
The Prairie and the Rainforest: Ecologies for Sustaining Organisational Change

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Abstract:

The apparent chaos of a rainforest provides a more sustainable environment than an ordered prairie. This vivid contrast provides a challenge for those whose approach to change in organisations involves ordered lines and neatness. This article interweaves observations from the natural world with insights from complexity theory and group behaviour (especially John Bowlby's attachment theory). Meg Wheatley neatly summarised the challenge of such a business ecology approach to organisational change: 'We can never direct a living system. We can only disturb it'. Practical examples from a range of business settings help build a picture of the exciting possibilities offered by this approach. A concluding section explores the implications for leaders, who need to get used to being comfortably out of control. Promoting a safe environment by relentless consistency encourages people to explore. The upshot is a paradox - that stability promotes change.

Embracing Change

'Enormous managerial energy... [has] been devoted to turnarounds, rescues, and massive 'change' programs, yet isn't the real goal to avoid a crisis-sised transformation problem by creating a capacity for continuous renewal deep within the company?'¹

How can we build a capacity for continuous renewal, for organisations and individuals? This paper presents a framework, combining insights from complexity theory with observations from the natural world (including developments of John Bowlby's attachment theory). Meg Wheatley has neatly encapsulated the challenge of an ecosystems approach to organisational change: 'We can never direct a living system. We can only disturb it'².

The framework was first developed by the Dutch business ecologist, Peter Robertson, and can be found in his book *Always Change a Winning Team*³. It should be clear in what follows that I owe an enormous debt of gratitude to Dr Robertson. I first encountered the prairie and rainforest image at the launch of his book in London's Savoy Hotel in 2005: the apparent chaos of a rainforest provides a more sustainable environment than an ordered prairie. In this article, we will be exploring the implications of this vivid contrast for leaders: three core sections look at complementary perspectives to this approach. The implications for leadership will then be drawn from this analysis.

Hamel and Prahalad's strategic question above is addressed at the corporate level, but can also apply to individuals. Other popular writers have addressed the issue: Daniel Goleman's

writing on emotional intelligence links the leader and organisation in creating sustainable change⁴.

Approach

The approach adopted is that of reflective praxis. My career includes time as a FTSE100 senior executive, SME director and strategic project manager. Reflecting on this practical experience resonates with the framework described here.

These reflections have made me aware that conventional approaches cannot adequately explain the nuances of organisational change. This paper therefore combines the disciplines of ecology, cybernetics, ethology (especially attachment theory), psychology and complexity theory to provide a new framework. In particular, we will be investigating three related disciplines:

- Ecology. Today's debates around sustainability should not narrow our focus away from the myriad interactions of natural systems.
- Complexity theory. In recent decades, a post-Newtonian worldview has been applied to business leadership and organisational change.
- Ethology, or the study of animal behaviour. A UK pioneer was John Bowlby (1907-90), whose attachment theory is a key focus here.

The paper is exploratory in attempting a synthesis. I should make it clear that I cannot claim expertise in each of the fields into which I venture. My modest aim is to bring disciplines together and encourage experts in their own fields to engage in mutual exploration. The paper is offered in the hope that the rough edges of the pioneer encourage others to engage in deeper and broader reflection for the benefit of the wider community.

I have been heartened to discover others engaged on similar paths of discovery. Jeremy Holmes, for example, states that 'for our discipline to advance further, another effort of synthesis will be needed, bringing together ideas from neurobiology, neuroimaging, linguistics, ecology, and the mathematics of complex system such as chaos theory. Forging such creative links is a task for the future.'⁵

The importance of widening the debate about sustainability and natural resources has been prompted by two events in my professional work in recent years. First, I was asked to work in what appeared to be two similar communities in different parts of the UK. Both were in former coal mining areas. Yet our work revealed major differences: one was beginning to see that it could no longer define itself primarily as a 'former mining community' and started to look to the future; the other still defined itself by reference to its past and struggled to take the steps needed to move forwards. The other occasion involved taking part in a sustainability roundtable at a major European business school. It took me long discussions with the organisers before they began to appreciate that the sustainability agenda and natural resources could apply to people and communities⁶.

An Ecology for Business

Making Connections

Ecology is loosely used to denote a number of concepts. The Shorter Oxford English Dictionary defines it as 'the science of the economy of animals and plants; that branch of biology which deals with the relations of living organisms to their surroundings, their habits and modes of life, etc.'

