

**Illuminating the Blind Spot:  
Leadership in the Context of Emerging Worlds<sup>1</sup>**

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<sup>1</sup> This paper reflects on the results of a global interview project with 25 thinkers on knowledge and leadership (see list of interviewees, p. 2). The full text of the interviews as well as this summary paper are accessible as free downloads from [www.dialogonleadership.org](http://www.dialogonleadership.org). The authors thank Adam Kahane for his helpful comments.

**List of interviewees:<sup>2</sup>**

Brian Arthur, Santa Fe Institute, Santa Fe, N.M.  
Henri Bortoft, author of *The Wholeness of Nature*, London  
Jonathan Day, McKinsey & Company, London  
Richard Foster, McKinsey & Company, New York  
Arie de Geus, formerly of Royal Dutch Shell, author of *The Living Company*, London  
Ronald Heifetz, Harvard University, Kennedy School of Government, Cambridge, MA  
Joseph Jaworski, Generon Consulting and SoL, Cambridge, MA  
Hans Joas, Free University Berlin, Berlin  
Tom Johnson, Portland State University, Portland, Oregon  
Michael Jung, McKinsey & Company, Vienna  
John Kao, The Idea Factory, San Francisco  
Robert Kegan, Harvard University, Cambridge, MA  
Georg von Krogh, Hochschule St. Gallen, Switzerland  
Thomas Malone, Massachusetts Institute of Technology  
Huai-Chin Nan, Hong Kong  
Ikujiro Nonaka, Hitotsubashi University, Tokyo  
Ryosuke Ohashi, Technical University of Kyoto  
Wanda Orlikowski, Massachusetts Institute of Technology, Cambridge, MA  
Eleanor Rosch, University of California, Berkeley  
Peter Senge, Massachusetts Institute of Technology and SoL, Cambridge, MA  
Rupert Sheldrake, Institute of Noetic Sciences, S.F./London  
Lucy Suchman, Xerox PARC, Palo Alto, CA/Lancaster University, UK  
Francisco Varela, National Centre for Scientific Research, Paris  
Jack Whalen, Xerox PARC, Palo Alto, CA

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<sup>2</sup> The interviews were conducted by Otto Scharmer (1999-2000). The interview with W. Brian Arthur was conducted jointly with Joseph Jaworski; and the interview with John Kao jointly with Ikujiro Nonaka.

## **I. The Challenge**

### **1. We Live, Lead, and Work in an Era of Clashing Forces<sup>3</sup>**

The waves of change sweeping the world—digitization, globalization, demographic shifts, migration, and individualization, as well as the rapid degradation of social and natural capital—are giving rise to arenas of clashing forces. These clashing forces play out as tensions between multiple polarities: speed and sustainability, exploration and exploitation, global and local ways of organizing, top-down and bottom-up approaches to leadership.

Although general statements like the one above have been true at many times and places in human history, there is something different about today's circumstances. The pace of change is somehow faster, the frequency and amplitude of restructuring and reforming are significantly greater, and the pathways of emerging futures seem to be less predictable than they were in earlier times.

### **2. The New Leadership Challenge Is to Sense and Actualize Emerging Opportunities**

As the economic foundations of our business world are transformed from more stable patterns to more dynamic patterns characterized by the “forming, configuring, locking in, and decaying of structures,”<sup>4</sup> the nature of leadership changes too. In this new environment, real power comes from recognizing the patterns of change. In environments where small differences can cause powerful effects the task of a leader is to sense and recognize emerging patterns and to position him- or herself, personally and organizationally, as part of a larger generative force that will reshape the world.

