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INSPIRATIONAL CHAOS:

Executive Coaching and Tolerance of Complexity

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Abstract

Executive coaching has emerged as a unique learning and developmental practice for executive managers who are now faced with unprecedented complexity, uncertainty, and ethical paradox. This paper shows how managers can develop a strategic *tolerance* of complexity through *chaordic* systems thinking as an extension of chaos theory applied to organizations. Wisdom decision-making processes are examined as a more effective paradigm for dealing with environmental complexity and rapid change, leading to the emergence of 9 principles of executive coaching for wisdom: (1) Facilitate recognition and management of uncertainty, (2) Promote dialogical thinking, (3) Encourage dialectical thinking, (4) Stimulate the articulation, critique, and integration of values into thinking, (5) Emphasize critical, creative and practical thinking in relation to the common good, (6) Serve as a role model of wisdom, (7) Activate mental representations of wisdom-related knowledge through guided imagination strategies, (8) Stimulate evaluative reflections, and (9) Explain and integrate the concept of progressive development.

Bio

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The End of Normal

The historical events of 'September 11', the subsequent wars, and the coincidental collapse of corporations and economies have heightened the perception of complexity and uncertainty in the business environment. Executive managers face unprecedented challenges for which solutions are often beyond the reach of current ways of doing things (Wood, 2000). That we live in turbulent times is an understatement. "There is no more normal", declares business commentator Seth Godin (2002). "We need a different way of organizing work".

Adapting to such an environment requires a high degree of "tolerance" of complexity according to Garvey & Alred (2001). They refer to the root meaning of the word "tolerate" (from the Latin *tolerare tolerat* – 'endure') meaning to: "allow the existence or occurrence of without authoritative interference" (The Concise Oxford Dictionary, 1995, p.1466). This notion of tolerance as 'enduring' or 'sustaining' is by no means a passive process. It requires a perception of the constantly changing organizational landscape as a field of bounded instability through which optimal performance is an emergent property.

Learning and development has been a crucial tool in developing 'tolerance' in executive managers, yet the traditional training model does not seem to have resulted in sustained behavioural change. Over the past 15 years coaching models based on the principles of psychology and education have evolved to provide more flexible and tailored learning solutions (Zeus & Skiffington, 2000; Peltier, 2001).

Martin (2002, p.10) points out that coaching may be in vogue now because "the time is ripe for a different approach to leadership. Up until recently, concerns about performance were addressed from the perspective of behaviour modification, with control as the underlying assumption. Current models of coaching, in contrast, are based on reflection and insight".

Kilburg (2000) suggests that coaching, at the highest level, not only develops reflection and insight, but also facilitates the emergence of *wisdom*.

Is wisdom a necessary attribute for executive managers to successfully 'tolerate' complexity and uncertainty? And if so, is executive coaching a valid intervention for promoting 'tolerance' of complexity?

The Inspiration of Chaos

Management and organization science literature has focused on the objective control of agents and the assumption that interactions can be described in linear terms (Levy, 2000). A contrasting view evolves from chaos and complexity theory (also known as dynamical systems theory). As Lissack & Gunz (1999) assert. "Complexity theory challenges the traditional management assumptions by noting that human activity allows for the possibility of emergent behaviour."

Chaos and complexity theory offers a different way of viewing the field of management and leadership - a mental shift from the "newtonian" cause-effect universe to a "quantum" field where uncertainty is the natural order (Waldrop, 1992; Wheatley, 1992; Stacey, 1996; Wheatley & Kellner-Rogers, 1999). Rather than trying to hold back the "dark forces" of chaos, organizations need to maintain a state of non-equilibrium, a kind of exquisite awareness at the edge of catastrophic change. This is the phase transition between stability and instability, where creativity and innovation occur. Here, the links between cause and effect give way to spontaneous self-organization, and a maximization of flexibility and responsiveness.

Despite the fact that chaos and complexity theory arises from observations in mathematics, physics and the natural world (Gleick, 1987; Coveney & Highfield, 1991), there is ample evidence of applications to the social sciences, particularly

as a dialectical influence (Loye & Eisler, 1987; Mac Cormac, & Stamenov, 1996; Ayers, 1997; Bütz, 1997; Warren, et al, 1998; Gilgen, 2000), and an incorporation into psychoanalysis (Pestana, 2001; Scharff & Procci, 2002).