A book which comes close to earning the epithet 'all-embracing' is Fritjof Capra's *Web of Life*⁷. Interconnectedness – between self, others, nature – is a common theme in spiritual traditions. Those from societies away from Western individualism rightly ask if the community has a role to play. Satish Kumar uses the Sanskrit dictum, *so hum*, to emphasise our need for each other: 'You Are Therefore I Am'⁸. Yet today, 'Our culture's dominant story is... of separation – from one another, from nature, and ultimately even from ourselves.'⁹

None of us exists except in relation to our environment – in the broadest possible meaning of that word. Words relating to wider society are relevant to business: 'The celebration of... our mutual dependency as a species should be encouraged. In these ways the vicious circles of deprivation can be broken, this generation's insecure young people no longer condemned to reproduce their own insecurities in the next.'¹⁰

Organisations as Living Systems

Applying a natural systems approach to organisations is not new. Arie De Geus wrote of the living company¹¹ and Gareth Morgan includes the organism as an organisational image¹². To Richard Barrett, the organisation is a living entity, whose physical, emotional, mental and spiritual well-being needs to be cared for¹³. Marcus Buckingham provides a revealing insight in the transcript of an interview with a manager, which includes a slip of the tongue: '... the organism as a whole, sorry, the organisation as a whole...'¹⁴.

Not all are happy with the idea of organisations as living systems. 'Those proposing this view frequently make emotive appeals for a return to ancient wisdom, supposedly now made scientific by the complexity sciences. This is advocated as a basis for leaders to build more caring communities and also as the basis for countering the global exploitation of the planet... It is said that ancient people had a much stronger, wider sense of community and that they were in closer touch with nature, respecting it in a way that secured a sustainable environment.'¹⁵

One implication of this approach is that we should reconsider our view of what constitutes success and failure. NASDAQ's Robert Greifeld reminds us of parallels with the natural world: 'For companies focused on organic growth, failure – in reasonable proportion to success – is a sign of health.'¹⁶ For those who long for stability in the midst of change, we have the stark

reminder that 'equilibrium is death'¹⁷: this applies to organisations as well as the living organisms with which they are compared.

The Sustainability Agenda

An ecological view of organisations has been encouraged by the growing interest in sustainability. A pioneering text was Paul Hawken's *Ecology of Commerce*¹⁸, though the title should perhaps read 'Commerce of Ecology' as it dealt primarily with business aspects of ecology in its 'green' sense. Abe et al¹⁹ tended towards cellular, rather than social, systems: once more, most business examples came from the green sector. Alan Heeks is a successful business leader who went on to own an organic farm; he provides some powerful insights²⁰.

Others approach the topic from a business angle. James F Moore published a Harvard Business Review (HBR) article with the distinctly Darwinian title, 'Predators and Prey', and went on to write a full-length book referring to the 'Age of Business Ecosystems'.²¹ Meyer and Davis²² write of the convergence of information, biology and business, although their main focus is on molecular biology and nanotechnology.

Two works have perhaps the best claim to cover the sustainability agenda as it is addressed here. Bob Doppelt²³ has attempted a synthesis on leading change for business, government and civil society. Dunphy et al²⁴ look to the past, present and future. Like Doppelt, they set out a multi-step framework: this 'transformational' path ranges from individual to cosmic perspectives.

S Curves

One concept which bridges the worlds of nature and business is the S (or sigmoid) curve. Organisations go through cycles of growth and decline, as do all things in nature: crops, generations, civilisations. Some organisations never recover from decline and cease to exist. Some become victims of their own success: the processes they implement to improve efficiency become established routines, departmental boundaries then act as barriers to change. Investigations from a cybernetic perspective illuminate the role of feedback systems in this evolution. In particular, feedforward (amplifying) loops can often be found at the beginning of S Curves, while feedback (damping) often predominates at the top of S Curves.

S Curves also apply at an individual level. In my experience, getting people to reflect on personal S Curves provides a powerful framework for engaging with change. Smooth continuities and stark discontinuities provide the impetus for moving on in personal and business life. Robertson²⁵ illustrates the turmoil of jumping S Curves by the metaphor of salmon leaps, noting that the salmon gains momentum by diving into points of maximum turbulence. Parallels with corporate and individual life are compelling.

