

Neurosocial Dynamics: Toward a Unique and Cohesive Discipline for Organizational Coaching

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*[Material for this article draws upon David Rock and Linda J. Page, *Coaching with the Brain in Mind: Foundations for Practice*. San Francisco: John Wiley & Sons, 2009.]*

Anthony Grant (2003) cites an article by C. B. Gorbey published in 1937 as the first use of the word "coaching" in the context of business and organizations. The concept is related to Elton Mayo's "nondirective interview" (1933) and human relations approaches to management. The term "coaching" was expanded beyond its use in athletics under the influence of Timothy Gallwey (2001). A number of practices, training programs, and associations converged in the 1990's to become the International Coach Federation (ICF, www.coachfederation.org). At this time, many change agents such as self-help gurus, educators, consultants, organizational development practitioners, industrial/ organizational psychologists, human relations advisers, psychotherapists and counselors (see Brock, 2008) took on the designation "coaches."

Many coaches, especially those with a background in academia, wondered about the theory and research base for coaching. A group of scholar-coaches including Irene Stein issued a call for papers (Stein & Belsten, 2004) and organized a Coaching Research Symposium prior to the ICF Conference in 2003. In the introduction to the proceedings, Stein suggested the metaphor of a tree representing contributions to a field of coaching studies. Its theoretical roots consisted of education, psychotherapy, communication studies, self-help movement, social systems theory, athletic motivation, adult development theories, holistic movement, and management and leadership (Stein, 2004, p. ix). Vikki Brock (2008) interviewed scores of coaches to identify the theories and scholars that had influenced them. Recent years have seen an increase in research initiatives (see for example, The Foundation of Coaching, www.thefoundationofcoaching.org and its successor, the Coaching Institute, www.instituteofcoaching.org) and academic programs that teach or utilize coaching (see research by the Graduate School Alliance for Executive Coaching, www.gsaec.org). This journal and the International Consortium for Coaching in Organizations (www.coachingconsortium.org) are examples that apply directly to organizational coaching.

WHAT IS ORGANIZATIONAL COACHING?

In order to answer questions about the theoretical foundations of coaching, it is necessary to define the field in general and specifically with regard to its applications in an organizational setting. It has been easier to say what coaching is not than to say precisely what it is - not athletic coaching (although it draws on the wisdom of the best sports coaching), not consulting, not mentoring, not psychotherapy, not counseling, not advising....

Coaches are change agents who serve the interests of their clients. The definition of coaching by the International Coach Federation (2009) recognizes this focus on the client's interests, or "agenda" by

defining coaching as "partnering with clients in a thought provoking and creative process that inspires them to maximize their personal and professional potential." Many similar definitions exist across coaching and coach training organizations.

David Orlinsky brought his experience as a professor in the multidisciplinary Department of Human Development at the University of Chicago to bear on the question of where coaching fits among other practices that use psychological or social means to induce change. Orlinsky combined the various definitions of coaching with his knowledge of other helping professions. Table 1 presents the preliminary conclusions that Orlinsky (2007) drew.

Table 1. Provisional typology of generic psychosocial change agents

	Constructive/Facilitative Change Agents	Commercial/Export Change Agents	Coercive/Manipulative Change Agents
Governing Norm	C/F change agents are committed to serving the positive interests and wellbeing of their clients (defined jointly by the client, the profession, society-at-large, & the change agent's own informed expert judgment)	C/E change agents serve their own interests through serving clients' interests, jointly adjusted through open market processes	C/M change agents are committed to serving the needs and interests of the change agents with respect to the client, and/or those of the change agent's sponsoring agency
Limiting Condition	C/F change agents must subordinate own interests to those of clients, but must also protect their own legitimate interests as members of a professional community and as individuals	C/E change agents must operate within the general limits of legality applicable to their service industry	C/M change agents need to operate within the normative limits of the organization and community that legitimize their activities (or risk criminal charges if discovered)
Specific Examples	<ul style="list-style-type: none"> - Professional therapists, counselors & coaches (of varied professional backgrounds) - Social workers (in addition to those in clinical or counseling settings) - Clergy (in their ministerial function & pastoral capacity) - Social/political 'reformers' 	<ul style="list-style-type: none"> - Business consultants - Fiduciary agents & advisors (legal, financial, etc.) - Salespersons & merchants 	<ul style="list-style-type: none"> - Advertising agents & agencies - Business & political negotiators - Partisan political consultants & strategists - Ideological propagandists - Police, security & military interrogators - Prosecutors & defense attorneys
Counterfeit Forms	<ul style="list-style-type: none"> - 'Quacks' - 'Confidence artists' 	<ul style="list-style-type: none"> - Providers of expert services in 'grey areas' 	<ul style="list-style-type: none"> - Ideologically/religiously based extremists ('revolutionary' or 'terrorist')

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Orlinsky describes each of the three broad categories of change agents in terms of its governing norm, limiting condition, and counterfeit forms. Like other constructive/facilitative change agents, coaches operate under the norm of a commitment "to serving the positive interests and well-being of their clients (defined jointly by the client, the profession, society-at-large, & the change-agent's own informed expert judgment)" (Orlinsky, 2007, p. 3). Government certification and ethical codes are designed to protect clients from counterfeit agents in this category, such as quacks and confidence artists. The question of whether and how the public can be protected from untrained coaches has not yet been determined, other than by voluntary certification with professional associations such as the International Coach Federation, European Mentoring and Coaching Council, or the Worldwide Association of Business Coaches.

Clients come to coaches because they want help in effecting changes. These are not physical changes, for which we might go to a hairdresser or cosmetic surgeon. Coaches fit into the general category of "psychosocial change agents." Other nonphysical change agents, such as salespeople, want us to alter our buying behavior, and lawyers or accountants advise us how to do things differently, but coaches are not in the "commercial/ expert" category like these change agents. There are change agents such as negotiators, propagandists, and police or military interrogators who use "coercive/manipulative" means to induce change, also unlike coaches. Coaches, suggests Orlinsky, are "constructive/ facilitative" change agents like therapists, counselors, social workers, clergy, and political reformers.

According to Orlinsky's survey of coaching literature as compared with his knowledge of psychotherapy and counseling, coaching is a psychosocial change intervention that optimizes "unrealized potential through development of talent & refinement of effective skills from unsatisfying, limited ('average') performance to enhanced or 'outstanding' effectiveness" (Orlinsky, 2007, p. 5). This is a definition that tells us what coaches do. However, questions remain about the extent of overlap among these three professions. In practice, many therapists and counselors take a developmental approach and seek to draw out and draw on client's strengths. Many coaches have to navigate "pathological" elements in their clients, even though coaching ethics and often government regulation prohibit them from treating these elements directly.