In order to do well in an economy driven by high technology and innovation, business leaders will have to develop and deploy the capacity to sense and seize emerging business opportunities.<sup>5</sup>

### **3. For Leaders, What Is “Real” Has Changed**

In traditional and more stable business environments, mental-social and generative processes were considered peripheral “complications” in a value chain largely based on the primacy of the physical world. In today's more organic and dynamic business environments, “value constellations”<sup>6</sup> are largely based on intangible resources and the primacy of web-shaped patterns of relationships. The intangible dimension—that is, the

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<sup>3</sup> Ikujiro Nonaka, Boston conversation, Sept. 20, 2000.

<sup>4</sup> W. Brian Arthur, Boston conversation, Sept. 19, 2000.

<sup>5</sup> Arthur (2000); Jaworski and Scharmer (2000).

<sup>6</sup> Ramirez and Norman (1994).

generative domain of human action and relationships—is moving from the periphery to center stage.<sup>7</sup> This shift becomes evident when one understands the informal social networks essential to all work, the role of mental models, and the emerging patterns of interdependence among complex and highly distributed (or dispersed) processes of innovation. Accordingly, measures that used to account for the hard variables are increasingly seen as abstract and secondary, while soft variables such as intentions, interpretations, and relationships are increasingly considered part of the more concrete and primary sphere of value creation. Hence, the core of what is considered real has moved from the more tangible to the more intangible variables of social behavior and managerial action.<sup>8</sup>

What follows from this for management is that leaders, in order to do well, will have to learn to pay attention to a different set of variables: the variables that used to be referred to as “soft,” such as intentions, interpretations, and identity.<sup>9</sup>

#### **4. Operational Excellence Requires Accounting for Complexity and Evolution**

As management and leadership change their fundamental assumptions about what is real, science is also changing. Complexity theorists shift our perspective from seeing reality as static models and stable patterns to seeing reality as living and evolving systems that account for the phenomena of emergence, evolution, bifurcation, indetermination, and flow.<sup>10</sup> According to this view, systems emerge from the bottom up, the parts embody the whole, and relationship patterns evolve. From this perspective, the vitality of systems is on the border between chaos and order. Says Robert Venturi: “It is the unity which maintains—but only just maintains—a control over the clashing elements which compose it... Chaos is very near. Its nearness but its avoidance is what gives force.”<sup>11</sup>

What makes this turn in science relevant in business contexts today is the challenge of coordinating increasingly complex performance systems. Participants in globally distributed performance systems lose their natural focus when the transformation process is hard to grasp because it is based on changes in different parts of the companies and the workplace is just a node in a network with diverse perspectives.<sup>12</sup> Operational excellence, as achieved by Toyota’s famed production system, emerges from evolving patterns of “concrete particulars” rather than from adherence to rigid management systems.<sup>13</sup> In the context of a complex, dynamic system, paradoxically, the individual and the local team become even more important as integrators and coordinators of functions that used to be taken care of by formal systems and mechanisms.

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<sup>7</sup> Jung (1999, 2000).

<sup>8</sup> Johnson and Bröms (forthcoming); Peter Senge, Boston conversation, Sept. 19, 2000.

<sup>9</sup> Jung and Wendler (2000).

<sup>10</sup> Arthur, Boston conversation, Sept. 19, 2000.

<sup>11</sup> Venturi (1965): Complexity and Architecture

<sup>12</sup> Jung (1999, 2000).

<sup>13</sup> Johnson (1999); Johnson and Bröms (forthcoming).

## 5. The Quality of Awareness Determines Performance

The shift in management and science reflects, we believe, larger patterns being detected by social science and cognition research. For example, recent work by cognitive scientist Francisco Varela, cognitive psychologist Eleanor Rosch, and phenomenologist Henri Bortoft illustrates a shift of attention toward first person methods that will allow people to readily access their various layers of experience.<sup>14</sup> Having gone in the 20<sup>th</sup> century through a *linguistic turn* in philosophy in which attention shifted from individual consciousness to the intersubjective domain of language, and through an *action turn* in social science in which attention shifted from observing to changing social behavior,<sup>15</sup> we now seem to be entering another turn of perspective. This time, the focus is redirected from the tangible to the intangible variables of social reality formation. By tangible we mean variables that are easily observable and accessible by a third person, such as walking or talking; in contrast, intangible variables like qualities of attention and experience usually involve some kind of first-person access; in other words, these variables are personal and within oneself.<sup>16</sup>

