

A centennial tribute to Gregory Bateson 1904-1980 and his influence on the fields of organizational development and action research

Peter Hawkins
Bath Consultancy Group, UK

ABSTRACT

This article describes the life and writing of Gregory Bateson, whose centennial is being celebrated in 2004 and who Fritjof Capra has described as 'One of the most influential thinkers of our time'. The article then describes the influence of Bateson's work on the fields of organization development and action research, with particular reference to: organizational culture, organizational learning and knowledge management, systemic thinking and the importance of an environmental perspective. The article ends by showing how Bateson was setting out a new paradigm for our times that transcends the differently blinkered approaches of science and religion.

**The most important task today, perhaps, is to think in a new way.
(Bateson, 1972, p. 437)**

Gregory Bateson, whose centennial is being celebrated this year in many parts of the world, is one of the most seminal polymaths of the 20th century. When I speak to colleagues in various fields, I am continually surprised at the number of people who have never heard of him. Yet when I then ask them whether they have heard of: the double-bind theory of schizophrenia; double loop and treble loop learning; cybernetics; systems theory; paradoxical family therapy; or Margaret Mead's anthropology in Bali, many have heard of several of these. Without realizing the influential role played by Gregory Bateson in all of them and many other areas. Bateson was focused on the fundamental principles and the underlying connecting patterns in the various fields of social sciences. He left it to others, such as R.D. Laing (1971); Chris Argyris and Donald Schön (1974, 1978); John Lilly (1973), Watzlawick, Weakland and Fisch (1980); Fritjof Capra (1983, 1996) and many others to apply and develop his thinking.

Bateson came from a very distinguished line of British biological academics. His father William was one of the founders of modern genetics and his grandfather William Henry had been master of St. John's Cambridge where both Gregory and his father had studied biology. Some commentators speculate that the reason that Gregory moved from the field of biology to anthropology was to avoid the paternal expectations and shadow. However, the positive motivation behind this and the other many moves that Bateson was to make across disciplines was that he had a heart-felt passion for discovering fundamental principles for creating better ways to understand the human and the more-than-human worlds of nature.

Throughout his life he was a passionate learner and inquirer - a role model for action learners in how to engage fully with a world and deeply reflect on the experience in ways that bring radically fresh perspectives and understanding. In his later years he delivered an extraordinary series of seminars at the Esalen Institute in California, where his style was not that of the brilliant lecturer, but of a wise, much travelled explorer engaging in thinking aloud with his audience, discovering in the moment new ways of knowing and participating in the world and of creating reconnection.

I was privileged to hear his last lecture in the UK In 1979 at the Institute of Contemporary Arts and to experience his wisdom weaving new patterns of understanding live on the stage, whilst rewiring my own ways of making sense of myself and my world.

Bateson would be acknowledged as a controversial but influential originator in the fields of anthropology, cybernetics, general system theory, systemic and paradoxical family therapy and communication studies. However, in this article I will show just some of the ways in which Gregory Bateson has radically changed two of the fields that he is less well known for influencing, namely; organization development and action research.

The fundamental epistemological shifts

His most fundamental contribution to the field of organizational development is that he has changed the way we look at and think about organizations. Before Bateson, organizational studies either viewed organizations through machine-like metaphors or as a conglomeration of individuals and groups. There had been important developments to try and link the human and the mechanical in such approaches as the Tavistock Institute's development of socio-technical understanding of organizations and the work of Kurt Lewin and others in the USA. However, I would argue that Bateson was pivotal in providing a way of viewing organizations as living systems or semi-bounded ecologies, where individuals contribute to the shaping of the whole organization but are also shaped by the system they inhabit.

Bateson has changed the way we see organizations through two key epistemological shifts. Firstly, Bateson encourages us to move our focus from parts to wholes and from seeing 'things' to seeing patterns. He argues that nature is comprised of innumerable interconnecting relationships and patterns, but we have been schooled to see things that are separate and bounded from each other. Thus it is common in organizations to hear debates about whether the problem is in the team or in the leader. Seeing *things*, we locate leadership inside certain individuals and understand organizational culture as what individuals do. Often I am invited to help organizations with their leadership. The top team tell me that those who report to them directly need to be able to take more leadership. They in turn often then explain to me that the reason they do not take more leadership is because of the way the top team behave and relate to them. Both groups locate the leadership lack in the other group. The quandary becomes whether to focus on one, on the other, or both. However, if we shift our epistemology to seeing *patterns* and *relationship* we soon recognize that to enhance leadership we need to attend to the leadership flow between these two levels. This is not a move from 'either-or' to 'both-and', for even 'both-and' is rooted in an epistemology of separate parts. Rather it is a move from focusing on *parts* to focusing on *relationships*, or as Bateson puts it, 'interfaces - boundaries that connect' (Esalen Seminars, 1978-80). In the world of organizations this helps us to realize that 'Leadership' is as much about the 'ship' as it is about the 'leader', yet most development efforts still focus on the individual out of context and act as if leadership resides inside the leader.