Table 2. Differentiation of psychosocial practices in psychotherapy, counseling, and coaching

Forms of 'Constructive/Facilitative' Psychosocial Practice		
"Psychotherapy"	"Counseling"	"Coaching"
Healing of distressing disorders <i>through</i> relief of suffering & correction of maladaptive habits, conflicts, attitudes <i>from</i> painful, symptomatic ('abnormal') dysfunction <i>to</i> asymptomatic or 'adequate' functionality	Solution of troubling problems <i>through</i> resolution of dilemmas & improvement of strategic coping <i>from</i> frustrating, impaired ('inadequate') adaptation <i>to</i> competent or 'normal' adaptation	Optimization of unrealized potential <i>through</i> development of talent and refinement of effective skills <i>from</i> unsatisfying, limited ('average') performance <i>to</i> enhanced or 'outstanding' effectiveness

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Turning now to organizational coaching in particular, this field, along with leadership and workplace coaching, is included in the definition of executive coaching adopted by the Graduate School Alliance for Executive Coaching (GSAEC, see www.gsaec.org). In this branch of coaching, there is some confusion about purpose, scope, responsibilities, and uniqueness. Is it primarily aimed at coaching individuals within organizations? To what extent must organizational coaches have a background in or knowledge of the industry within which the organization operates? How can coaching be differentiated from consulting, or need it be? Can managers serve as coaches to their direct reports? To whom is the coach responsible and for what? To the person being coached? To the organization that foots the bill? Does coaching apply to an individual, a team, or the whole organization? How does coaching differ from consulting or organizational development or leadership or training or project management or any other psychosocial change initiative within an organization? These and many other questions are guiding the maturation of the practice of organizational and executive coaching.

As a contribution to that maturation, GSAEC member institutions have adopted the following definition:

Executive and Organizational Coaching is a development process that builds a leader's capabilities to achieve professional and organizational goals. A leader is an individual who has the potential of making a significant contribution to the mission and purpose of the organization. This coaching is conducted through one- on-one and group interactions, driven by evidence/ data from multiple perspectives, and is based on mutual trust and respect. The coach, individuals being coached, and their organizations work in partnership to help achieve the agreed upon goals of the coaching. (<http://www.gsaec.org> Retrieved 23 May 2009)

In summary, coaching in general is a psychosocial change process aimed at identifying and achieving client goals, including development of the client's potential, based on a collaborative relationship between coach and client. Organizational coaching likewise aims at achieving goals, but these include system-wide as well as individual goals, and collaboration includes individuals, teams, and the organizational system as a whole. The practice is based on "evidence/ data from multiple perspectives." What are those multiple perspectives and do they provide a theoretical foundation for this type of psychosocial change process? That is the essence of the first challenge.

CHALLENGES TO COACHING

Challenge 1: Coaching must draw on a substantial knowledge base

Support for meeting the first challenge draws on several types of evidence, including the concepts and theories from existing disciplines as presented in *Coaching with the Brain in Mind: Foundations for Practice* by David Rock and the author. This section is organized under five broad categories of questions that characterize coaching issues: Who are we? How can we be truly healthy? Why do we do what we do? How can we develop our potential? And how can we get along better?

This section presents various types of evidence for the existence of a coaching knowledge base in response to the first challenge. It then provides an overview of concepts and theories that make up that base. These concepts and theories, drawn from a multiplicity of scholarly and professional fields, are organized according to a series of broad questions that summarize issues typical of coaching. Taken together, these concepts and theories constitute a substantial knowledge base that answers the first challenge. This will lay the groundwork for a consideration of the second challenge regarding the cohesion of these various contributions.

Evidence for the existence of a knowledge base for coaching in general and organizational coaching in particular can be of several types. The first type is external validation achieved by comparing standards for a coaching profession with those expected of other internationally-recognized professional credentials. For coaching in general, the International Coach Federation (www.coachfederation.org) is presently engaged in a process guided by the International Organization for Standardization's (ISO) 17024 Standard for credentialing persons. Meeting this standard requires evaluating potential coaching practitioners on their familiarity with a knowledge base, in addition to their practical competencies. As a comparison, physicians must develop requisite knowledge in "hard" sciences such as biology and chemistry as well as the practical ability to diagnose and to apply techniques. Likewise, coaches must draw on knowledge from a number of fields to complement their practical abilities such as listening and questioning.

GSAEC provides an example of how this first type of evidence for a body of knowledge applies specifically to organizational coaching. GSAEC conducted an international research project supported by the Foundation of Coaching (www.foundationofcoaching.org) to identify coaching offerings in graduate schools (see <http://pennsurveys.org/coaching>). Although the research was limited to English-speaking institutions, over 200 universities were identified in 2008 that offered degrees, for-credit certificates, not-for-credit certificates, courses, or coaching services at the graduate level. Sixty-three master's or doctoral degrees were identified, including 17 that included coaching in the name of the degree. A

discipline is defined as a body of knowledge taught in academic institutions. GSAEC has since its inception sought to identify the elements of that knowledge base that are being or may become relied upon by these graduate programs. A preliminary result was presented in August, 2009, at the Academy of Management in Chicago: "Curriculum for an Academic Coaching Program" (Starr, Maltbia, Orenstein, Page, & Brock, 2009). Thus, in the worlds of credentialing and academic settings, there is growing evidence that coaching is indeed based on a body of knowledge that meets international and scholarly standards.

A second type of evidence for the existence of a body of knowledge involves research. Theoretical knowledge requires research to test its validity and applicability to the questions arising from practice. Research is surely a necessary sign of the existence of a body of knowledge. Each of the above degree programs can be expected to require its students to engage in various forms of research to supported theses and dissertations. Coaching research has been promoted by the Research Symposia, Research Repository, and Research Special Interest Group of the International Coach Federation. The Foundation of Coaching sponsored an International Research Forum and Coaching Commons, and its successor, the Institute of Coaching (www.instituteofcoaching.org/) at Harvard University Medical School and McLean Hospital is dedicated to "building the scientific foundation of coaching." Peer-reviewed journals that publish research articles are included in a listing at the end of this paper. Therefore, evidence exists that research supporting the development of coaching theory is in progress.

A third type of evidence includes books that attempt to outline coaching theory and its evidence base and that can be used as references or texts in university courses. Rock and Page (2009) is an example, as are Drake, Brennan & GOrtz, (2008), Cavanaugh, Grant & Kemp (2005), Orenstein (2007), and Stober & Grant (2006). More textbooks are to be expected because of the increasing numbers of university courses in coaching.

This paper takes a fourth approach that is similar to GSAEC's efforts to identify theory and knowledge required for an academic curriculum for organizational coaching (see www.gsaec.org/curriculum.html). In essence, this involves asking what theory and knowledge is necessary to do coaching, that is to respond to the issues and questions that clients bring to coaching. Exact identification of those issues and questions awaits empirical research. However, it is possible to deduce broad categories of questions from the definitions of coaching given above. For example, the ICF definition of coaching as a process that focuses on the client's agenda to inspire development of one's "personal and professional potential" begs the question of what human potential is. Coaching definitions that involve reaching goals imply change. What theories explain change? The inclusion of terms such as "collaboration" and "leadership" arouse social and behavioral questions. A high-level list of such questions follows:

Who are we? Coaching is conducted by and with human beings. What are human capabilities, characteristics, limitations, variations? How does one individual human being compare with others? What is the essence of each?

How can we be truly healthy? Even though coaches may not work directly with health issues, surely whether or not a client is capable of achieving goals is related to his or her state of physical, social, emotional, and mental wellbeing. How do we change that state?