The rise of postmodernism during the 1980s and 1990s is a good case in point for this shift of perspective, for it allowed the aesthetic dimension to come to the foreground of scientific discourse and inquiry.<sup>17</sup> The postmodern shift of perspective has now been extended and enhanced by a resurgence of interest in the nature of experience and how the quality of consciousness determines the quality of performance and experience, both individually and collectively.<sup>18</sup> As a consequence, the more subtle levels of reality and consciousness move from the background to the foreground of scientific discourse.<sup>19</sup>

UC Berkeley psychologist Rosch refers to these more subtle levels of experience and consciousness as *primary knowing*. “Mind and world are not separate,” says Rosch, describing such a participative view of cognition. “Since the subjective and objective aspects of experience arise together as different poles of the same act of cognition—are part of the same informational field—they are already joined at their inception. If the senses do not actually perceive the world, if they are instead participating parts of the mind-world whole, then a radical re-understanding of perception is necessary.”<sup>20</sup>

The relevance of primary knowing in the world of business leadership stems not only from the general shift from “product-making” to “sense-making,”<sup>21</sup> but more important, from the above-described new leadership challenge concerning sensing and seizing emerging business opportunities. In order to do well in high-tech-driven environments,

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<sup>14</sup> Varela (2000); Depraz, Varela, and Vermersch (1999); Varela and Shear (1999); Rosch (1999, forthcoming); Bortoft (1999, 1998, 1996).

<sup>15</sup> Lewin (1952); Argyris (1992); Torbert (2001); Senge and Scharmer (2001); Reason and Bradbury (2001).

<sup>16</sup> Varela and Shear (1999).

<sup>17</sup> Lyotard (1984).

<sup>18</sup> Csikszentmihalyi (1990); Pine and Gilmore (1999); Conlin (1999); Day (1999); Jaworski (1999); Jung (1999).

<sup>19</sup> Wilber (2000); Torbert (2000); Scharmer (forthcoming).

<sup>20</sup> Rosch (1999).

<sup>21</sup> Brown and Duguid (2000).

leaders will have to develop a new cognitive capacity that involves paying attention to the intangible sources of knowledge and knowing.<sup>22</sup>

## 6. Plus Ça Change, Plus C'est La Même Chose

And yet, in spite of all the talk about the new economy—and the new leadership its non-linearity supposedly requires—actual leadership behaviors often are unchanged: “plus ça change, plus c'est la même chose”—the more things change, the more they stay the same. Wanda Orlikowski of MIT has said that people seem to be “doing more of the same. Very often, even though the espoused goal is to change the way we work with new technology, in reality our practice is often to do more of the same. The technology changes. How we work doesn't. It's rare to find people really doing things differently, improvising, innovating, and changing the work structures that they operate within.”<sup>23</sup>

While the world is becoming more interconnected through technology, people's lives seem to become more disconnected. Lucy Suchman of Xerox PARC and Lancaster University suggests that we are increasingly preoccupied with self-referential worlds that leave us isolated and disconnected from what is going on in the world around us.<sup>24</sup> Or as Andy Grove of Intel has put it: “This business about speed has its limits. Brains don't speed up. The exchange of ideas does not really speed up, only the overhead; that slows down the exchange. When it comes down to the bulk of knowledge work, the 21<sup>st</sup> century works the same as the 20<sup>th</sup> century.”<sup>25</sup> In spite of the apparent need for new ways of leading, strategizing, and organizing, real management processes—in most organizations and companies—have changed very little.<sup>26</sup>