Applications

Examples of S Curves in the corporate sphere in recent years include IBM and Marks and Spencer. IBM progressed swiftly from posting one of the largest profits in history to posting one of the largest losses. Their reinvention as a service company under Lou Gerstner enabled them to grow once more. M&S likewise had a long history of strong profit growth: their fall, and subsequent recovery under Stuart Rose, mirrors the end of one S Curve and the beginning of another. I have recently found the concept embraced by leaders ranging from the construction industry to primary schools.

Personal S Curves can be traced through key industry figures such as Steve Jobs. Following the spectacular growth of Apple Computer, Jobs was ousted from the very company he co-founded. One can trace the (literal and metaphorical) ups and downs as he found new growth at NeXT and, spectacularly, Pixar, only to rejoin Apple and catapult it into the iTunes era. Personal stories illustrate how change often comes from unexpected sources. Bennis and Thomas²⁶ noted the importance of transformational events across generations, coining the term 'crucible' for these.

Different strengths are called for at different stages of an S Curve. A retail bank created a project team to launch innovative e-commerce products. The team consisted of like-minded individuals (described by some as a 'gang'). They had early successes, but the honeymoon did not last as the focus turned to relentless execution. Changes were made to rebalance the team, and the products were introduced successfully. David G Thomson²⁷ investigates the senior management teams of a number of high growth companies from this perspective. This is where real diversity can thrive: Scott E Page²⁸ calls for a move beyond the politics that cloud debates about diversity: 'difference beats homogeneity'.

Summary

When approaching change, we can learn from nature. In our organisational and individual lives, we are part of ecosystems, reflecting a dynamic interconnectedness. Natural cycles of growth and decay are well represented by S Curves. A key area for development comes when jumping S Curves, a situation often characterised by turbulence.

Complexity Theory

The Challenge of a New Worldview

The Newtonian worldview of cause and effect is being challenged by a new approach, characterised by uncertainty, complexity and chaos. Not all welcome the new perspective: '[t]his style of management is not for everyone. Witness the reaction of one manager who was attending a seminar by Ralph Stacey..., who is among the few people to address the human side of complexity science in business. Stacey was urging his audience to embrace

uncertainty, to give up tight control, and to allow for unpredictability, when someone in the audience wailed, “You have just set management back fifteen or twenty years!”²⁹

Stacey and his colleagues challenge all who venture into this field. They ‘examine the claims made by management complexity writers. Do they hold out the potential for a radical re-examination of how we think about organisations; that is, re-examination that goes to the very roots of our thinking? Or are they but the latest in the explosion of management fads we have seen over the past few decades, another superficial fashion that leaves untouched the roots of management thinking and so soon fades? [They] argue that a great many writers run the fad risk.’³⁰ Building their thesis on, *inter alia*, the philosophy of Kant (1724-1804) and the social psychology of GH Mead (1863-1931), they are able to disagree with writers like Senge and Wheatley over such questions as the degree to which self-organisation is something in which we participate, rather than something that can be observed as a system.

Self-Organisation and Emergence

Complex adaptive systems, strange attractors, self-organisation and emergent properties emphasise how relationships and interactions can produce creative results. ‘I can think of several organisations, particularly customer-oriented ones, that brag about how a single customer enquiry or the suggestion of one employee directed them into entirely new product lines that became very successful. There was no preplanning, no long-range strategic objectives, that led into these markets. Just the creativity of one or two individuals who succeeded in getting the attention of the organisation and then watched the suggestion *amplify* to the level where the company reorganised or responded to it.’³¹

Despite years of delayering, we still see evidence of hierarchical organisations from Fortune 500 companies through Government Departments to the Roman Catholic Church (the word itself derives from *hierous*, meaning priest). John Adair identifies three levels of leadership: strategic, operational and team³². But how relevant is this neat hierarchy to a world characterised by complexity and chaos? ‘Self-organisation in business relies on intelligence that exists in every part of a complex adaptive system (in the mind of every employee) and makes it possible to tap this resource and release its formidable potential. That capacity, in turn, allows companies to seize opportunities and solve problems as they arise. Self-organisations and emergence are the twin engines of adaptive work.’³³

Change Management?

‘Managing change’ is a great oxymoron of our time. Although the expression is widely used, we can ask how much we can actually manage change. The dominant Newtonian worldview underlies much thinking in this field: a common feature is an implied predictability – if management [sic, it is rarely ‘managers’] does *this*, then *that* will follow. Insights from complexity theory give a different view. ‘We can never direct a living system. We can only disturb it.’