Why do we do what we do? As meaning-making organisms, human beings rely on explanations to guide their plans. The ability to understand human behavior is crucial to designing actions that will achieve desired goals.

How can we develop our potential? Presumably, coaching is sought because that potential has not been reached. What techniques for development are supported by evidence?

How can we get along better? Especially in the context of work, people need to communicate and know how to motivate one another if they are to fulfill whatever mission and purpose brought them together.

Various existing disciplines have responded to these or similar questions. Theories from these disciplines, then, are candidates for providing a foundation for coaching. The questions and representative responses from various disciplines are presented below

Who are we? Philosophical inquiry into this question is called "ontology." Under the influence of Newtonian mechanics and logical positivism, understanding phenomena required reductionism, or reducing analysis to constituent parts until the elemental or essential level was reached. Where "being" was concerned in the Western world at the time of 18th century demands for liberty, this basic level was assumed to be that of the individual. The emerging ideology of capitalism affirmed the focus on the individual by assuming that one's own self-interest is the primary route for the promotion of wellbeing. Psychology critic Isaac Prilleltensky (1994) describes this assumption as it appeared in 20th century psychology as follows: "The self is conceived of as a supreme entity with magnificent powers" (p. 17). Ultimate explanations, even of social phenomena, were sought at the level of the individual self, with the consequence of excluding from scrutiny social structures or existing power arrangements.

This individualist orientation builds on the Socratic principle of discovering one's own answers to questions and support self-awareness and the search for self-fulfillment in coaching. Following his experience in Nazi concentration camps, Viktor Frankl (1984) described how people's ability to create meaning may lend them strength to withstand adversity. Exploration of the meaning of existence by Frankl and other existential philosophers is a substantial contribution to coaching.

However, philosophers such as Martin Buber (1970) and social sciences of the early 20th century, such as sociology and anthropology, investigated "who are we?" by approaching social interaction, groups, societies, and cultures not as aggregates of individuals but as exhibiting emergent properties that cannot be fully understood through a lens that sees only the individual self as primary. Anthropologists developed methods that required them to participate in the societies they were studying. Sociologists Peter Berger and Thomas Luckmann (1966) showed how social interaction influences what individuals think of and react to as reality. New Age philosophy, which gained influence during the social upheavals of the 1960's, renewed interest in non-Western and more community-oriented traditions.

Social psychologist Richard Nisbett (2003) investigated different patterns of thinking between Westerners and Asians and described how globalization was allowing the groups to exchange worldviews. Eastern traditions of Buddhism, Hinduism, Taoism, and Confucianism that rest on assumptions of social and universal embeddedness have become more known and accepted in the West, including among coaches. Travel, communications, and commerce have put people around the world in touch with one another, have accelerated access to the resources provided by different

perspectives, and have made it more difficult to assume the superiority of one over another. Thus, individualism was brought into question by recognition of the importance of relatedness.

Systems theory (von Bertalanffy, 1969) began as an attempt to model relatedness in biology, but has been widely applied to ecology, cybernetics, education, history, philosophy, psychotherapy, psychology, sociology, and neuroscience. Generally, a system is defined as a set of elements and the relationships among those elements (Weinberg, 1975), so it is a direct expression of an emphasis on relatedness. By the end of the 20th century, lessons from systems theory, along with work in the areas of chaos and complexity were being applied to human beings and human systems (Wheatley, 1992). Each of us as an individual is a complex system embedded in other complex systems - relationships, families, groups, organizations, societies, and the human species.

At each of these levels, changes emerge that could not have been predicted even from knowing everything about the elements in the level beneath. Thus, between the beginning and end of the 20th century, there was a shift in how we understand who we are - from assumptions of individualism through relatedness to complexity. The fields that have participated in this shift and contributed to the resulting emergence of coaching include the influence of Eastern and New Age philosophy on Western philosophy; anthropology; sociology; and systems theory, including chaos and complexity.

However else we answer the question "who are we?" we are certainly physical beings in a material world. None of us escapes the challenges of accidents, disease, aging, and death. Human beings throughout the ages have wondered how to maintain and improve physical and mental functions in the face of these challenges. This also provides part of the foundation of coaching.

How can we be truly healthy? Classical medical practices in Greece and the Middle East were what we today would call holistic. They included body-mind health promotion and rehabilitation as well as prevention and treatment of disease. This section documents how reductionism limited that broad emphasis and then how the development of 20th century medicine has begun to reestablish that breadth.

Descartes' separation of physical from nonmaterial reality was a particular application of reductionism, called dualism, that allowed medical science to focus on practicing physical medicine without incurring the wrath of theologians. By the start of the 20th century, secularization had made it less necessary for medical science to avoid the realm of the soul or psyche; however, mental health and health promotion had already been assigned to ancillary professionals and to public and governmental agencies. The separation of mind and body continued. Even strictly medical practices were divided among different professions, each with its focus on a part or parts of the whole human being, its own specialized language and assumptions, its encapsulated theory and research base, and its exclusive set of practices. Such divisions made it more difficult to resolve dualistic claims of environment versus heredity, nature versus nurture, external versus internal, and so forth.

Despite the limitations of these dualistic elements, medical discoveries in physiology and stress have applications to health in general and thus contribute to coaching. Understanding "homeostasis," or the capacity of a living organism to maintain an internal state of equilibrium, such as to adjust to different external temperatures, reminds coaches to inquire about consequences of being out of balance. For example, poor nutrition, dehydration, lack of exercise, or inadequate sleep can be both consequence and cause of physical and mental illness. The harmful effects of stress have become more widely

recognized since Hans Selye's studies (1956, 1974). Of particular interest to organizational coaches, Richard Boyatzis and colleagues (Boyatzis, Smith, & Blaize, 2006) found that organizational leaders suffer stress particularly when they are seen by others, have to work in conditions of ambiguity, and must perform under pressure. They suggest that coaching others engages the compassion of leaders and actually mitigates the harmful effects of stress.

Wellness theory is a broad term that encompasses many alternative and nontraditional health practices that reject dualism. These have met with more widespread acceptance during the latter half of the 20th century. Bolstered by globalization and New Age philosophy, massage therapy, acupuncture, and naturopathy have become regulated professions in some jurisdictions. Herbal remedies are being taken seriously by pharmaceutical researchers and by regulators. Along with research showing connections between physical and mental health, these trends have made dualism, or separation of mind and body, less hegemonic. The ancient concept of *holism* has been reintroduced to medical and related practices.

Even when people and their coaches understand the mind-body connection and identify the changes that must be made to maintain or restore health, the problem remains: how do you put those changes into action? Solving this problem is made more difficult by a mechanistic bias that sees change as related to a single external cause that has a one-way effect. Fortunately, in some fields, such as athletics, the drive to perform better and better has led to techniques for integrating mind-body dynamics. The success of goal setting, visualization, and finding a "zone" or state of mind for peak performance have been verified by research (Csikszentmihalyi, 1991) and the experience of athletes (Gallwey, 1981, 1987, 1997).