Secondly, Bateson liberates our understanding from the myth of the isolated mind located in the brains of individuals. Descartes, Newton and the empirical-positivistic tradition of science and philosophy have bequeathed to us a mind that is both separate from the body and separate from the world around us. This way of thinking is also rooted in our grammar of subjects acting on objects; I (subject) see (verb) you (object).

Bateson writes:

Consider a tree and a man and an axe. We observe that the axe flies through the air and makes certain gashes in a pre-existing cut in the side of the tree. If we now want to explain this set of phenomena, we shall be concerned with differences in the cut face of the tree, differences in the retina of the man, differences in the central nervous system, differences in his different neural messages, differences in the behaviour of his muscles, difference in how the axe flies, to the differences which the axe then makes on the face of the tree. Our explanation will go round and round that circuit. If you want to explain or understand anything in human behaviour, you are always dealing with total circuits, completed circuits. (Bateson, 1972, p. 433)

Later in the same paper he writes about how difficult it is to adopt this epistemology:

I can stand here and I can give you a reasoned exposition of this matter; but if I am cutting down a tree, I still think 'Gregory Bateson' is cutting down a tree. I am cutting down the tree. 'Myself' is to me still an excessively concrete object, different from the rest of what I have been calling 'mind'.

The step to realizing - to making habitual - the other way of thinking - so that one naturally thinks that way when one reaches out for a glass of water or cuts down a tree - that step is not an easy one.

And, quite seriously, I suggest to you that we should trust no policy decisions which emanate from persons who do not yet have that habit. (Bateson, 1972, p. 437)

Once we have made this shift, our perspective fundamentally changes. We firstly start focusing on relationships, flows and patterns; and secondly realize that we are part of any field we are studying and to understand the field we must also reflect on ourselves as part of that world. This way of thinking has entered the world of psychotherapy through the schools of intersubjectivity and gestalt field theory; action research through the approaches of participative and collaborative research (for a recent application of Bateson's thinking to action research, see Marshall, 2004); and organizational development through systemic approaches (Ackoff, 1981; Forrester, 1961; Galbraith, 1977; Senge, 1990); the development of shadow consultancy (Hawkins, 2003[1993]); and dialogue and conversational approaches (Issacs, 1999; Shaw 2002).

Organizational culture

Bateson's epistemological focus on 'form, substance and difference', to borrow the title of one of his essays, and seeing oneself as part of the field has been particularly influential in the field of organizational culture. Bateson was part of an influential group of anthropologists, that included his wife and collaborator Margaret Mead, that studied cultures as living evolving ecologies and also recognized that they themselves were a necessary part of the field that was studied. Like Levi-Straus they recognized that anthropologists do not study villages, but rather study in villages and that participant observation needed to include observation of the participant. Many management writers have reduced organizational culture to its surface behavioural manifestations, describing it as 'the way things are done

around here'. Practitioners following such approaches try to measure and categorize culture as a fixed entity by means of data collected from questionnaires, but culture does not fill in questionnaires! They also believe that culture resides in the individuals within the organization and that you change culture by the organizational members learning to change their behaviour.

Those influenced by the ecological and anthropological approaches of Bateson focus on the culture's deeper organizing principles that are rooted in the collective shared mind sets, emotional ground and motivational roots of those in the organization (Hawkins, 1997; Schein, 1992[1985]) and see that the behaviours and cultural artefacts are the symptomatic manifestations of these principles. Elsewhere I have defined one aspect of organizational culture as 'what you stop noticing when you have worked or lived somewhere for three months'. I have done this in order to emphasize that culture is carried not just in what we do, but in the way we see, hear and experience the world and even more importantly in how we make sense of those perceptions, cognitively and affectively. Following Bateson I have argued that 'Culture resides in the habituated relational pathways of an organisation' such that it is possible for all the members of an organization to change but the culture to live on, enacted by new players. To assist the evolution of organizational culture, one first has to start by attending to these deeper organizing principles, which are not accessible from questionnaires or individual interviews, but can be glimpsed in the oft repeated stories and shared metaphors; the collective ways of tackling issues; the recursive patterns of behaviour, the shared unwritten rules and the collective emotional patterns that rarely can be articulated but which are communicated to the outsider through 'empathic resonance'.