Thus, the challenge for leaders is to develop the “knowledge for action” (Chris Argyris) that helps them achieve the essence of post-industrial leadership: to develop higher qualities of pattern recognition and innovation by shifting the place from where a system operates—that is, by becoming more mindful of the deep sources from which behavior and profound innovation and change emanate.<sup>27</sup>

## II. An Overarching Theory

### 7. Experience Must Inform Strategy and Leadership

We believe that an important blind spot in 20th-century philosophy, social science, and management science lies in *not seeing the full process of social reality formation*.<sup>28</sup> In everyday experience we do not see what precedes managerial action and entrepreneurial action—the thought processes that gradually lead to the development of entrepreneurial

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<sup>22</sup> Jaworski and Scharmer (2000).

<sup>23</sup> Orlikowski (1999).

<sup>24</sup> Suchman (1999).

<sup>25</sup> Quoted in Jung (2000).

<sup>26</sup> Jung (2000); Argyris (1999).

<sup>27</sup> Scharmer (2000, forthcoming).

<sup>28</sup> Nan (1999); Scharmer (2000, forthcoming).

ideas and initiatives. We do not see the full process of coming-into-being of social action: we do not see its descending movement from thought and consciousness to language, behavior, and action. We see *what* we do. We also form theories about *how* we do things. But we are usually unaware of the *place* from which we operate when we act.<sup>29</sup> Says Master Huai-Chin Nan, a noted Chinese Taoist-Buddhist-Confucian scholar and teacher: “What has been lacking in the 20th century is a central cultural [unifying] thought.... We have not gotten into the center: What is human nature? Where does life come from? What is life for? Where does consciousness come from? No one can answer those questions today”<sup>30</sup>

From the perspective of the cognitive sciences, Varela (1996) describes the blind spot of the 20<sup>th</sup> century as *experience*: “The problem is not that we don't know enough about the brain or about biology, the problem is that we don't know enough about experience. ... We have had a blind spot in the West for that kind of methodical approach, which I would now describe as a more straightforward phenomenological method. ... Everybody thinks they know about experience, I claim we don't.”

As we move from product- and service-driven stages of economic development to an era that is, as Pine and Gilmore argue, driven by an experience economy,<sup>31</sup> the issue of developing a sound method for accessing experience will be of the utmost importance for leadership and strategy development.

## 8. Social and Managerial Realities Arise from the Same Deep “Source”

To develop a view of leadership that is more consistent with emerging perspectives from science and business, management science will need to incorporate new research in cognition science, action science, and philosophy. It should, we believe, provide an integrative view of the processes that lead to social and managerial reality formation.<sup>32</sup> Such a phenomenology of distributed leadership would describe three different levels of emergence: (1) the behavioral level of social reality; (2) the level of emerging patterns of relationships; and (3) the deep tacit level, or “source”—what we call the blind spot—the place from which a system operates.<sup>33</sup> For example, a conversation that takes place on the behavioral level will play out as a repetitive pattern of interaction among different points of view (discussion). A conversation that takes place on the level of emerging relationship patterns would allow new patterns to evolve. For example, people would discover something new about what’s going on as throughout the process of their conversation. A conversation that operates on the third level of emergence, the deep tacit level, would evolve in the mode of deep flow, presence, and collective co-generation.<sup>34</sup> For example, when people engage in generative dialogues that truly access the full potential of collective intelligence, the full capacity of thinking together that resides within a situation or group.

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<sup>29</sup> Schamer (2000).

<sup>30</sup> Nan (1999).

<sup>31</sup> Pine and Gilmore (1999).

<sup>32</sup> Nonaka, Boston conversation, Sept. 19, 2000.

<sup>33</sup> See in more detail Schamer (forthcoming).

<sup>34</sup> Schamer (forthcoming).