For example, *nonlinear* modeling has been used to describe group problem solving productivity over multiple time intervals (Guastello, 1998a), team coordination in the performance of simple games (Guastello, 1998b), and the self-organization of a therapeutic alliance in long-term psychotherapy sessions (Tschacher & Scheier, 1997).

Lewis & Junyk (1997) show how easily chaos and complexity theory can be incorporated into the dynamics of social systems through their narrative on the *development bifurcations* of the self-organization of personality, and the *core attractors* of psychological defensive behaviours.

Kilburg (2000) uses the *cusp catastrophe model* developed by Guastello (1987) to simulate the behavioural dynamics of frustration, aggression and tension in team decision-making. He also uses terms such as *virtuous* and *vicious attractors* to describe either creative or regressive patterns of behaviour that individuals or groups use readily in corporate environments.

The terminology of chaos applied to social systems has an immediate appeal in helping to explain the “real world” of organizational behaviours. Both Wheatley (1992, 1999) and Stacey (1995, 1996) have been particularly influential in using the conceptual framework of chaos and complexity theory to promote the creative possibilities inherent in a dynamical, self-organizing enterprise.

Levy (2000) summarizes the applications and limitations of this framework in organizations:

1. Chaotic systems never reach a *stable equilibrium*. Organizations might reach some temporary, relatively stable pattern, but this is likely to be short-lived.
2. Large fluctuations can be generated internally by deterministic chaotic systems, and *small perturbations* to networks, even when in an ordered state, can sometimes have *major effects* (suggesting that executive managers might underestimate the potential for large changes in industry conditions or competitors' behaviour).
3. *Short-term forecasting* is possible in a chaotic deterministic system, given a reasonable specification of conditions at one time period (for example, sophisticated computer modeling of weather is useful for a few days).
4. Complexity theory suggests that organic networks poised on "the edge of chaos" might give rise to *self-organization* and *emergent order* that enable firms to prosper in an era of rapid change.

An extension of this framework is "Chaordic Systems Thinking", coined by Fitzgerald & Eijnatten (2002a, 2002b) as a new way of viewing dynamic complexity in organizations – separate to *systems thinking* – and incorporating the fundamental principles of chaos and complexity theory as applied to human enterprise. "A chaordic system is one in which nothing ever happens the same way twice, and yet everything happens in an orderly enough way to preclude complete and utter mess" (Fitzgerald & Eijnatten, 2002a, p. 406). The five properties of a *chaordic system* are:

1. *Consciousness*: The presence of both a personal consciousness and an organizational consciousness (suggesting that executive managers need an appreciation for the system's intangible *within* in order to create sustainable organizations).
2. *Connectivity*: Every "thing" is connected at some point, even though the connection may be infinitesimally small, and this connectivity is strengthened through interaction.

3. *Indeterminacy*: The non-linearity of cause and effect, suggesting that every event is the result of the accumulation of all prior events, not just one.
4. *Emergence*: The sudden appearance of *higher order* qualities, which originate from the dynamical interaction of the system's components, although they are neither found in, nor are they directly deducible from them.
5. *Dissipation*: The capacity of a chaotic system in *far-from-equilibrium* conditions to "fall apart" structurally while simultaneously maintaining the integrity of its core identity (for example, an organization may dissipate *intentionally*, choosing to "leap" through a window of opportunity rather than risk the ultimate catastrophe of *maximum fatal chaos*).

As Perna and Masterpasqua (1997) point out, the framework of chaos and complexity theory is based on two fundamental assumptions: That apparently random and disordered behaviour may very often have meaning, and "that this meaning is acquired because of the vital role chaos plays in the self-organizing processes of human change and development" (Perna and Masterpasqua, 1997, p.17).

So, how does this help executive managers in their 'tolerance' of complexity and uncertainty? Utilizing the chaos framework, Ball (2000) interviewed managers and found common themes emerging from those who could best carry out their managerial responsibilities under complex and uncertain conditions:

1. Accepting complexity and uncertainty as the way of the world.
2. Establishing guiding principles for setting priorities and making decisions.
3. Making timely decisions.
4. Managing the information flow.
5. Nurturing and sustaining relationships.
6. Acknowledging and processing emotions.
7. Being a continuous learner.

These themes provide a useful working framework that may allow managers to “operate at the edge where long-term outcomes are unknowable” (Stacey, 1995, p.488). In particular, the emergent quality of learning in a complex environment (Argyris, 1993; Barrett, 1999) provides an opportunity for managers to improve their tolerance of complexity.