Attempting to help people change their physical and mental health habits and to improve performance has also contributed more generally to understanding what prevents and accelerates change for individuals and organizations. This follows the dictum of Kurt Lewin (1974) that we understand a system when we try to change it. What kind of change is valued and what is seen as threatening shifted during the second half of the 20th Century. Gradual, step-by-step change that minimized conflict or disruption was the preferred model until the political upheavals of the 1960's, the postmodern challenges to power structures of the 1970's, and the 1980's discoveries of systems whose appearance of chaos belies underlying order. Newer models of change (Prochaska, Norcross & DiClemente, 1994; Senge, 1990) assume that conflict is inevitable and disruption is sometimes unavoidable. Understanding holism as an aspect of systems helps us to define positive change not as movement toward an immutable target, but as dynamic stability, or the ability to move within parameters of chaos and rigidity toward goals that are continually informed and reformed by feedback (Siegel, 1999).

Thus, Western medicine, physiology, wellness theory, stress research, sports psychology, and change theory, in addition to applications of systems theory to human beings, all provided theories and research to help coaching answer the question "How can we be truly healthy?" Each of these fields contributed to coaching through shifts during the 20th century from dualism through *holism* to *dynamic stability*.

As part of a whole mind/body/ system process of change, it is natural to wonder about and attempt to explain human behavior. We now turn to this question.

Why do we do what we do? During the 20th century in North America, people who wanted to understand human behavior typically looked to psychology, which became what one historian described as "the 'master' science of human affairs" (Prilleltensky, 1994, p. 28). The price psychology paid for its position required not only elevating the individual above systemic influences, but also limiting itself to a mechanistic definition of scientists as objective onlookers who ignore the input of those who are being studied. Thus, John Watson (1913) induced what appeared to be a neurotic fear of fuzzy animals by sounding a loud bell to frighten a toddler known as Little Albert. After losing his position at Johns Hopkins Medical School (not because of what happened to Little Albert but as a result of his infidelity), Watson went on to apply psychology to advertising and marketing, pioneering many of the techniques still taught to coaches in practice-building books and seminars. Behaviorism was also applied to war propaganda, political campaigns, and even torture and intimidation.

Watson's interest in behaviorism also influenced B. F. Skinner (1938), who became one of the best-known psychologists in North America. Skinner's radical behaviorism carried the mechanistic paradigm to an extreme by disregarding anything that cannot be seen and measured. Thoughts, hopes, goals, emotions, values, meaning were all relegated to an impenetrable mental "black box" of no interest to science of the day. Despite its exclusion of much of what people consider crucial to their experience of life, behaviorism established some very clear answers to why we behave as we do. We are part of a natural world of other living organisms, and like many others, we learn from consequences. This association of stimulus with response happens quite apart from our intentions or beliefs or other non-directly observable thoughts or feelings. This kind of learning occurs over time by incremental practice in a process that is similar to how neural connections are strengthened by practice. Coaches rely on behaviorist principles when they suggest acknowledging small wins and taking one step at a time.

However, Gestalt psychologists had for some time investigated perceptions that could not be explained by specifying every one of their constituent qualities. People see the typographical characters of a colon, dash, and close parenthesis as a "smiley face":-). However objectively and in whatever detail we analyze the characters from the outside, if we ignore the phenomenological experience of the person doing the perceiving, we cannot understand the relationship between the characters and the meaning given to them. Wolfgang Kohler (1959), a psychologist who had studied with Max Planck and who discovered insight learning among the apes he studied during World War II, called the extreme demand of objectivity "methodological behaviorism." Because of it, he claimed, psychological researchers ... refrain from observing, or even from referring to, the phenomenal scene. And yet, this is the scene on which, so far as the actors are concerned, the drama of ordinary human living is being played all the time. If we never study this scene but insist on methods and concepts developed in research 'from the outside,' our results are likely to look strange to those who intensely live 'inside'. (p. 732)

Psychometrics is another field that attempts to measure experience "from the outside". It concerns the practice of assessing psychological traits and states and was accorded acceptance as a science because of its anchoring in statistics. From the beginning, psychometrics was assumed to shed light on concepts on the inside of the black box, such as intelligence and personality. Many coaches rely on assessments to guide their coaching. By mid-20th century, nonparametric statistical techniques that allow researchers to work with categories and concepts rather than only numbers made studying phenomenological data more acceptable.

Developmental psychology was influenced by Jean Piaget (1928), who observed patterns of maturation in his own children. Being from France, Piaget was not limited by North American demands for methodological behaviorism, allowing him to draw conclusions about the development of intellect that later became more generally important in cognitive psychology. Erik Erikson (1950, 1968, 1975) extended developmental theory to adults. His recognition of "identity crisis" and later adult challenges (such as "generativity") are relevant to all coaches. However, the idea that everyone goes through the same life cycle stages was brought into question by globalization and differences in the experience of aging among diverse communities and individuals. Thus, reliance by early behaviorism on objective behavioral observations began to shift by mid-20th century to including people's internal experiences—that is, what people think, feel, believe, imagine, and hope for.

According to Howard Gardner (1985), 1956 is the year that a "cognitive revolution" began in psychology and education, based on the realization that even when mental processes cannot be directly observed, rigorous inquiry can lead to solid conclusions about them. George A. Miller (1956) pointed out that people (observably) have trouble keeping more than seven digits in mind and posited (unobservable) limits to short-term memory and the resultant "chunking" of remembered content into seven or less units. Noam Chomsky (1957) argued that behaviorist principles were simply inadequate to account for human language and therefore there must be internal mental structures that enable people to learn and use it. Thinking became a legitimate topic for scientific inquiry, and this led learning theorists on a quest to find processes that activate mind. They no longer just observe behavioral results of the mind's (unknowable) responses to stimuli. Adult education could no longer assume an empty vessel into which an instructor poured predetermined content. It did not take long for the empty vessel assumption to be questioned for all learning at any age. Cognitive psychology and learning theory shifted to inquiring about experience to inform us about why we do what we do and how we learn to do it.

Further eroding mechanistic assumptions, the very possibility of an objective observer was brought into question by quantum discoveries (Stapp, 2007). Although quantum theory was first discovered by Max Planck in 1900, its implications are so far-reaching that many years and scores of experiments confirming its predictions were required for its acceptance. In essence, quantum mechanics is the general theory that applies in all instances, whether the phenomena being studied are extremely small or extremely large. Quantum theory overturns an assumption of universality that had held for three centuries. Newtonian theory, or classical mechanics, applies only to large objects—so is a special case of quantum theory. At the quantum level at which the brain operates, the very questions that people ask make a difference as to the responses that nature gives. We cannot understand objective observations without also asking about subjective experiences.

From behaviorism and psychometrics through developmental psychology to cognitive psychology and learning theory, scientific attempts to explain behavior shifted during the 20th century from demanding pure objectivity through allowing experience to requiring subjectivity.

In understanding contributions to coaching, it is important to distinguish between psychology as scientific inquiry, on the one hand, and the application on the other hand of psychology along with medicine, philosophy, and other fields to psychotherapy and counseling. Psychology is not psychotherapy. Psychotherapy has its own history, research traditions, and theoretical roots. Many psychologists practice psychotherapy and counseling, but so do many psychiatrists, other medical

doctors, psychiatric nurses, clinical social workers, and clerics. Within these professions, it is understood that knowing why we do what we do is not the same as feeling satisfied and happy with our lives.