The relevance of a social phenomenology that would give us a better access to the tacit dimension of distributed leadership lies in the emerging new patterns of business environments. As we move into high-velocity business environments, knowledge creation and innovation will depend more and more on the capacity of a system to access and operate from its primary source. Would-be leaders who are unable to access and operate from the deeper levels of emergence will depend on imitating others and hence will be less likely to succeed in highly competitive environments.<sup>35</sup>

## 9. The Self Is the Eye of the Needle

The point of a distributed leadership phenomenology is to conceive of social and managerial reality creation from the perspective of the actor—the “I,” the self—both individually and collectively. The process of becoming aware, as suggested by some recent research in neurophenomenology, is punctuated by three specific “gestures” or inflection points. Each gesture or inflection point shifts the structure of attention from one level of emergence to another: from (1) “suspension”—overcoming habitual patterns; to (2) “redirection”—turning one’s attention from the object to its source; and to (3) “letting go”—changing one’s quality of attention from looking for something to letting it come.<sup>36</sup> The task of a leadership phenomenology should be to map this tacit territory by identifying and describing these inflection points in the domain of social reality formation. These descriptions would come from the action perspective of the leader’s “I”—from the perspective of decision-makers in the world of business.

Today, everyday leadership practices focus primarily on what is visible. The relevance of mapping the *invisible* territory of leadership—the tacit territory—is to develop a deeper level of knowing, a deeper level of awareness. This will enhance both decision-making and creativity.

## 10. Knowledge Creation and Innovation Happen in Places

Without temporal, spatial, and relational context there is just information, not knowledge.<sup>37</sup> Knowledge creation always depends on situated perception, cognition, and action<sup>38</sup>—on a *ba*, as Ikujiro Nonaka puts it, using the Japanese word for “place.” The quality of *ba*, says Nonaka, determines the quality of knowledge creation. Shared context, or *ba*, does not reside in individuals’ minds. Rather, it arises from interactions, from patterns of relationship that evolve among participants.<sup>39</sup>

Following the Japanese philosopher Kitaro Nishida, each *ba* has three dimensions: the physical dimension (objectivity), the dimension of mental and social relationships (intersubjectivity), and the self-transcending dimension of trans-subjectivity. Says John

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<sup>35</sup> Arthur (1996).

<sup>36</sup> The three gestures in the core process of becoming aware are elaborated in Varela (2000), Depraž, Varela, and Vermersch (1999), and Varela and Shear (1999).

<sup>37</sup> Nonaka and Konno (1998); Kao (2000).

<sup>38</sup> Orlikowski (2000); Suchman (1987)

<sup>39</sup> Nonaka and Konno (1998).



Kao, the founder of The Idea Factory, a San Francisco–based innovation laboratory: “We believe that physical place is really important, and we also believe that our physical place should be able to change its purpose at a moment’s notice, depending upon staging or perception or intention.”<sup>40</sup> The Idea Factory uses several concepts from theater and design in order to inspire innovation. Says Kao: “In the theater, you quickly forget about the literal facts of the physical place if the experience is successful. You forget that you’re sitting in a chair that has purple cushions, that the theater has a certain number of rows and a certain kind of architecture, because there’s a suspension of disbelief that changes the mental landscape. You are drawn into action that is occurring on the stage among actors that you have a projective identification with and that leads to a flow state, where you lose track of physical time and space as you are drawn into a story.”

Thus, the first level of *ba*, the physical level, facilitates the emergence of the second, the mental level. “That’s part of what we mean when we emphasize to companies that they need to figure out their story,” says Kao. “There’s a big difference between what people physically do in a company and the kind of mental space they’re in, which relates to whether they’re feeling like they’re a part of the corporate story.”

And finally, if successful, the second level of *ba* facilitates the emergence of a third, the spiritual essence of place. “If the story works,” adds Kao, “you progress to the third level, which is yet another landscape. The great Zen philosophers and practitioners talk about how, at the moment of enlightenment, space and time have a different meaning and there’s a great mental clarity. That burst of insight or *satori*—which I think people are seeing increasingly not as one isolated event, but as a quality of experience sustained in one’s spiritual practice—has a different landscape again. It’s yet another shape imposed on the physical and the mental.”