To a generation of managers brought up on 'making it happen', 'letting it happen' may prove to be an unsettling alternative.

Boundaries and the 'Edge of Chaos'

Leadership does not simply sit at the top of organisations. 'Leaders are not just at the top but in the middle of a complex network of relationships.'³⁴ Gosling and Mintzberg speak of managers being at the edge: 'To manage context is to manage on the edges, between the organisation and the various worlds that surround it.'³⁵

'When one is snug in the middle of an organisation, possessing power and comfort, one cannot always see what change is needed; it is often those on the margins who first experience changing conditions and the necessity for a new response ... Those who in traditional companies would be on the margins are brought into the centre.'³⁶ Hamel and Prahalad link the historical and business perspectives: 'Front-line employees and middle managers today, inclined to regard themselves as victims, have lost confidence in their ability to shape the future of their organisations. They have forgotten that historically it has been the dispossessed – from Gandhi to Mandela, from the American patriots to the Polish shipbuilders – who have led revolutions. Notwithstanding all the somber incantations that 'change must start at the top', one must ask how often the monarchy has led a revolution.'³⁷

Applications

Dee Hock, founder of Visa International, mixes personal story and a vision for an organisational world harnessing chaos and order, in his book *Birth of the Chaordic Age*³⁸. My own brief encounter with Visa Europe was a sobering experience – it runs with only 750 employees. Although the language is opaque (acquirers, merchants), it is fascinating to observe how different institutions, especially banks, act simultaneously in competition and cooperation.

One, perhaps surprising, application where complexity theory resonates with the contemporary world is in military strategy. The Cold War had clear adversaries, each of whom knew their own (and, one suspects, their opponent's) orders of battle. It was an ordered world, but a different approach is now needed. Keith Grint³⁹ describes the system of leadership rooted in *Auftragstaktiker*, Mission Command: 'general directives, not specific orders, strategic operational requirements, thereby enabling decentralised control that facilitated distributed leadership and the ability of local ground commanders to seize the initiative rather than await orders'. As Grint comments, 'None of this is new': Mission Command originated with the 19th century Prussian General Staff. The US Marine Corps now define their command structure as 'a system that provides the means to adapt to changing conditions. We can thus look at command-and-control as a process of continuous adaptation.'⁴⁰

Grint's work introduces two further useful concepts: constructive dissent and inverse learning. Constructive dissent – and its shadow, destructive consent – can be seen in the dynamic between leaders and those around them. Grint⁴¹ provides examples from King Lear to Sir Richard Greenbury and the board of Marks & Spencer. Chaos theory has an analogous perspective: 'Relentless discomfort is a discipline that arrests the drift of living systems towards self-confirmation and homeostasis.'⁴²

Inverse learning occurs when 'the relationship of "teacher" to "pupil" is the reverse of that normally assumed.'⁴³ In this context, Grint emphasises the importance of reflective experience, using the child-parent relationship as an example. My own contribution comes from working as a volunteer in a psychiatric hospital: reflecting on my experience of being confronted with joy, anger, bewilderment and despair, I asked 'who was teaching whom?'⁴⁴

An emerging application of complexity can be found in the debate about corporate values and business ethics. Southwest Airlines, the most successful US airline of the past two decades provides a good example. Ann Rhoades, former Executive VP at Southwest inadvertently drew attention to this when she left to join start up rival, JetBlue. 'Values were central at Southwest Airlines, but they just happened. I think it's better to decide upfront what they'll be.'⁴⁵ Just happened? The relentless consistency of Herb Kelleher, Colleen Barrett and others meant that Southwest's values were no accident. Gittel's observations are pertinent. 'Southwest's success is not due to one particular organisational practice or another, but rather to the overwhelming consistency among them.'⁴⁶ As we shall see, consistency is a key component for leaders promoting sustainable change.

Summary

Insights from complexity theory throw down a challenge to traditional managers. We participate in complex adaptive systems, where new ideas emerge. Managers throughout organisations need to get used to being comfortably out of control, to replace the mantra of Make It Happen with Let It Happen. For people to prosper amid such complexity, they need to feel safe.

Attachment Theory

Bowlby and Subsequent Developments

'Ethology [is] a new source of inspiration for management.'⁴⁷ A starting point is that not only physical characteristics evolve over time, but also behavioural characteristics. A pioneer, controversial in his time, was John Bowlby at London's Tavistock Institute. Bowlby's own work is hardly accessible: his *Attachment and Loss* trilogy⁴⁸ extends to over 1400 pages.