An organization's culture cannot be fully understood by the organizational members immersed in its life, for their attempts to see their own culture will be through the lenses that are also the culture, or as the Chinese proverb so beautifully puts it: 'The last one to know about the sea is the fish.' However, it is also impossible for an outsider to see and understand the culture, as the culture is communicated differently to outsiders than insiders and the richness of the culture has to be experienced through deep participation.

To overcome this paradox culture requires a rigorous discipline of action research that combines both internal and external perspectives and transcends the limitations of both through a process of dialogue and challenge between different system positions. This process is supported by the methodology, tools and approaches of action research that combine what has been described as third-person, second-person and first-person research (Reason & Bradbury, 2001; Torbert, 2001).

First-person action research/practice skills and methods address the ability of the researcher to foster an inquiring approach to his or her own life.

Second person action research/practice addresses our ability to inquire face-to-face with others into issues of mutual concern . . . Third person strategies aim to create a wider community of inquiry . . . the most compelling and enduring kind of action research will engage all three strategies (Reason & Bradbury, 2001, p. xxvi)

Third-person research can help us look at the patterns of language, story, behaviour, activity, emotions and relationships that shape the flow of organizational life. First-person action research can help us move from immersion in the organizational culture back into structured personal reflection on how that culture has impacted our own being. For what a culture can not directly tell you it communicates through your emotional experience as you engage with it (Hawkins, 1997). This movement from action to reflection requires structured approaches and methods, whether drawn from phenomenology and psychodrama

(Hawkins, 1988); psychotherapy (Hawkins & Shoheit, 2000[1989]); or shadow consultancy (Hawkins, 2003[1993]).

Second-person research can help in providing a joint space where insiders and outsiders can collaborate together to help the insiders become 'flying fish' and freshly perceive the sea they are swimming in, and the outsiders to more fully experience the cultural impact. This form of action research can also be greatly enhanced by using tools and methods that enable the culture to enact and exemplify itself, such as storytelling, use of drawing or enacting the unwritten induction with the rules of: 'What everybody needs to know to flourish around here, but nobody will tell them directly'. It is often through the medium of aesthetic representation in art, drama, music etc. that a culture can be more fully expressed, and empathetically appreciated. This is a notion that Bateson held dear throughout his working life, from his early studies of the Iatmul people in New Guinea (Bateson, 1980) and his art collections and photographs from Bali (Bateson, 1972), to his late conversations with his daughter Mary Catherine Bateson (Bateson & Bateson, 1987). (See also 'Style, grace and primitive art' and 'A theory of play and fantasy' in Bateson, 1972.)

Organizational learning and knowledge management

In the late 1980s and 1990s, some time after Bateson's death, there was a great upsurge in the interest in both organizational learning and knowledge management. Peter Senge's book on organizational learning, *The Fifth Discipline* (1990), became a best seller and the somewhat different approach of Pedler, Boydell and Burgoyne (1991) to the *Learning Company* also became a rallying point for organizational learning in the UK and the rest of Europe. If we trace back the roots of this flowering, we find that one of the strongest goes back through the work of Argyris and Schön (1974) and their development of single loop and double loop learning. Their prolific work over many years is fundamentally rooted in the groundbreaking paper by Bateson, 'The Logical Categories of Learning and Communication' (Bateson, 1972, pp. 250-279) in which his thinking is based on Whitehead and Russell's theory (1913) of logical types.

Bateson distinguished between: what he termed 'zero learning', the acquisition of data or information that does not create a difference or change; 'Learning I', in which skill learning is acquired through trial and error selection of a possibility within a set of options; and 'Learning II', where second order or double loop learning occurs through shifting the frame or set in which one is making level one choices.