If Pine and Gilmore are right that we have moved from product- and service-driven stages of the economy to an era that is driven by staging and co-creating customer experiences, then the capacity to facilitate the co-creation of experience along the lines that John Kao described above are of the utmost importance for the future of leading and organizing.

## 11. Primary Knowing: Shifting the Place from Where We Operate

The third level of place that Kao talks about involves a different quality of knowing and cognizing, the kind that Eleanor Rosch refers to as wisdom awareness or primary knowing. Primary knowing, says Rosch in describing how it differs from our usual understanding of cognition, is knowing “by means of interconnected wholes (rather than isolated contingent parts) and by means of timeless, direct presentation (rather than through stored re-presentations). Such knowing is ‘open,’ rather than determinate; and a sense of unconditional value, rather than conditional usefulness, is an inherent part of the act of knowing itself. Action from awareness is claimed to be spontaneous, rather than

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<sup>40</sup> Kao (2000).

the result of decision making; it is compassionate, since it is based on wholes larger than the self; and it can be shockingly effective.”<sup>41</sup>

Primary knowing, says Rosch, is based on the fact that mind and world are not separate but are aspects of the same underlying field: “That knowing capacity actually is the field knowing itself, in a sense, or this larger context knowing itself.... If you follow your nature far enough, if you integrate and integrate, if you follow your nature as it moves, if you follow so far that you really let go, then you find that you’re actually the original being, the original way of being. The original way of being knows things and does things in its own way. When that happens, or when you get even a glimpse of it, you realize that we don’t actually act as fragmented selves the way we think we do. Nothing you do can produce this realization, can produce the original way of being. It’s a matter of tuning in to it and its way of acting. It actually has a great intention to be itself (so to speak) and it will do so if you just let it.” When acting on this level of knowing, continued Rosch, action appears “without conscious control—even without the sense of ‘me’ doing it.”<sup>42</sup>

The relevance of primary knowing for leadership comes from the challenges that the emerging new business contexts pose. The farther we move into the high-velocity context of the 21st-century economy, the more leaders will have to develop their “blank canvas” capacity—their capacity to sense and go with what emerges from nothing. The core process of future leadership is deeply connected with the capacity of presencing: to use one’s Self as a blank canvas for sensing and bringing into presence that which wants to emerge.<sup>43</sup>

## 12. Organizations Are Relational Spheres in Motion

In the emerging new world of business, organizations can perhaps best be thought of as “morphing fields,”<sup>44</sup> or what Nonaka calls an “organic configuration of *ba*,” of contexts in motion.<sup>45</sup> The notion of *ba* captures well some aspects of networked structures, web-shaped relationships, and fluid and open boundaries. Morphic fields, says biologist Rupert Sheldrake, are “within and around the systems they organize. They have attractors in them. You can model many of their properties in terms of attractors, things which draw the system towards a particular form or goal or end state or end cycle or end structure. The fields organize systems in a nested hierarchical way.... It’s a nested hierarchy of organization of nature, which all holistic world views recognize.”<sup>46</sup> What the notion of fields or networks capture less precisely is the evolution of differentiated and yet interwoven spheres of relationship.<sup>47</sup>

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<sup>41</sup> Rosch (forthcoming).

<sup>42</sup> Rosch (1999).

<sup>43</sup> Scharmer (2000, forthcoming); Jaworski and Scharmer (2000).

<sup>44</sup> Michael Jung, Boston conversation, Sept. 19–21, 2000.

<sup>45</sup> Nonaka, Boston conversation, Sept. 19, 2000.

<sup>46</sup> Sheldrake (1999).

<sup>47</sup> See, for example, Senge and Scharmer (2001), where the authors talk about learning communities as the interweaving of three spheres or sets of practices: research, practice, capacity building.