How can we fulfill our potential? Because it is also a practice that uses psychosocial means to elicit change, psychotherapy has much to offer coaching. Early in the 20th century, Viennese psychiatrist Alfred Adler's prescient notion of social interest as an indication of health and happiness was based on assumptions of phenomenology, social embeddedness, uniqueness and creativity, goal-orientation, and holism (Ansbacher & Ansbacher, 1956). His approach could have been a prescription for coaching, but it did not fit with what was considered acceptable science at the time and was thus rejected as being too value laden. As the 19th turned to the 20th century, the question was what determined mental illness: heredity or environment? Deep-seated drives or rewards and punishment? Internal conflict or external reinforcement? Battles between various schools of psychotherapy raged throughout much of the 20th century. These were ameliorated only when sophisticated research methods revealed that theoretical orientation made a relatively small contribution to psychotherapy outcome (Hubble, Duncan, & Miller, 1999).

A third alternative to the either/or battles, that is, both and neither, had been suggested by Adler's holism and insistence on people's "... styled creative power" (Ansbacher & Ansbacher, 1956, p. xxiv). This perspective was reintroduced by the humanistic movement at the middle of the 20th century. Related to the hierarchy of needs pyramid offered by Abraham Maslow (1943, 1968), Carl Rogers (1951) insisted that people have resources within themselves that need only be nurtured in order to be revealed. This is one of the most important contributions of psychotherapy to coaching.

Cognitive therapy techniques developed by Albert Ellis (1974) and Aaron Beck (1976) further provided coaches with practical techniques and evidence to back up the claim that people can release themselves from debilitating emotional distress by changing how they interpret what is happening to them. That is, people can determine their own futures rather than being determined by their inherited or experienced past.

Social psychologist Kurt Lewin (1975) was instrumental in starting small training groups, or T-Groups, run by the National Training Laboratories for Group Dynamics (NTL) in organizations on the East Coast of America in the mid-20th century. In 1964, Fritz Perls and his wife Laura took up residence at Esalen Institute, where they conducted groups similar to those run by NTL. Werner Erhard was influenced by his experience at Esalen to start a movement, now called Landmark Education (<http://www.landmarkeducation.com/landmarkforum.jsp>) that relies on group dynamics to effect personal change. Erhard and Landmark were cited in the research done by Vikki Brock (2007) as being very influential in the development of coaching. Many self-help books and groups based on the assumption of self-determination flourished in the late 20th century.

A strong theoretical base for the capacity of human beings to self-determine was introduced to psychotherapy in the late 20th century with the development of narrative (White & Epston, 1990), metaphor (Kopp, 1995), and question-centered (Goldberg, 1997) therapies. All of these approaches draw on sociology (Berger & Luckmann, 1966; Foucault, 2001), discourse analysis (Jaworsky & Coupland, 1999), hermeneutics (Seebohm, 2004), literary theory (Culler, 1997), and systems (Bateson, 2000; Maturana & Varela, 1980) and family systems (Bowen, 1978) theory to support the idea that people are meaning-makers. These influences on psychotherapy provided theoretical foundations and practical applications that have been inherited by coaching. They represent a shift from the assumption that

people's personalities and behaviors are determined by objective forces (either heredity or environment), to the assumption that they are constructed through active, unique, meaning-making processes.

The general belief among coaches is that clients come to them rather than to psychotherapists because "I'm not sick--I just feel there's something more to my life." Yet to be fair, many psychotherapists see their practice as helping people live their lives more fully, and solution-focused therapy (Berg, 1994) helps people apply previous solutions to new problems. Taking a broader perspective, in North America, coaching emerged along with increased restrictions by health maintenance organizations on reimbursement for psychologists and psychiatrists. In some cases, humanistically-oriented psychotherapists saw coaching as a more appropriate rubric under which to pursue their developmental and strengths-oriented practices (Williams & Davis, 2002). Furthermore, some clients may seek coaching rather than psychotherapy not because their presenting issue is different but because of the social stigma that associates therapy with mental illness. Nonetheless, coaching is seen primarily as an expression of a desire to accentuate the positive. Nowhere is this desire pursued more vigorously than in the new field of positive psychology.

Positive psychology was initiated by Martin Seligman (2002), during his term as President of the American Psychological Association, to investigate what it means to be truly, authentically happy and fulfilled as a human being anywhere - not just in North America or Europe. Seligman gathered a team of researchers including Mihali Csikszentmihalyi (1991), Ed Diener and Robert Biswas-Diener (2008), Barbara Fredrickson (2001), and Chris Peterson (2006). The team searched without success to find a body of research on happiness in existing psychological literature and ended with creating its own, based on three types of happiness: the pleasant life based on hedonic satiation; the good life based on developing and utilizing one's abilities and interests; and the meaningful life based on connecting to values beyond oneself (Peterson, 2006). Positive psychology research on the meaningful life harkens back to Adler's "social interest," or having an interest in the interests of others.

Research conducted by positive psychologists has provided evidence to support coaching assumptions. Just as importantly, positive psychologists have applied their theories to the benefit of coaching, such as in Biswas-Diener and Ben Dean's (2007) book on positive psychology and coaching. Further, research into resilience provides techniques for coaches to help people bounce back in the face of disaster, trauma, threat, or long-term stress (Stoltz, 1997). The findings of emotional researchers reported by Daniel Goleman (1995) have corrected an over-emphasis on cognition and rationality in helping people achieve more of their potential.

But if we apply the understanding of systems to the question of how to fulfill our potential, we recognize that potential is not a stable target. Complex systems move toward goals defined within a particular set of circumstances, but those circumstances change partly because of the effects of the system's movements. This is called "co-evolution" in complexity theory. For an individual, when we move toward a goal we believe we are capable of achieving, we change our very capacity. Physically, when we use a muscle without damaging it, it becomes stronger. The more often neurons in our brains connect, the stronger and more automatic their connection. As we strive toward what is now the limit of our capacity for fulfillment, that capacity increases. As an organization achieves its sales targets, this changes the market for its goods or services. How can we take this into account in our desire for a good or meaningful life or a profitable business?

Neuroscientist Steven Rose (2005) worries that we are still to some extent trapped in a "mechanistic reductionist mind-set" that makes it difficult to understand and integrate the complexities of the questions we are asking. "Imprisoned as we are," he says, "we can't find ways to think coherently in multiple levels and dimensions, to incorporate the timeline and dynamics of living processes into our understanding of molecules and cells and systems" (Rose, 2005, p. 215). A solution may be to recognize the tendency, at least in English, to make static, thing-like nouns out of dynamic, ever-changing processes. For example, we say "fulfillment" as if it means checking off items on a grocery list. When it comes to striving for goals, we are rather engaging in a process of "fulfilling." Instead of expecting to achieve a static "potential," we are always "potentiating;" Although it may seem awkward to substitute "potentiating" for "fulfillment of potential," the effort reminds us that we are engaged in a process, not a thing.

Thus, there has been a shift in fields that promote human striving, including the humanistic movement, cognitive therapy, experiential and solution-focused approaches, narrative therapy, metaphor therapy, and question thinking. Research in and techniques drawn from positive psychology, resilience theory, and emotional intelligence have added to this shift from determinism that seeks to identify and remove external causes for unhappiness through constructivism that recognizes our capacity to create meaning to potentiation that holds the promise of the ongoing expansion of fulfilling processes.