These distinctions have become central to understanding not only different orders of individual learning, but also the distinctions between operational learning and strategic learning in the life of the organization. In knowledge management it has become central to understanding the distinctions between data, information, knowledge and understanding. However, in the pursuit of knowledge management many organizations have ended up with growing their data warehousing to the extent that it drowns out information; or have created information overload in a way that suppresses the creation of new knowledge. This echoes the sentiment of T. S. Eliot who wrote in 'The Rock':

Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information? (Eliot, 1963, P. 161)

Elsewhere (Hawkins, 1991) I have written about how the development of double loop learning and organizational understanding is constrained by the lack of wisdom and what

Bateson termed 'Learning III'. For double loop learning to be enabled there is a need for level three or treble loop learning in organizations.

It was not until 1971, seven years after he originally wrote the paper, that Bateson revised his theory to include Learning III. This is defined by Bateson (1972, p. 264) as 'Change in the process of Learning II e.g. a corrective change in the system of sets of alternatives from which choice is made'.

Learning III is difficult to understand, and has often been misunderstood by other writers. This is probably inevitable, for, as Bateson points out, 'Learning III is likely to be rare even in human beings'. Learning III involves a transcendence of the ego-world, where experience is orientated to and made sense of through some rational self – 'what I call my character'. Thus it is the realm which, according to Wilber (1982), can be talked of only in symbolic, mandalic and paradoxical language.

According to Bateson, 'To the degree that a man achieves Learning III . . . his self will take on a sort of irrelevance. The concept of self will no longer function as a nodal argument in the punctuation of experience' (1972, p. 304).

If, as a prerequisite to Learning II, I have developed the ability to shift the framework within which I am making choices, then a prerequisite to Learning III must be the ability to shift the underlying premises and belief systems that form these frameworks.

Bateson's references to the transpersonal dimension of Learning III are elliptical, with references to a Zen master he once heard and the writings of the visionary mystic Blake, of whom he said: 'He knew more about what it is to be human than any other man' (in Brockman, 1978). Despite this tangential linking, the implication that Learning III involves a shift to spiritual and transpersonal realm is clearly there, for, as Bateson explains, Learning III is:

. . . a world in which personal identity merges into all the processes of relationship in some vast ecology or aesthetics of cosmic interaction. That any of these [people] can survive seems almost miraculous, but some are perhaps saved from being swept away on oceanic feeling by their ability to focus on the minutiae of life. Every detail of the universe is seen as proposing a view of the whole. (Bateson, 1972, p. 306)

But he also writes:

. . . certainly it must lead to a greater flexibility in the premises acquired by the process of Learning II - a freedom from their bondage . . . but any freedom from bondage of habit must also denote a profound redefinition of self. (Bateson, 1972, p. 304; original emphasis)

What seems crucial in understanding this distinction between Learning II and Learning III is that the latter occurs when the person cannot replace one underlying framework by which he lives with another - for example, deciding to quit being a Christian and to become a Buddhist; or to quit being an alcoholic and become an ex-alcoholic - but must also be aware that both these paradigms or worldviews are systems, frameworks, or spectacles through which we view the world. It is when we are able truly to let them go that we enter the domain of Learning III. The person has to let go of self-definition as an ex-Christian or as a Buddhist and embrace a sense of self which is non-definitional, in terms of either outward characteristics or frameworks of belief.

That said, I suggest there are two ways of thinking about Learning III, one more helpful in everyday life than the other:

One way is to follow the implications in Bateson that Learning III is a state of enlightenment, attained by only a few, such as Sufi or Zen masters, or Castaneda's Don Juan. The other more useful way of viewing this level is that it provides temporary access to a higher logical level of awareness, where we have the space to become free enough of our normal perspectives and paradigm constraints to see through them rather than with them, and thus create the space to change them. By definition, it is possible to change the way one double-loop learns only if there is some temporary access to Learning III, for it is spiritual learning in worldly organisations, rather than Ashrams, that is the focus. (Hawkins, 1991, pp. 172-173)

Systemic thinking

Arguably the most important development in organization development in the last 15 years has been a whole systems approach to organizations. Fritjof Capra, who has been highly influenced by Bateson, defines a system as 'an integrated whole whose essential properties arise from the relationships between its parts', and defines systems thinking as 'the understanding of a phenomenon within the context of a larger whole' (Capra, 1996, pp. 27, 29). This is further developed by Peter Senge, who writes, 'The discipline of systems thinking lies in a shift of mind: Seeing interrelationships rather than linear cause and effect chains; and seeing processes of change rather than snapshots' (Senge, 1990). In an even more Batesonian tone, Capra writes, 'The pattern of organisation: the configuration of relationships that determines the system's essential characteristics' (Capra, 1996, p. 27).