Hagel and Singer argue, for example, that companies in many industries are in the process of unbundling themselves into separate units with one and only one of the following three business foci: (1) customer relationships, driven by economies of scope, (2) operations and infrastructure, governed by economies of scale, and (3) product innovation, governed by economies of speed.<sup>48</sup> As transaction costs decrease through the use of the World Wide Web, argue Hagel and Singer, the more companies will tend to unbundle these three aspects of business. The more unbundled they are, the better the companies can focus on organizing around the underlying economies of speed, scale, and scope. Other authors, such as Werbach,<sup>49</sup> argue also in favor of differentiating along the three dimensions of creation, production, and customer interface. However, Werbach talks not only about unbundling but also about how to integrate all three spheres of activity into one system through *syndication*.<sup>50</sup>

Some of the most successful high-tech companies, such as EMC, the Massachusetts-based world market leader in storage technology, have developed ways to do both—differentiating and integrating the three spheres of creation, production, and customer relationships. McKinsey’s Richard Foster argues that the operational core of successful large companies is surrounded by what he calls an entrepreneurial “Schumpeterian cocoon” that allows companies to sense and experiment with emerging new opportunities—often the primary ground of value creation in the new world of business.<sup>51</sup> Nonaka and Takeuchi’s (1995) concept of the hypertext organization also highlighted this aspect of differentiating the living system of a company.

Maybe the firm of the future can best be thought of as an ecology of differentiated relational spheres that are driven, interwoven, *and* integrated through individuals and networked teams who participate and move across, as needed, the different spheres of relationship and value creation.<sup>52</sup>

### **13. Organizational Health Stems from the Interplay of Three Relational Spheres**

There is enormous social value in helping large and complex organizations become more healthy, more vital, and more sustainable over time—helping communities of leaders to work, renew, and develop themselves and their relationships to all key stakeholders in and around their organization. Organizational vitality springs from the vitality and interplay of three contexts: the formal/structural, the social/relational, and the trans-personal. All three contexts interact continuously and transform reflexively.<sup>53</sup>

A good and healthy organization is natural in that all people, as W. E. Deming said, “seek joy in work.”<sup>54</sup> Discord and structural violence stem from the dominance of single perspectives or single contexts that result in bureaucracy (domination of the

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<sup>48</sup> Hagel and Singer (1999).

<sup>49</sup> Werbach (2000).

<sup>50</sup> According to Werbach (2000), syndication is the integration of creating, producing, and delivering by three different actors—creators, syndicators, and distributors, respectively. –

<sup>51</sup> Foster (1999).

<sup>52</sup> Day, Jaworski, Jung, Nonaka, Schamer, Senge, Boston conversation, Sept. 19–21, 2000.

<sup>53</sup> Jung and Wendler (2000).

<sup>54</sup> Senge, Boston conversation, Sept. 19–21, 2000.

formal/objective context), the politics of old-boy networks (domination of the social/intersubjective context), or various sorts of fundamentalism (domination of the trans-subjective realm).

The implication of this proposition is that the health of an organization depends primarily on the health of the larger embedding system in which it develops and grows.

#### **14. Leadership Is Both Deeply Personal and Inherently Collective**

Tom Johnson defines learning as “understanding and embodying nature’s patterns.”<sup>55</sup> In this spirit, leadership plays a pivotal role in determining whether deep learning is possible. While it is not valid, in our view, to associate leadership with managerial rank, it is valid to associate leadership with spirit, energy, patience, perseverance, and imagination. These qualities of generative *ba* are the mark of effective leadership at all levels. If the emerging understanding of organizations is of a living human system—an ecology of overlapping interpenetrating relational spheres—then leadership in this world may be defined as shaping “life-enhancing” conditions.<sup>56</sup> Such leadership is both deeply personal and inherently collective.<sup>57</sup> It involves individuals tapping their sources of inspiration and imagination, and it involves collectives actualizing emerging futures. It grows from both individual and collective discipline, much of which we still grasp only dimly.

