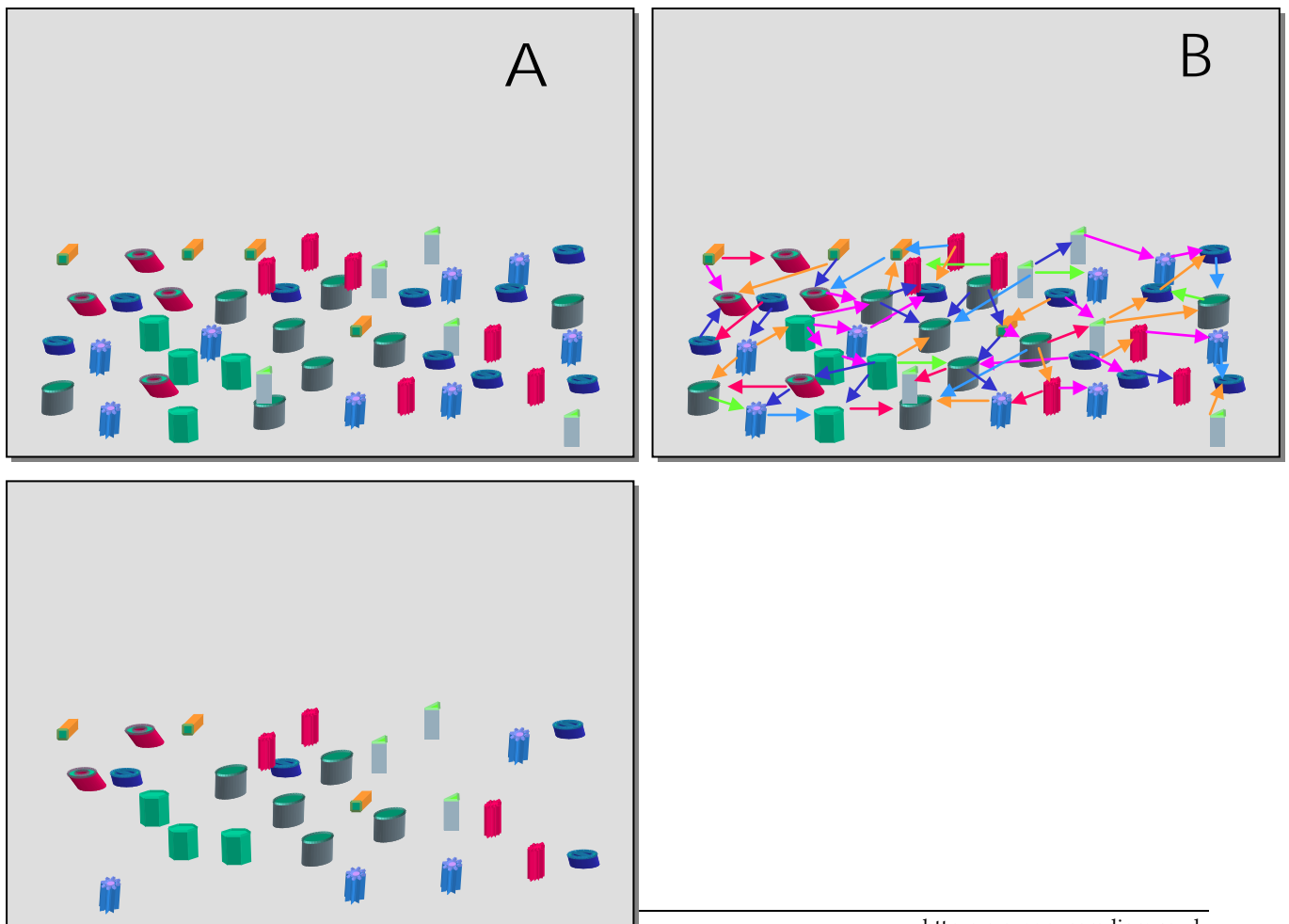


Figure 2—Emergent process: a system of diverse agents (A), richly connected (B), gives rise to an emergent pattern (C), which feeds back down into the system (D).