Above I have shown how this systems approach has influenced the approaches of organizational culture, organizational learning and knowledge management, but this perspective is even more pervasive. It informs many approaches to organizational dynamics (Ackoff, 1981; Forrester, 1961; Galbraith, 1977; Senge, 1990, among others) as well as problem solving (causal loop mapping is probably the most known of the systemic tool kit). It also has been essential in the field of change management in the move from mechanistic planned approaches to those that are more emergent, many layered and engage with the organization as a complex adaptive system (Watters & Coates, 2004).

The shift from mechanistic to systems thinking can be summarized in the move illustrated in Table 1.

Table 1

From	To
Parts	Whole
Objects	Relationships
Measuring	Mapping
Contents	Patterns
Quantitative	Qualitative
Context free	Contextual
Linear Thinking	Process Thinking
Single Level of Discourse	Multi-Level Discourse
Building blocks	Organizing Principles

This approach in turn has helped the field to begin to attend to the organization as embedded in its wider stakeholder context. The organization is created and sustained not just by those within the organization but also the organization's range of stakeholders. These include: customers; suppliers; investors; commentators; influencers; politicians; and the communities in which the organization operates. This wider systems perspective was synthesized by the RSA's 'Tomorrow's Company' project (1997), later published under the title of the 'Inclusive Company'. More recently Bath Consultancy Group and others have added 'Nature' as another key stakeholder in the functioning of any organization, but a stakeholder that commonly lacks a human voice to represent it and therefore can be easily ignored by many organizations.

Seeing organizations in their stakeholder context has influenced a great deal of recent approaches to organizational strategy and in particular the writings of Hamel and Prahalad (1994) and Prahalad and Ramaswamy (2004). The latter book also shows how research and development is increasingly seen as a co-created process that is rooted in the relationship between the organization and its customers and suppliers.

Environmental perspective

By the 1960s and 1970s, Bateson had become one of the first powerful voices to speak about the developing ecological crisis facing our planet. Some time before other commentators, he showed how our current environmental crisis is rooted in our epistemological mind sets.

Bateson writes about our epistemological errors which he describes as:

the ideas that dominate our civilization at the present time date in their most virulent form from the industrial revolution. (Bateson, 1972, p. 468)

Bateson also shows how these beliefs are rooted in a theology that separates God from Creation and creates a merely transcendent God separate from Nature:

If you put God outside and set him vis-à-vis his creation and if you have the idea that you are created in his image, you will logically and naturally see yourself as outside and against the things around you. And as you arrogate all mind to yourself, you will see the world around you as mindless and therefore as not entitled to moral or ethical consideration. The environment will be yours to exploit ...

If this is your estimate of your relation to nature and you have an advanced technology, your likelihood of survival will be that of a snowball in hell. You will die either of the toxic by-products of your own hate, or, simply, of over population and over-grazing.
(1972, p. 436)

If we now revisit each of these false and dangerous beliefs we can look at what we would put alongside them as an antidote or cure, that would help us overcome the human/nature dualism. You might at this point like to write your own antidotes for each of the Bateson statements before comparing them with the ones that I have written in the right hand column of Table 2.

Table 2

a) It's us against the environment.	We and what we call environment are interdependent.
b) It's us against other men.	Win-lose always becomes lose-lose.
c) It's the individual (or the individual company, or the individual nation) that matters.	The unit of survival is organism plus environment. We are learning by bitter experience that the organism that destroys its environment destroys itself.
d) We can have unilateral control over the environment and must strive for that control.	Nature was before, will be after and is greater than that small part of it that is human beings.
e) We live in an infinitely expanding 'frontier'.	There are limits to growth.
f) Economic determinism is common sense.	90% of what is most important cannot be measured by economics. Money as the measure of all things actually serves to impoverish us all.
g) Technology will do it for us.	Technology, on its own, will merely accentuate our own abilities to destroy ourselves and our environment. You can not solve a problem from within the thinking that created it.

Bateson writes very clearly of the problems we have created by choosing the wrong unit of survival.