Two definitions map out the territory. Holmes defines ethology as 'a biological science which studies animal behaviour in a particular way: the animal is considered as a whole; behaviour is usually studied in natural or wild conditions; there is great attention to antecedents and

consequences of behaviour patterns; the function of any behaviour is considered; and an evolutionary perspective is always taken.⁴⁹ Robertson defines ethology as 'the science that, using the perspective of evolution, investigates how and why a specific behaviour develops and what drives that behaviour.'⁵⁰

We can note how the definitions link to systems thinking and cybernetics ('antecedents, consequences, what drives behaviour'). Feedback and feedforward mechanisms, regulatory and reinforcing loops feature in books applying systems thinking and a new paradigm⁵¹.

We can also note the importance of group behaviour. 'Relationship' is widely used in management literature: from customer relationship management (CRM) to a competence for emotional intelligence⁵². For Bowlby, there was an important relationship, that of a child to its parents (especially mother), which led him to develop his attachment theory.

Bowlby's work is now being applied more widely - attachment theory has been employed in the political, social policy and ethical arenas. Two recent publications hold out the possibility of introducing his work into the business mainstream. Daniel Goleman made a passing reference to Bowlby in his best-selling *Emotional Intelligence*. In *Social Intelligence*⁵³, he devotes considerable space to his ideas. And attachment theory is now being cited in the marketing literature.⁵⁴

Our focus here is on the concept of attachment, and the related notion of exploration. I have found these resonate with practical observations when working with people and organisations going through change.

Attachment

Attachment is the 'condition in which an individual is linked emotionally with another.'⁵⁵ It is an instinctive process, which brings risks. Of particular significance is the object of attachment: the ideal is safe, or secure, attachment. Behaviour driven by attachment will, in any new situation, focus people on establishing connections with something familiar from the past. In the context of corporate change, we should note the importance of safe attachment when people are exposed to an unfamiliar environment.

Bowlby linked attachment to loss. A Tavistock colleague, Elizabeth Kübler-Ross, pioneered work on grief. Both business and personal change can be viewed as a grief journey through denial, anger, bargaining, depression and acceptance. A feature of life in former coal-mining communities has been the holding of quasi-religious ceremonies to enable the community to move on in their collective journey. David Jenkins describes addressing a demonstration at the closure of a coal pit as 'like conducting a funeral service.'⁵⁶

Recent research⁵⁷ has shown how attachment can be not just to other people, but to concepts and things ('matter'). We attach in varying degrees to people or matter. Objects of attachment are quite literal when we are young (mother, father, 'teddy'...) but are more generalised in

adults (profession, culture, religion...). Safe attachment occurs when we detect consistency in our object of attachment, we can trust it. Unsafe attachment occurs when we detect inconsistency in our object of attachment – our energies are directed to re-establishing safe attachment. ‘The consummation of attachment [is] a relaxed state in which one can begin to ‘get on with things’, pursue one’s projects, to *explore*.’⁵⁸

Exploration

Exploration is another instinctive and strong process. Our need for personal growth takes over once our need for security has been satisfied. Exploration is the drive to discover what we do not know without needing to know what the benefit might be – our natural curiosity. It occurs when we have safe attachment, when the important things in our lives are dependable, reinforcing and supportive. Bowlby’s colleague Mary Ainsworth coined the term ‘secure base’ for this. It provides the basis for the creativity and energy needed to tackle the challenges of change.

I know of no better illustration of attachment and exploration than observing what happens when a young child is taken to a party full of unfamiliar people⁵⁹. Initially most children will cling (often literally) to their parent or carer. But when it is time to go home, the typical child cannot be found anywhere. The intervening steps are vivid examples of the interplay between attachment and exploration.

Applications

A colleague and I were asked to work with specialists who were vital to a large merger in the financial services sector: they were not joining in crucial gatherings. We found that their prime attachment was to their professional discipline – people-based gatherings were thus not important. The merger went ahead successfully. In another company, matter attachment related to the replacement of a computer system. This was a key factor generating resistance: managers needed to acknowledge this before progress could be sustained.