We do not need scientific research to tell us that other people's feelings and behavior influence our own. All of the preceding questions have a social aspect: Who we are is related to whether and how we fit in with others on whom we depend for survival. Staying healthy is a matter of accessing physical resources provided by others and of managing both positive and negative stress of relationships. Understanding why we do what we do is at least partly dependent on our assessment of why others do what they do. And feeling fulfilled is often a function of how others feel and behave. We now turn to asking how we can get along with others, a crucial question that intrudes on all others, especially in an organizational setting.

How can we get along better? We are a social species. The importance of our connection with others is evidenced by a universal need for belonging (Wever-Rabehl, 2006). Neuropsychiatrist Leslie Brothers (2001) insists that the human brain is made for social participation. Attuned relationships are one of the three irreducible requirements for true mental health and wellness, according to Daniel Siegel (2007), the others being a reflective mind and an integrated brain. Roy Baumeister and Mark Leary (1995) claim that the need to belong is a fundamental motivation for human beings.

For most of humanity's half-million years, getting along was a matter of small-group dynamics and personal relationships. The accumulation of technological advances some ten centuries ago resulted in agriculture, the accumulation of wealth, cities, and class structure. Management in the sense of planning, controlling, coordinating, and organizing resources for the work of groups of people became a valued activity of a chosen few, both for controlling existing wealth and for waging war to accumulate more of it. Knowledge about how to organize was passed down informally from generation to generation for most of human existence. With the advent of class society, management became a more conscious activity, with the military model of command- and-control predominating. Management theory was formalized during the industrial revolution of the 18th and 19th centuries, and universities began giving related degrees in North America in the early 20th century. Because most people today

spend most of their waking hours working in organizations, the question of how we get along with one another is strongly influenced by how those organizations are managed.

In 1911, in an attempt to trade on the legitimacy of science, Frederick Taylor (1964) devised a set of scientific principles for management. These principles provided a rationale for the assembly line, breaking complex processes into small tasks that can be performed repeatedly to increase productivity. Each task requires little or no skill so that workers can be replaced like cogs in a machine. This is clearly a function of a top-down hierarchical assignment of duties and expression of a mechanistic devaluation of the experience of the worker. Yet Taylor added to these "hard" results-oriented techniques the hope that science would promote the education and development of workers and better relations between workers and management. This "soft" side of management was supported in research by Elton Mayo (1933) that showed the importance of group cohesion and worker morale to productivity and that began the human relations school of management. Mayo promoted what he called a "nondirective interview" to allow employees to talk through workplace issues, a suggestion that has more than a passing similarity to organizational coaching today.

The subdiscipline of industrial/ organizational psychology developed to provide expertise in (soft) programs such as employee assistance in organizations, but also to suggest and administer (hard) assessments for hiring and promotions. Social psychological research conducted by Kurt Lewin (1947) and Muzafer Sherif and his colleagues (1961) questioned the efficacy of top-down, command-and-control, competitive management techniques. This combined with global democratization movements following World War II to bring the superiority of hierarchy into question.

This shift accompanied increased emphasis on leadership as a necessary quality in organizations. Current leadership theory (see, for example, Cashman, 2001; Goleman, Boyatzis, & McKee, 2004; Sandstrom & Smith, 2008; Wheatley, 1992) reflects many of the shifts that have contributed to coaching: distribution of leadership; greater emphasis on relatedness, context, and community; systems thinking; belief in the capacity of groups to construct reality; encouragement of self-activity based on shared values and goals; bottom-up contributions to planning and decision-making; and appreciation of strengths and skills. The introduction of these ideas into organizational life during the second half of the 20th century in North America came with a cost that has been chronicled by Art Kleiner (2008). The pioneers who proposed these ideas were treated as "heretics." Yet what was then considered heretical has become orthodoxy in the world of organizational coaching. Chris Peterson (2006) characterizes today's positive organizations as displaying purpose, safety, fairness, humanity, and dignity. The return on investment in this shift is supported by evidence from field theory (Lewin, 1975); social network theories (Freeman, 2004); family systems therapy (Kerr & Bowen, 1988); appreciative inquiry (Cooperrider & Whitney, 1999); and the human capital movement (Cameron, Dutton, & Quinn, 2003; Luthans, Youssef, & Avolio, 2007).

One former heresy was the suggestion that workers should have a voice in planning their work. Management's former approach of ignoring bottom-up information and telling people what to do and how to do it is being replaced by leadership skills of listening to workers' own ideas in order to promote engagement rather than hierarchy. Clearly, not all organizations have embraced this shift. Often, they experiment with flattening the hierarchy and allowing workers to make more decisions, only to return to a vertical structure in a crisis. One can hardly imagine a more "hard" demand for absolute control than when disaster is imminent or possible. Yet management researchers Karl Weick and Kathleen Sutcliffe

(2001) studied organizations with a high demand for reliability, such as nuclear power plants and aircraft carriers. They found that encouraging participation in decision-making by all concerned, whatever their formal position, was more effective in avoiding disaster than directing all activity from the uppermost tip of a hierarchical pyramid, however skilled or experienced the top personnel were. Jim Collins (2001) found that phenomenal business performance did not come from companies whose CEO was a flamboyant dictator. Instead, heads of companies that put the good of the organization first and knew how to build collaborative teams were more likely to lead their firms to greatness. It will be instructive to observe what kinds of management structures correlate with survival rates following the economic crisis of 2008 and 2009.

Thus, reliance on hierarchy as a guide to getting along in the workplace is beginning to shift through employee engagement to encouragement of collaboration in more transparent managerial decision-making, and organizational coaching is emerging from this shift. Contributing fields include management theory; industrial/ organizational psychology; social psychology; field and social network theories; family systems therapy; appreciative inquiry; and human capital research.

If indeed, as Mayo (1933) insisted, the major factor in business success is the quality of relationships in the workplace, then business success is itself a measure of how well people get along. If hard measures of success support the soft assumptions of coaching, then we can perhaps spread more widely the lessons of relatedness rather than competitive self-interest, of taking subjective values and feelings into account, of allowing people to participate in decision making, of recognizing uniqueness and creativity, of appreciating contributions to the common good, and of sharing leadership. All these result from the series of shifts chronicled in this section, and all characterize organizational coaching to a great extent.

The five questions considered above are related to issues clients bring to coaching. For each question, disciplines that contribute theories and research to coaching have been provided. This list may not be exhaustive, but it is an indication that theories exist as candidates for meeting the first challenge, that of providing a substantial knowledge base for organizational coaching. However, there are many practices that draw on various academic disciplines but are not considered cohesive enough to form a specific discipline related to that practice. Hobbies such as caving (or spelunking) or gardening provide examples. They may draw on disciplines such as biology or geology, or botany in the case of gardening, but they are not disciplines in themselves. This consideration leads to the second challenge.