Wisdom as a Strategy for Tolerance of Complexity

What is the best form of decision-making process in uncertainty? Researchers have generally found that *vigilant* decision-making processes are superior to *hypervigilant* decision-making processes under experimental conditions (Keinan, 1987; Baradell & Klein, 1993). Vigilant processes are at once familiar as the sensible, logical, and rational approach to problems characterized by: a systematic, organized information search; thorough consideration of all available alternatives; devotion of sufficient time to evaluate each alternative, and; the re-examination and review of data before making a decision.

However, Johnston, Driskell & Salas (1997) found that, on a naturalistic task, a hypervigilant strategy was significantly more effective than a vigilant strategy under both normal and high-stress conditions. The selective focus, filtering of information, and accelerated information processing characteristic of hypervigilant decision-making may be a highly adaptive and effective response in the face of increased task demands.

Higgins (2000) proposes that when people experience a “good fit” between a personal goal and their own self-regulatory style they are more likely to value activities in pursuit of the goal, and to report feeling alert, energized, and *good* about what they have done.

'Feeling good' is a normative assessment, which forms the basis of a positive psychology where happiness and well being are the desired outcomes. Happiness can be thought of as an outcome of life: "the overall appreciation of one's life as a whole" (Veenhoven, 2003). This dimension takes a 'whole of life' perspective on decision-making: How does a particular choice contribute to a 'meaningful life'? Seligman (2003) suggests that it depends on what kind of life you wish to lead: A *pleasant life* is one that "successfully pursues the positive emotions about the present, past, and future"; the *good life* is "using your strengths and virtues to obtain abundant gratification in the main realms of life", and; a *meaningful life* is "the use of your strengths and virtues in the service of something much bigger than you are" (Seligman, 2003, p.127).

Making decisions "in the service of something much bigger than you are" is a fundamental characteristic of human *wisdom* and, it is suggested here, an essential characteristic of executive decision-making in enterprises facing turbulent and uncertain times.

For example, Arlin (1990) defines the features of wisdom in terms of questions rather than answers:

1. *The search for complementarity*: Discovery of overlap and agreement in what appear to be unrelated or contradictory phenomena.
2. *The detection of asymmetry*: Ability to notice relevant and often subtle features.
3. *Openness to change*: Willingness to remain open to receive new information, and on the basis of that information to be willing to change one's world view.
4. *Pushing the limits*: Formulation of problems in ways that will give direction and meaning to the choices made, rather than close conformity to an acknowledged standard of right or wrong.
5. *A taste for problems of fundamental importance*: Strong conviction about what matters most.

6. *Preference for certain conceptual moves*: Such as “active experimentation”, or “discovery-oriented behaviour”.

Kitchener & Brenner (1990) discuss wisdom from the *reflective judgment* model of adult cognitive development, suggesting four aspects or conditions for wisdom:

1. The presence of unavoidably difficult, “thorny” problems inherent in the lives of adults.
2. A comprehensive grasp of knowledge characterized by both breadth and depth.
3. A recognition that knowledge is uncertain and that it is not possible for truth to be absolutely knowable at any given time.
4. A willingness and exceptional ability to formulate sound, executable judgments in the face of this uncertainty.

Wisdom, according to Chandler and Holliday (1990), is a well-defined, multi-dimensional competency, the key elements of which are exceptional understanding, judgment and communication skills, and general competence. Wisdom arises in the face of difficult, real-life problems - often ones that involve pragmatic decisions under conditions of paradox and contradiction.

The notion of wisdom-as-knowledge is used by Sternberg (1990) to distinguish between intelligence, creativity and wisdom. His *balance theory of wisdom* emphasizes the role of *tacit knowledge*, which he sees as a kind of action-oriented knowledge – a form of “knowing how” rather than “knowing that” – which is indirectly acquired and not domain-specific (Sternberg, 1998).