Understanding attachment is important for individuals. Surface impressions can mislead. A team leader in a pressurised customer service role was described as ‘definitely a people person’. In fact, they were highly matter attached: this secure attachment enabled them to deal with difficult personal situations without experiencing an emotional drain. This understanding can help in career counselling. A matter-attached MBA went through the trauma of being replaced as head of a cross-functional change project... to discover personal and job satisfaction as an internal auditor in another company.

There is no correct position on the stability-exploration axis. The management team of a Chinese pharmaceutical production facility were highly stability-oriented, exactly what was needed in a factory focused on efficient production. The dangers of inappropriate exploration can be seen in the 1986 Chernobyl nuclear explosion. It is instructive to investigate not only

the immediate cause (actions of control room staff), but also the organisational culture which allowed such behaviour to develop.

Entrepreneurs tend to be exploratory. We can see their frustration as their companies are floated, and subsequently taken back into private hands. A FTSE100 company recruited a highly exploratory director to underpin a massive corporate change programme. Dramatic changes ensued and corporate performance rocketed. But the director left, feeling alienated in the new world he helped to create. This illustrates the need to map leadership styles onto the stages of corporate S Curves. Leaders need to build teams with relevant diversity for each phase - to 'always change a winning team.'⁶⁰

A study of Starbucks illustrates the language of attachment. 'With consistency comes customer trust. Consumers gain stability when they know they can depend on having a reliable experience... Consistency is crucial for success in a world that is unpredictable.'⁶¹

Another application of consistency is in business ethics. Rather than being seen as a separate discipline, it flows naturally from this approach. Such consistency, rather than reliance on following regulatory and compliance requirements, is the best protection against corporate scandals and individual employment cases.

Summary

We all have a natural tendency to explore. Exploration is encouraged when people feel safe, when they have a secure base. Such safe attachment is promoted by consistent behaviour. Leaders have a responsibility to promote such safe attachment to provide a secure base during change.

Implications for Leaders and Leadership

What are the implications of these considerations for the organisational change agenda? And what, in particular, are the consequences for those with the responsibility of leading change, of promoting 'a capacity for continuous renewal deep within the company'? We can note some key points.

- *Creating a Secure Base.* In my experience, even the most cynical executive will smile grudgingly at the child's party example. To release the natural drive for personal growth and development (exploration) in people, leaders need to understand how to create the conditions for security (safe attachment). They need to focus on creating a secure base by living a consistent set of values, embodying behaviour aligned to corporate strategy and goals. By doing so they build a foundation of trust from which the challenges of a changing world can be tackled.
- *Consistency.* A secure base is promoted by consistency – relentless consistency in leaders, from strategic vision to day-to-day behaviour, consistency in governance, in

systems and processes (eg performance management, recruitment, reward). Organisational values that reflect such consistency will have a far greater chance of being embedded in an organisation than words, however worthy, pinned on notice boards.

- *Being Comfortably Out of Control.* Leaders need to help people deal with uncertainty – the complexities and ambiguities of the world we encounter. Leaders should promote participative self-organisation. They need to clarify important things from the past to honour, and design processes for people to engage in. They should stop attempting to direct living systems.
- *Always Change a Winning Team.* Leaders need to ensure that a team's strengths match the organisation's position on its S Curve(s). Entrepreneurs need to move on. Execution needs different skills from planning.
- *A Closing Paradox: Stability Promotes Change.* I have elsewhere noted the paradox of change, where traditions that claim to promote change are often perceived as among the most resistant institutions⁶². A stable base and a secure environment promote exploration, growth and continuous renewal. There is a stark contrast between this approach and some conventional change management literature. Far from creating 'burning platforms'⁶³, the leader's role is to provide the secure environment in which people can exercise their innate tendency to explore.

Such continuous renewal, encouraging growth, allowing complexity to thrive, is much closer to the sustainable ecology of a rainforest than the repeated intensity of planting and harvesting a prairie.