The focus of organisational change interventions moves away from ‘planning change’ and onto ‘facilitating emergence’. If we are looking to help a new paradigm emerge we need a new way to think about the role of the change agent—whether external consultant or internal OD specialist. We need a new metaphor.

One possibility is change agent as ‘midwife’. It seems to work reasonably well: the good midwife develops a personal relationship with the pregnant woman; she recognises the uniqueness of each encounter, treating the woman as a living being not a machine; she knows that birth should not be forced but assisted; she understands the importance of working *with* the body’s natural processes.

Most change agents seem to have a much more mechanical view of themselves—how can you be a good consultant, how can you re-engineer or fix an organisation, if you don’t have a full ‘tool kit’? This is the complement of the prevailing metaphor of ‘organisation as machine’ which has been around since the time of Taylor and Fayol (Morgan 1997). It implies that the change agent can stand outside the system, diagnose and understand its working parts and then intervene to redesign it to operate in a more effective way. The midwife metaphor, on the other hand, has the merit of seeing the organisation as a complex self-organising entity to be worked *with* rather than worked *on*. But it does not go far enough; it still places the change agent outside the system. The complex systems approach invites us to work *in* the system, to give up the illusion that we can comprehend its complexity and to adopt more modest aims.

One approach is that adopted by Patricia Shaw and Bill Critchley (Shaw 1997). They choose to work both formally and informally in organisations helping people have conversations which they might otherwise not have had. There is no linear plan of campaign; instead they work towards helping the organisation become ready for its own transformation. In Bak’s terms they help to remove barriers and open up channels so that the system can self-organise to a critical configuration, where change becomes possible.

An epidemiological approach

Some organisations need more structure and reassurance. Recently, working with the IT division of a major public service organisation looking to change its culture, I developed a different, but equivalent, approach which was both radical enough to offer the prospect of significant change while being contained enough to keep their anxiety at manageable levels. The model I proposed was based on an epidemiological approach to culture change. This is not new; the French anthropologist Dan Sperber (1996) has been using the model for some years although not in the context of organisational development. In terms of this model an appropriate metaphor for the change agent may be something like a virus—except that this virus is benign and welcomed by the host body.

Together with my colleague, Rita McGee, I designed a workshop to be rolled out to everyone in the division. Its explicit aim was to sensitise people to the power of culture and paradigms and to encourage them to discover a compelling vision of a

future culture which would motivate them to behave differently. Most importantly, we encouraged all participants to become change agents or 'missionaries', spreading the word and engaging in different kinds of conversation with their colleagues. Again, our aim was to help them

Thus, by building greater connectivity between people and by encouraging them to make different meaning about their day-to-day working lives we aimed to help the organisation remove barriers and open up channels so that *it* could self-organise to the critical position and become much more able to change. Organisational change is sometimes characterised as either *top-down* or *bottom-up*. Our approach isn't really either of these. Instead it could be characterised as *middle-out*: everyone is involved and there is no preferred starting place.

Things are never this simple, of course. Once any real degree of change seems likely the organisation's 'immune system' will start to resist the infection from new ideas and practices. Some people will try to reassert the power they feel they are losing; some will be cynical and pour scorn on the process; some will feel afraid and withdraw from the changes. This is where the senior management have a significant role to play. They must act as an *immuno-suppressant*, trying to damp down resistance and to nurture and encourage the new behaviours. Until a critical mass is achieved the change is very frail and can be easily destroyed.