Baltes & Kunzmann (2003, p.131) define wisdom as “expert knowledge and judgment about important, difficult and uncertain questions associated with the meaning and conduct of life”. The work of Baltes and colleagues (Baltes, Glück, & Kunzmann, 2002) has resulted in the formation of the *Berlin wisdom paradigm*, which proceeds from the philosophical and cultural-anthropological concepts of

wisdom to place these into the context of psychological theory and methods. Using standardized procedures to collect “think-aloud” responses, trained raters evaluate responses according to five criteria thought to define *wisdom-related knowledge*:

1. *Factual Knowledge*: Including topics like human nature, life-long development, interpersonal relations, social norms, and individual differences in development and outcomes.
2. *Procedural Knowledge*: Comprising strategies and heuristics for dealing with life problems (e.g. the structuring and weighing of life goals, ways to handle conflict, or alternative back-up strategies).
3. *Lifespan Conceptualization*: Refers to knowledge about the many different themes and contexts of human life, their interrelationships, and cultural variations.
4. *Value Relativism and Tolerance*: Refers to the acknowledgement of individual and cultural differences in values with an explicit interest in achieving a balance between individual and collective interests and a focus on human values.
5. *Recognition and Management of Uncertainty*: Refers to knowledge about the limitations of human information processing and about the low predictability of occurrences and consequences in human life, but also about ways to deal with such uncertainties

Wisdom has been found to have psychometric properties which overlap with measures of intelligence, personality, and their interface, yet possess distinctly different characteristics (Staudinger, et al, 1997; Webster, 2003).

However, most adults are not wise. Only some people have access to and acquire knowledge about the conduct and meaning of life that comes close to wisdom, and age is a necessary, but not a sufficient condition for wisdom. Baltes, et al (2002) found that *Wisdom-related knowledge* increases sharply during adolescence and young adulthood, but, on average, remains relatively stable

during middle adulthood and young old age. Peak performances seemed to be more likely in the 50 - 60 age group with *professional specialization* the strongest predictor.

Wisdom suits the domain of difficult and “thorny” life decisions with no right answers faced by executive decision-makers in a ‘post-apocalyptic’ world. Wisdom is the most readily available decision-processing tool in conditions of uncertainty and requires a certain tolerance of complex environments.

According to Sternberg (1998), executive managers must be able to apply both *tacit* and technical knowledge, mediated by values, toward the goal of achieving a *common good*. To do this requires finding a balance among competing interpersonal, intrapersonal and extrapersonal interests, and the capacity to adapt to the existing environmental contexts, or find a way of shaping them, or select new ones, over both the short- and long-terms.

Can wisdom be transferred, and does executive coaching enhance wisdom?

Executive Coaching as a Tool for Wisdom

Executive coaching is a solution-focused dialogue, which promotes the enhancement of work performance and, particularly, self-directed learning and personal growth of the client (Greene & Grant, 2003).

Boyatzis (2001) defines self-directed learning as the learning agenda which arises out of a perceived gap between the *ideal self* and the *current reality*. And Garvey & Alred (2001) refer to the development of reflective skills and *metacognitions* as essential to learning in complex environments.

Self-regulation is certainly a required condition for achieving goals (Carver & Scheier, 1998), but other processes such as self-monitoring (Peterson, 1996),

appreciative inquiry (Hammond & Royal, 1998), and even mindfulness meditation (Benson, 1996) may be part of the practice of self-reflection in coaching.

The critical element of self-reflection in self-directed learning is not only a key aspect of *action learning* (Schon, 1987; Argyris, 1993), but also of wisdom. *Evaluative reflection* on one's past and present life serves a host of valuable functions including identity formation and maintenance, self-understanding, problem-solving, and adaptive coping (Webster, 2003).

Action learning and *evaluative reflection* are core components of executive coaching according to Kilburg's (2000, p.74) 6-stage "circle of awareness" process. He defines three levels of reflection: *learning in action* (being self-aware of task), *reflection on learning in action* (being aware of the available ways or learning routines for approaching task), and *reflection on reflection on learning in action* (being aware of the multiple environmental complexities of the situation and able to revise available learning routines for the emergence of new forms of relationships).

These levels of reflection and learning loops can be applied to what Kilburg (2001) refers to as the *path of progressive development*: "The layering of experience, learning, and deliberate efforts to change the self through time in the context of social roles and occurring in the complexity of the inner biopsychological life space of the participants" (Kilburg, 2001, p.257).