In accordance with the general climate of thinking in mid nineteenth century England, Darwin proposed a theory of natural selection and evolution, in which the unit of survival was either the family line or species of sub-species or something of that sort. But today it is quite obvious that this is not the unit of survival in the real biological world. The unit of survival is organism plus environment. We are learning by bitter experience that the organism that destroys its environment destroys itself. (Bateson, 1972, p. 459)

We have to move from just fighting for saving this species or that, to working with the preservation and development of living ecologies; from thinking of the environment as a thing, to seeing that it is a complex web of connections; from seeing it as other to experiencing it as part of us. There is no self, no nature, only nature self.

Action research

Much of what I have written above has already shown the enormous influence Bateson has had on the methodology and approach of action research, but most importantly Bateson has provided the fundamental epistemological underpinning for much of the theory of action research. Bateson gave new emphasis to the following approaches that have become central to action research:

- studying the connecting patterns rather than the parts;
- attending to the aesthetic and presentational aspects of knowing as well as the cognitive and propositional knowing;
- questioning one's assumptions from outside of the frame in which they were formulated;

- working with creative dichotomies;
- seeing oneself as part of the field that is being studied;
- questioning power and conscious purposefulness, which is trying to increase control over the wider system.

Conclusion: a participative world view

As Bateson writes, 'The most urgent task is to think anew' (1972, p. 437), but thinking is not enough. The most urgent task is to connect anew, to connect in the world through what a number of people (Ferret, 2002; Reason, 2002; Skolimowski, 1994; Tarnas, 1991) are describing as a 'participative consciousness'. Reason writes:

... we can only understand our world as a whole if we are part of it; as soon as we attempt to stand outside, we divide and separate. In contrast, making whole necessarily implies participation: one characteristic of a participative worldview is that the individual person is restored to the circle of community and the human community to the context of the wider natural world. (1994, p. 10)

I was recently inspired to return to an in-depth reading of Bateson by reading the doctoral thesis of Noel Charlton (2003) entitled *A sacred world: The ecology of mind, aesthetics and grace in the thought of Gregory Bateson*. I was fascinated by his references to Bateson's use of the term 'Grace'. In *Steps to the ecology of mind*, Bateson writes, 'Aldous Huxley used to say that the central problem for humanity is the quest for grace' (Bateson, 1972, p. 101). He goes on to define Huxley's notion of grace as a quality that many animals have of being able to exhibit 'a naivete, a simplicity, which man has lost' characterized by a lack of self-deceit and a harmony of movement.

This is a different use of the term 'Grace' from the religious notion of grace found in both the Christian and Islamic traditions, where grace is seen as an unearned gift or benefit from God. However, the two notions dovetail beautifully in a systemic perspective. The more we align and are in service to the greater systemic whole, then the more graceful and harmonious are we in our own living and movement. Internal harmony is only possible when there is harmony in the collective circuits of mind and in the wider ecology. Only when we live gracefully in service of the greater system of which we are part, do we receive the grace of beneficence bestowed from the greater system on its parts.

Bateson's ultimate search was for a fundamental belief system that would help us live more fully, more harmoniously and more appropriately in and with our fragile world. The new paradigm had to be 'neither supernatural nor mechanical' (Bateson & Bateson, 1987, p. 50), for both positivistic science and religious dogma have led us to an alienated existence tottering on the edge of ecological disaster.

At the end of his life he wrote:

I find myself still between the Scylla of established materialism, with its quantitative thinking, applied science, and 'controlled' experiments on one side, and the Charybdis of romantic supernaturalism on the other. My task is to explore whether there is a sane and valid place for religion somewhere between these two nightmares of nonsense. Whether, if neither muddleheadedness, nor hypocrisy is necessary to religion, there might be found in knowledge and in art the basis to support an affirmation of the sacred that would celebrate natural unity. (Bateson & Bateson, 1987)



Gregory Bateson has passed on the torch to all those who are searching to create a better world. His torch has illuminated some of the underlying principles of a new paradigm that can guide those of us in both organizational development and action research, but there is much still to be done.

Acknowledgements

I would like to acknowledge and appreciate the helpful comments and discussion of my colleagues Peter Reason, Peter Binns, Nick Smith, Judy Ryde and Robin Coates in the preparing of this article.