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- ³⁰ Stacey, Ralph D., Griffin, Douglas & Shaw, Patricia, (2000), *Complexity and Management: Fad or Radical Challenge to Systems Thinking?* London & New York NY: Routledge, p.2
- ³¹ Wheatley, Margaret J, (1999), *Leadership and the New Science*, 2nd edn. San Francisco CA: Berrett-Koehler, p.88. Italics added.
- ³² Adair, John, (2005), *How to Grow Leaders*, London & Sterling VA: Kogan Page, pp.43-51
- ³³ Pascale et al. (2000), *op.cit.*, p.120
- ³⁴ Binney, George, Wilke, Gerhard & Williams, Colin, (2005), *Living Leadership: A Practical Guide for Ordinary Heroes*,. Harlow: FT Prentice Hall, p.242
- ³⁵ Gosling, Jonathan & Mintzberg, Henry, (2003), 'The Five Minds of a Manager', *Harvard Business Review*, November 2003, pp.54-63, 59
- ³⁶ Lamont, Georgeanne, (2002), *The Spirited Business: Success Stories of Soul-Friendly Companies*, London: Hodder & Stoughton, p.16
- ³⁷ Hamel & Prahalad (1996), *op.cit.*, p.xiif. It was with a sense of irony that I found this quotation when preparing a paper for a conference at Windsor Castle.
- ³⁸ Hock, Dee, (1999), *Birth of the Chaordic Age*, San Francisco CA: Berrett-Koehler
- ³⁹ Grint, Keith, (2005), *Leadership: Limits and Possibilities*, Basingstoke: Palgrave Macmillan, p.38
- ⁴⁰ Cited in Meyer & Davis (2003), *op.cit.* p.152
- ⁴¹ Grint (2005), *op.cit.*, pp.40-42
- ⁴² Pascale et al. (2000), *op.cit.*, p.258
- ⁴³ Grint, (2005), *op.cit.*, p.102. See also Reverse Mentoring in Kelley, Tom (2006), *The Ten Faces of Innovation: Strategies for Heightening Creativity*, London: Profile Books, pp.85-87
- ⁴⁴ Harle, Tim, (2004), 'Lessons from the Margins', *The Reader* 101(1),, 14-15, p.15

⁴⁵ Gittell, Jody Hoffer, (2003), *The Southwest Airlines Way: Using the Power of Relationships to Achieve High Performance*, New York NY: McGraw-Hill, p.226

⁴⁶ Gittell, (2003), op.cit., p.206

⁴⁷ Robertson, (2005), op.cit., p.36

⁴⁸ Bowlby, John, (1969), *Attachment*, (1973), *Separation: Anger and Anxiety*, (1980), *Loss: Sadness and Depression*, London: Hogarth, repr. Pimlico 1997/8

⁴⁹ Holmes, (1993), op.cit., p.220

⁵⁰ Robertson, (2005), op.cit., p.7

⁵¹ e.g. Senge, Peter M, (1990), *The Fifth Discipline: The Art and Practice of the Learning Organisation*, London: Random House, pp.68-126; Wheatley, (1999), op.cit., pp.78-9; Pascale et al, (2000), op.cit., pp.93-109

⁵² Goleman et al, (2002), op.cit., pp.255-6

⁵³ Goleman, Daniel, (2006), *Social Intelligence: The New Science of Human Relationships*, London: Hutchinson

⁵⁴ Earls, Mark, (2007), *Herd: How to Change Mass Behaviour by Harnessing Our True Nature*, Chichester: John Wiley, pp.9, 38f

⁵⁵ Holmes, (1993), op.cit., p.218

⁵⁶ Jenkins, David, (2002), *The Calling of a Cuckoo: Not Quite an Autobiography*, London & New York NY: Continuum, p.123

⁵⁷ Robertson, (2005), op.cit., pp.61-73.

⁵⁸ Holmes, (1993), op.cit., p.67, italics orig.

⁵⁹ Robertson, (2005), op.cit., pp.37-39

⁶⁰ The sub-title of Robertson, (2005), op.cit. I hesitate to split an infinitive, but can plead that one of the great grammatical lapses in 20th century culture provides an illuminating example of a perfectly balanced team. Star Trek's Captain Kirk, Mr Spock, Dr 'Bones' McCoy and 'Scotty' the engineer cover the spectrum of people-matter attachment and stability-exploration orientation. Thanks to David Lewis for this profound insight.

⁶¹ Michelli, Joseph A., (2007), *The Starbucks Experience: 5 Principles for Turning Ordinary into Extraordinary*, New York NY: McGraw-Hill, p.101

⁶² Harle, Tim, (2005), 'Serenity, Courage and Wisdom: Changing Competencies for Leadership,' *Business Ethics: European Review* 14(4),, 348-358

⁶³ The phrase can be traced to Conner, Daryl R., (1998), *Managing at the Speed of Change*, Chichester: John Wiley & Sons, p.92. It refers to a decision to jump from the burning Piper Alpha oil platform in the North Sea in 1988.