Does this imply that wisdom can be learned? Sternberg (2001a) has outlined, and begun to implement, a curriculum for teaching wisdom in schools, teaching children not *what* to think, but rather *how* to think. There may be some overlap between wisdom, philosophy, and creative thinking (Halpern, 2001; Kuhn & Udell, 2001; Perkins, 2001), but Sternberg's curriculum seems eminently applicable to executive managers in the context of executive coaching:

1. Explore with students the notion that conventional abilities and achievements are not enough for a satisfying life.
2. Demonstrate how wisdom is critical for a satisfying life.
3. Teach students the usefulness of interdependence.
4. Role model wisdom (because what you do is more important than what you say).
5. Have students read about wise judgments.
6. Help students to *recognize* their own interests, those of other people, and those of institutions.
7. Help students learn to *balance* their own interests, those of other people, and those of institutions.
8. Teach students that the “means: by which the end is obtained matters, and not just the end.
9. Help students learn the roles of adaptation, shaping, and selection, and how to balance them.
10. Encourage students to form, critique, and integrate their own values in their thinking.
11. Encourage students to think *dialectically*, recognizing that both questions and their answers evolve over time, and that the answer to an important life question can differ at different times in one’s life.
12. Show students the importance of *dialogical* thinking, whereby they understand interests and ideas from multiple points of view.
13. Teach students to search for and then try to find the *common good* – a good where everyone wins.
14. Encourage and reward wisdom.
15. Teach students to monitor events in their lives and their own thought processes about these events.
16. Help students understand the importance of inoculating oneself against the pressures of unbalanced self-interest and small-group interest.

Of particular relevance to executive coaching are the principles of *dialogical thinking*: encouraging the thinker (client) to understand problems from multiple points of view, and *dialectical thinking*: developing an understanding in the client that both questions and their answers evolve over time and can differ at different life stages. Sternberg (2001a) also advocates the reflective articulation, critique, and integration of the client's *values* into their thinking; and an emphasis on critical, creative, and practical thinking, particularly on trying to reach the *common good*.

Sternberg (2001a) alludes to the influence of a significant other in the teaching of wisdom through the importance of a *role model*, but he might just as well be referring to the role of a *coach*.

Similarly, Pascual-Leone (2000) recommends *mentors* and *psychotherapists* as suitable agents of the client's *external path* to wisdom. And one of the findings of the Berlin wisdom paradigm is the contribution of *wisdom-enhancing mentors* to a development of higher levels of wisdom-related knowledge (Baltes, Glück, & Kunzmann, 2002; Baltes and Kunzmann, 2003).

Staudinger and Baltes (1996) demonstrated that social interaction plays a significant role in wisdom-related performance. Participants who discussed a wisdom-related problem with a significant other person before giving their individual responses produced a substantial increase in performance over those who were just given some time to think about the problem by themselves.

In another study, participants were instructed in the use of a cognitive strategy. They were asked to imagine traveling around the world on a cloud visiting other places and cultures and asked to construct mental images of each place and culture. When subsequently presented with practice wisdom tasks they demonstrated significant increases in targeted wisdom criteria over those participants who had not been instructed in the "cloud journey" tool. The authors

conclude that wisdom-related knowledge may be available in principle, but is not used as a guiding strategy until activated by *mental representations* or mental scripts (Staudinger & Baltes, 1996).

This suggests that executive managers could be similarly encouraged by coaching to broaden their epistemological framework and elicit mental representations of knowledge for dealing with wisdom-related problems.

Based on Sternberg's (2001a, 2001b) wisdom curriculum and the Berlin wisdom paradigm (Baltes, Glück, & Kunzmann, 2002), it is possible to outline a set of coaching principles for enhancing tolerance of complexity and wisdom-based decision-making processes in executive managers:

1. Facilitate recognition and management of uncertainty.
2. Promote dialogical thinking.
3. Encourage dialectical thinking.
4. Stimulate the articulation, critique, and integration of values into thinking.
5. Emphasize critical, creative and practical thinking in relation to the common good.
6. Serve as a role model of wisdom.
7. Activate mental representations of wisdom-related knowledge through guided imagination strategies.
8. Stimulate evaluative reflections.
9. Explain and integrate the concept of progressive development.

In this way executive coaching offers more to the workplace than just a transfer of training tool (Olivero, Bane & Kopelman, 1997), or a way to facilitate constructive-developmental thinking (Laske, 1999), or shift leadership style (Kampa-Kokesch, 2002). Executive coaching may best be considered as a pre-eminent learning framework for inspiring leaders to apply *wisdom* decision-making processes and tolerance of complexity, through *chaordic systems*, to achieve a common good.

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