References

- Ackoff, R. (1981). *Creating the corporate future*. London: John Wiley.
- Argyris, C., & Schön, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco, CA, Jossey Bass.
- Argyris, C., & Schön, D. A. (1978). *Organizational learning*. Reading, MA: Addison-Wesley.
- Bateson, G. (1972). *Steps to an ecology of mind*. London: Palladin.
- Bateson, G. (1979). *Mind and nature: A necessary unity*. New York: Dutton.
- Bateson, G. (1980). *Naven*. London: Wildwood House.
- Bateson, G., & Bateson, M. C. (1987). *Angels fear: An investigation into the nature and the meaning of the sacred*. New York: Macmillan.
- Brockman, F.J. (1978). *About Bateson*. London: Wildwood House.
- Capra, F. (1983). *The turning point - Science, society and the rising culture*. London: Fontana Paperbacks.
- Capra, F. (1996). *The web of life: A new synthesis of mind and matter*. London: HarperCollins.
- Charlton, N. (2003). *A sacred world: The ecology of mind, aesthetics and grace in the thought of Gregory Bateson*. Unpublished PhD, Lancaster University, Lancaster.
- Eliot, T.S. (1963). *Collected poems*. London: Faber & Faber.
- Esalen Institute. (1978 80). *Esalen Seminars [Audio Tapes]*. California: Author.
- Ferrer, J. N. (2002). *Revisioning transpersonal theory: A participatory vision of human spirituality*. Albany, NY: SUNY Press.
- Forrester, J. W. (1961). *Industrial dynamics*. Cambridge, MA: MIT Press.
- Galbraith, J. R. (1977). *Organization design*. Reading, MA: Addison-Wesley.
- Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. Boston, MA: Harvard Business School Press.
- Hawkins, P. (1988). A phenomenological psychodrama workshop. In P. Reason (Ed.), *Human inquiry in action* (pp. 60 78). London: Sage.
- Hawkins, P. (1991). The spiritual dimension of the learning organisation. *Management Education and Development*, 22(3), 166 18 1.
- Hawkins, P. (1997). Organizational culture: Sailing between evangelism and complexity. *Human Relations*, 50(4), 417 440.
- Hawkins, P. (2003[1993]). *Systemic shadow consultancy (working paper)*. Bath: Bath Consultancy Group.
- Hawkins, P., & Shohet, R. (2000[1989]). *Supervision in the helping professions*. Buckinghamshire: Open University Press.
- Issacs, W. (1999). *Dialogue: The art of thinking together*. New York: Doubleday Currency.
- Laing, R. D. (1971). *Self and others*. London: Penguin.
- Lilly, J. (1973). *The center of the cyclone*. St Albans: Paladin.

- Marshall, J. (2004). Living systemic thinking: Exploring quality in first person research. *Action Research*, 2(3), 309-329.
- Pedler, M., Boydell, T., & Burgoyne, J. (1991). *Learning company: A strategy for sustainable development*. London: McGraw Hill.
- Prahalad, C. K., & Ramaswamy, V. (2004). *The future of competition: Co creating unique value with customers*. Boston, MA: Harvard Business School Press.
- Reason, P. (1994) *Participation in human inquiry*. London: Sage.
- Reason, P. (2002). Justice, sustainability and participation: Inaugural professorial lecture. *Concepts and Transformation*, 7(1), 7-29.
- Reason, P., & Bradbury, H. (Eds.). (2001). *Handbook of action research: Participative inquiry and practice*. London: Sage.
- Royal Society of Arts. (1997). *Tomorrow's Company*. RSA Inquiry Report. London: Author.
- Schein, E. (1992[1985]). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.
- Senge, P. (1990). *The fifth discipline*. New York: Doubleday Currency.
- Shaw, P. (2002). *Changing conversations in organizations: A complexity approach to change*. London: Routledge.
- Skolimowski, H. (1994). *The participatory mind*. London: Arkana.
- Tarnas, R. (1991). *The passion of the western mind*. New York: Ballantine.
- Torbert, W. (2001). The practice of action inquiry. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 250-60). London: Sage.
- Watters, J., & Coates, R. (2004). *Simple consulting for complex change issues (working paper)*. Bath: PriceWaterhouseCoopers and Bath Consultancy Group.
- Watzlawick, P., Weakland, J. H., & Fisch, R. (1980). *Change: principles of problem formation and problem resolution*. New York: W.W. Norton.
- Whitehead, A.N., & Russell, B. (1913). *Principia mathematica*. Cambridge: Cambridge University Press.
- Wilber, K. (1982). *The holographic paradigm and other paradoxes*. Boulder, CO: Shambhala.

Peter Hawkins is Chairman of Bath Consultancy Group through which he works with a wide variety of organizations throughout the world on managing complex change.
[Email: Peter.Hawkins@bathconsultancygroup.com]