Conclusions

I have covered a lot of ground in this article and there is much more to say on many of the topics. My aim is to open some avenues for thought and exploration rather than to present finished work. Nevertheless I believe that by adopting a complexity perspective we can look at organisational culture and change in completely different ways. We start to realise that organisations cannot be changed according to plan or desire; instead the best we can do is to try to build new connections and relationships so that a process of self-organisation can take place. Then it is just a question of waiting and trying to make sure that the forces for stability do not move it away from the critical state (actually, I believe that it is possible to have a significant influence on the outcome even though one cannot determine it, but that is another article). We also come to see that the best place for the change agents to be is within the system; working from outside is likely to be far less effective.

This is such a different way of working that it is hard for both clients and consultants. Consultants have been used to offering apparently rational approaches to change which satisfy clients' needs for certainty and assurance. The complexity consultant cannot do this and it takes a brave client to be prepared to accept that a complexity approach actually offers a better chance of a favourable outcome than a conventional mechanical proposal. It's also scary for the consultant. The old check lists and prescriptions have gone, to be replaced by intuition and creativity. You can end up feeling very exposed and inadequate but when it works it feels great! I urge you to give it a try.

Biographical note

Richard Seel runs New Paradigm Consulting ([://www.new-paradigm.co.uk](http://www.new-paradigm.co.uk)) and has a particular interest in culture and complexity. In 1999 he completed his MSc in

Organisation Consulting at Ashridge where his dissertation topic was emergence in organisations. If you would like to discuss any of the ideas sparked by this article please contact him at @new-paradigm.co.uk

References

- Bak, Per (1997) *How Nature Works: The Science of Self-Organized Criticality*. Oxford: University Press.
- Capra, Fritjof (1997) *The Web of Life: A New Synthesis of Mind and Matter*. London: Flamingo.
- Dooley, Kevin J. & Van de Ven, Andrew H. (1999) "Explaining Complex Organizational Dynamics" *Organization Science* Vol. 10, No. 3 May-June pp. 358-372.
- Douglas, Mary (1985) "Introduction" in Jonathan L. Gross & Steve Rayner, *Measuring Culture: A Paradigm for the Analysis of Social Organization*. New York: Columbia University Press.
- Geertz, Clifford (1973) *The Interpretation of Culture*. New York: Basic Books.
- Handy, Charles (1995) *Gods of Management: The Changing Work of Organisations*. London: Arrow.
- Harrison, Roger & Stokes, Herb (1992) *Diagnosing Organizational Culture*. San Francisco: Pfeiffer.
- Johnson, Gerry (1992) "Managing Strategic Change – Strategy, Culture and Action". *Long Range Planning* Vol 25 No 1 pp 28-36.
- Kroeber, A.L. & Kluckhohn, Clyde (1952) "Culture: A Critical Review of Concepts and Definitions." *Papers of the Peabody Museum of Harvard Achæology and Ethnology, Harvard University* 42(1). Cambridge, Mass: Museum Press.
- Kuhn, Thomas (1996) *The Structure of Scientific Revolutions*. 3rd ed. Chicago: University Press.
- Lewin, Kurt (1946) "Research on Minority Problems". *The Technology Review*. 48(3).
- Mihata, Kevin (1997) "The Persistence of 'Emergence'" in Raymond A. Eve, Sara Horsfall & Mary E. Lee (eds) *Chaos, Complexity & Sociology: Myths, Models & Theories* pp 30-38. Thousand Oaks, Ca: Sage.
- Morgan, Gareth (1997) *Images of Organization*. 2nd ed. Thousand Oaks: Sage.
- Shaw, Patricia (1997) "Intervening in the Shadow Systems of Organizations: Consulting from a Complexity Perspective." *Journal of Organizational Change Management* 10(3): 235-250.
- Sperber, Dan 1996. *Explaining Culture: A Naturalistic Approach*. Oxford: Blackwell.
- Wilkins, A. L. & Patterson, K. J. (1985) "You Can't Get There From Here: What Will Make Culture-Change Projects Fail". in R. H. Kilmann, M. J. Saxton, R. Serpa & associates (eds) *Gaining Control of the Corporate Culture*. San Francisco: Jossey-Bass, 262-291.