Challenge 2: Coaching (whatever it is called) must be shown to be a unique and coherent discipline

The second challenge of providing coherence for a possible coaching discipline is discussed in the context of a major shift during the 20th century that affects what is considered legitimate scientific and scholarly inquiry. Rock and Page (2009) refer to this as a shift from a mechanistic to a systemic paradigm and examine coaching as a product of that shift. In this article, I further propose that the systemic paradigm provides assumptions that support a cohesive discipline for coaching, one that builds upon other disciplines yet is not limited to any one of them. The name "Neurosocial Dynamics" is proposed for this new discipline. Neuroscience, itself an inheritor of and contributor to the systemic shift, is suggested as an important source for future evidence to support the new discipline.

Meeting this second challenge requires identifying some frame or principle that both unites the disparate theories that support coaching practice and differentiates it sufficiently from existing

disciplines. One possible frame is revealed by the shifts that have occurred across the various disciplines described above. Let us look more closely at these shifts.

During the 17th century, Isaac Newton discovered the principles of motion and gravity that were then thought to explain all natural events. The success of his methods, combined with affirmation by Renee Descartes of the dualistic view that divided reality into "physical" and "spiritual," had profound effects on intellectual inquiry in the Western world from the 18th through 20th centuries. Under the influence of logical positivism in philosophy, scientific evidence was limited to what was objectively observable; ethics and values were rejected as topics of interest because they were unverifiable; and scientific statements could only be true, false, or meaningless. Scholars in the fields of medicine, psychology, psychotherapy, and management strove to become more scientific in these ways.

David Rock and Linda Page (2009) proposed that the fields contributing to coaching each have undergone an internal shift toward a new perspective, as referred to in describing responses to the five questions above. Scholars from many other fields have noted similar shifts. Otto Scharmer surveyed philosophy, systems theory, and the social sciences and concluded " ... that there is an invisible shift going on in the world. It's as if we were standing on a threshold, about to cross through a new doorway into rooms we could never before access." (2009, p. 111) The fact that these shifts have occurred is part of an answer to Julio Olalla's (2004) questions "Why coaching? Why now?" Here, I am claiming that coaching emerged from that shift itself. Other fields were born in a previous era - enlightenment, rationalist, empiricist, logical positivist, modernist --and are struggling with how to incorporate or adjust to or make room for post-mechanistic perspectives such as those presented by postmodernism, neo-phenomenology, and quantum theory. But, despite borrowing many approaches and concepts from older fields, coaching itself developed along with and in response to shifts across the sciences, social sciences, philosophy, and society. One might say these shifts and coaching co-evolved. Coaching is a unique and cohesive embodiment of shifts that have coalesced into a new paradigm. Rock and Page refer to this paradigm as "systemic," replacing its "mechanistic" predecessor.

PARADIGMS

Table 3 summarizes the mechanistic-to-systemic shifts described above. If we take the "from... " characteristics at the beginning of the 20th century together, they emphasize a set of ideas that have been widely accepted since the 17th century:

- Supremacy of the individual over relatedness, community, or context
- Dualism and attention to constituent parts rather than holism and understanding of systems
- Objectivity as more privileged than subjectivity
- The search for causal one-way determinants with no place for co-construction of reality or self-directed striving for potential
- Hierarchical control, punishment, and correction as the only way to manage; little acknowledgement of the possibility or value of engagement and collaboration

Table 3. Mechanistic to systemic paradigm shift

Questions ↓	Contributing Fields ↓	←FROM Mechanistic TO Systemic →			Contributing Fields ↓
Who are we?	western philosophy, new age philosophy, sociology, anthropology	individualism	relatedness	complexity	globalization, systems theory, chaos & complexity
How can we be truly healthy?	physiology, stress, wellness theory	dualism	holism	dynamic stability	sports psychology, change theory
Why do we do what we do?	behaviorism, psychometrics, developmental psychology	objectivity	experience	subjectivity	cognitive psychology, learning theory
How can we feel fulfilled?	humanistic movement, psychotherapy techniques	determinism	constructivism	potentiating	positive psychology, resilience, emotional intelligence
How can we get along better?	management theory, industrial/organizational psychology, social psychology	hierarchy	engagement	collaboration	field & social network theories, family systems therapy, appreciative inquiry, human capital research

Rock and Page (2009) called this set of ideas the "mechanistic paradigm." It took its name from discoveries in physics. Rock and Page draw on the study of systems for the name of the new paradigm: "systemic."

Application of the term "paradigm" to modern scientific thought is credited to Thomas Kuhn (1962). According to Kuhn, a paradigm is a mental model or a set of beliefs through which we view the world. The paradigm referred to as "mechanistic" was employed in Western European and later in North American thinking from the time of Isaac Newton in the 17th century to the mid-20th century, although it has gone through various stages during that time. This paradigm is referred to in many other ways: classical or Newtonian mechanics, modern, rational, logical positivist, industrial, capitalist. In general, mechanism assumes that objective truth is the goal of inquiry, that understanding results from studying the bits and pieces that constitute phenomena, and that causes lead in only one direction to determine effects. Mechanism also assumes a universe that is rather like a clock. The existence and behavior of all its elements can be perfectly understood if only we can identify the causes that happened just before the moment we are trying to understand. We can understand those prior causes by identifying what determined them--and on and on back to the beginning of time. As discussed above, the hegemony of this paradigm has been eroded over the 20th century in all the fields that have contributed to coaching, as well as in many others.

Kuhn (1962) defined a paradigm shift as a discontinuous and sometimes radical change in assumptions. Before his book appeared, scientific progress was commonly thought to consist of small discoveries accumulating to form larger, more significant explanatory theories. Kuhn disagreed that this was the

only way progress happened in science. He argued that some discoveries are revolutionary and cause giant leaps forward. For example, Galileo's claim that the earth was round shook the very foundation of how questions are formulated and answered. This was a major paradigm shift in human history.

When whole societies begin to see with new eyes, existing assumptions come into question, the old equilibrium breaks down, and the resulting chaos provides fertile ground for new fields and practices. Such a shift is not easy to see while we are still in it and requires pattern recognition over a broad range of developments. From this perspective, the systemic shift can be seen as the story of how coaching came into being. This story is told in this article as a set of shifts in a series of responses to questions about human identity, behavior, and relationships.

The new paradigm does not completely replace the old. As we have pointed out throughout this paper, fields that are thoroughly steeped in mechanistic assumptions, such as behaviorism, nonetheless have made significant contributions to coaching. Yet if mechanistic modes of inquiry and practice had been adequate at the end of the 20th century, there would have been no need for coaching. Medical and psychological change agents tended to approach human problems separate from their social context. Individuals are divided into physical and mental, work and personal, spiritual and material, each with different professional attendants. In contrast, coaches are trained fundamentally to think differently-to think systemically. If we look at the column on the systemic side of the mechanistic to systemic shift in Table 1, we see the following characteristics: complexity, dynamic stability, subjectivity, potentiating, and collaboration. This in fact provides a good description of coaching. Coaches are comfortable with the properties of emergence and embeddedness that characterize complexity theory. They take a holistic perspective, attend to the subjective experience of clients, assume their capacity to potentiate, and use an egalitarian, collaborative rather than a directive approach.

Not only does the systemic paradigm apply to what coaches do and how they do it, it applies to how we determine the evidence base for that practice. Most of us look to scientific evidence to confirm what we accept as true, but across all disciplines, scientific inquiry has undergone a shift. Science is still as rigorous as ever, but now we listen to people's subjective experience; we are more likely to take context into account, rather than limiting our view to the individual; we recognize that people actively create meaning in their lives; and we focus on strengths and values as the crucial resources for change. Systematic inquiry arising from this shift is beginning to provide evidence that confirms the value of coaching.

Coaching has arisen as a unique embodiment of the systemic paradigm, inheriting aspects of but basically unencumbered by mechanism. As coaching research and theories accumulate, the discipline of coaching will take shape as a contribution to a new way of understanding and behaving in the world. Specifically, organizational coaching has the potential to help us "learn from the future as it emerges." Scharmer (2009) suggests that this is necessary if organizations are to meet the leadership challenge of inventing not just new solutions to complex problems, but new approaches to problem-solving itself. "How," he asks, "do we reinvent our institutions as the ground under our feet is being pulled away?" (p. 112) Because it is less burdened by mechanistic assumptions, coaching may also help society navigate the three global revolutions that Scharmer cites: economic interconnection, communications networking, and "... the development of new forms of individual and collective consciousness" (ibid.).

However, the challenge remains to actually establish in practice a theoretical and evidence base for coaching that is distinct and coherent enough to justify calling it a new discipline rather than relying on

existing disciplines to make room for coaching. What will propel coaches in general and organizational coaches in particular to meet this challenge?

What are we doing here? It is my contention that no one existing discipline is sufficient to provide an academic or theoretical home for coaching, although many have and will continue to contribute to it. How might we differentiate such a discipline from others, and what might bind it together? Rather than beginning that consideration by examining external fields of study, I ask high-level questions that, in my experience, represent categories of issues that clients and organizations bring to coaches. Whether these categories are exhaustive or truly representative of coaching issues worldwide is an empirical question. It has been my intention in the discussion above to illustrate how starting with issues that characterize coaching can guide a multidisciplinary curriculum for coaching that draws on a multitude of scholarly disciplines. It is my hope that further research will clarify what categories and what specific disciplines are best suited to that curriculum.

I have also argued above that the assumptions of the systemic paradigm are fundamental to coaching, and that the emergence of coaching along with and in response to the shift across many disciplines to a systemic paradigm, lends coaching both uniqueness and coherence.

The answer to one further question relates to enacting a discipline of coaching: what are we doing here? This is a question about purpose. In the mechanistic paradigm, it might have been answered by referring to drives: We are here to pursue physiological needs or deep-seated psychological cathexis. Outside of scientific inquiry, the answer might be sought from faith or religion. A systemic approach assumes a dialectic relationship among heredity (brain/ body), environment (especially social relationships), and our own self-creative, mutually constructive powers. We formulate a sense of what it means to be truly, authentically ourselves. Moving toward and achieving goals consistent with that sense is immensely fulfilling as Alfred Adler (Ansbacher & Ansbacher, 1956) proposed at the beginning of the last century and positive psychology research on the meaningful life (Peterson, 2006) is indicating now. Making conscious decisions that keep ourselves moving toward that ideal of our highest purpose is the essence of potentiating. Connecting our every decision with that highest purpose is what lends our lives coherence. Applying coaching theory to our consideration of coaching as a discipline, we therefore need to determine the purpose of coaching in order to motivate the creation of a discipline.

Meeting the challenges of establishing a coaching discipline

What is the purpose of coaching? What is the purpose of organizational coaching? What is the purpose of a discipline that supports coaching, individual and organizational? I propose that pursuing this question is an important step in the development of a coaching discipline. I also propose three other, less global steps:

I. Establishment of the purpose of coaching, or at least identification of the dimensions along which the question of purpose may be pursued. This discussion has been implicit since the beginning of coaching but is only recently being consciously discussed (see Global Convention on Coaching <http://www.coachingcommons.org/guest-contributors/reporting-from-dublin-global-convention-on-coaching/and2006> Evolving the Conversation: <http://www.coachfederation.org/articles/index.cfm?action=view&articleID=190§ionID=18>). How might this question relate to Scharmer's (2009) challenge to "learn from the future as it emerges"?

2. Recognition of systemic assumptions as the core of coaching: complexity, dynamic stability, subjectivity, potentiating, collaboration, and the importance of purpose. This core has been established by the emergence of coaching as an expression of the systemic paradigm.

3. Identification of a set of questions or categories of questions that represent the issues dealt with by coaches. These questions provide a guide for selecting theories and research from other fields that respond to these questions, as long as they are consistent with systemic assumptions. This element awaits empirical research that determines the issues typical of coaching, but an example of using questions in this way is illustrated above.

4. Devising an academic name for the new discipline that avoids confusion with athletic coaching. I propose the name Neurosocial Dynamics. Neuro for the reasons outline in the section below on the future of coaching. Social because of the importance of social systems to coaching and, indeed, human life. And dynamics because coaching is about change and the necessity to understand it.

These considerations are presented as a contribution to the potentiation of the profession and discipline of organizational coaching.

IMPLICATIONS FOR THE FUTURE OF ORGANIZATIONAL COACHING

A major implication of meeting the challenges associated with developing a discipline of coaching is that organizational coaching would have a future.

Stepping outside a coaching-centric view, a new discipline could help to integrate theory and research from existing disciplines. Often, different research "silos" study the same phenomena but because they have different terminology and publish in different journals, they do not share their findings. A coaching discipline may help to cross-fertilize heretofore separate research communities.

Organizational coaching can also support a dialectic between theory and practice that has been so fruitful in psychotherapy research. We can shift our focus " ... to the ontological and epistemological grounding of the situation we are operating in (our sources for both action and thought" (Scharmer, 2009, p. 112).

The question of whether to continue calling coaching by that name is one that deserves further discussion. The advantage of such a common name is that it is common and avoids the stigma of more academic or specialized titles. On the other hand, its very commonness continues to cause confusion with sports coaching.

Rock and Page (2009) emphasize the usefulness of neuroscience to coaching theory and research, as indicated by my suggestion of "Neurosocial Dynamics" as the name for a discipline of coaching. This suggestion is made with the recognition that the usefulness of neuroscience or any other potential contribution to the proposed discipline will be determined by the field of coaching itself. The richness of dialogue within that field will help to determine its viability. It is out of this dialogue that the foundation for a discipline of Neurosocial Dynamics (or whatever it ends up being called) will emerge to provide a theoretical foundation and evidence for the value of coaching.

JOURNALS

Coaching: An International Journal of Theory, Research, and Practice

www.InformaWorld.com/coaching/

Consulting Psychology Journal: Practice and Research

www.apa.org/journals/cpb/description.html

Harvard Business Review

www.harvardbusinessreview.com

International Coaching Psychology Review

[www.psychology.org.au/units/interest groups/coaching/](http://www.psychology.org.au/units/interest%20groups/coaching/)

International Journal of Coaching in Organizations

www.ijco.info/index/html

International Journal of Evidence Based Coaching and Mentoring

www.brookes.ac.uk/schools/education/ijebcm/

International Journal of Mentoring and Coaching

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