### **III. Implications**

#### **15. The Most Important Tool for Leading 21<sup>st</sup>-Century Change Is the Leader’s Self**

An effective leader will have the capacity to use his or her Self as the vehicle—the blank canvas—for sensing, tuning in to, and bringing into presence that which wants to emerge.<sup>58</sup> William O’Brien, the former CEO of the Hanover Insurance Company, has summarized his experiences in leading change as follows: “The success of an intervention depends on the interior condition of the intervenor.”<sup>59</sup> In other words, the success of a tangible move in a particular situation depends on the Self of the intervenor. The implications of this principle are further developed below.

#### **16. Distributed Leadership Systems Require Collective Practices**

“First, before you can become a leader you have to understand yourself,” says Master Nan. In his writings Master Nan outlines seven meditative spaces of leadership that he considers the essence of the Confucian teachings on leadership.<sup>60</sup> Although the various Eastern and Western traditions of inner cultivation and development differ in their beliefs

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<sup>55</sup> Johnson (1999); Johnson and Bröms (forthcoming).

<sup>56</sup> Fritjof Capra, author of *The Web of Life*, personal conversation (COS).

<sup>57</sup> Senge, Boston conversation, September 19–21, 2000.

<sup>58</sup> Scharmer (2000).

<sup>59</sup> William O’Brien, private conversation (COS).

<sup>60</sup> Nan (1999).

and assumptions, they all focus on *practices* as key for enhancing personal cultivation and spiritual growth. If the leader's most important tool is the Self, what does that mean in the context of the distributed nature of postmodern leadership systems? In other words, what collective organizational practices should be cultivated in the context of distributed leadership systems?

In most traditions we know of, the journey of cultivation has always focused on three core elements: study, practice, and service.<sup>61</sup> Likewise, we believe that an emerging new way of leadership cultivation may focus on developing these three elements in the social (inter-subjective) context of our everyday work life. In this context, to study means *to see reality*, to sense what is going on in the here and now; to practice means *to meditate on reality*, to take conversations and collective processes to a deeper level, to the point of stillness "where knowing comes to the surface";<sup>62</sup> and to serve means *to collectively co-create reality*, to bring forth new worlds that serve new possibilities for living. Such a cultivation of leadership that is situated in everyday practices echoes Nonaka's rearticulation of the ancient Western sentiment that knowledge creation has to do with truth, beauty, and goodness: seeing reality, receiving the inspiration of inner knowing, and co-creating that which wants to emerge in the service of life. "The new practices," says Senge, "will come from those who have created together."<sup>63</sup>

An example of this sequence is given by Adam Kahane of Generon Consulting. In Guatemala in 1998–99, leaders representing all segments of society participated in an exercise (a "scenario project") designed to help them see the forces of current change (in other words, reality). One evening the participants told stories about experiences they had had that they thought related to what had happened, was happening, or might happen in Guatemala. Through this process of story sharing the group gradually moved toward uncovering the deeper inner aspects of their country's problems. Says Kahane: "For example, one businesswoman, who is a prominent fighter against judicial impunity, told the story of her sister being assassinated by the military and how she went from office to office trying to find out what had happened, and how the first military official she had spoken with, and who had denied everything, was the man sitting next to her that evening in the circle. So people showed a lot of openness and courage."<sup>64</sup>

Kahane continued: "Then, first thing the next morning, when we had gathered again, one man who had not spoken the night before said that he wanted to tell a story about his role in the exhumation of mass graves from a village massacre. He talked about what it had been like for him to find the corpses of children and pregnant women, and to work with the villagers to figure out what to do. When he finished his story, the whole room was silent for about five minutes. I had no idea what to do, so I didn't do anything. Something happened during this silence. One person said later that there had been a spirit in the room, another that this had been a moment of communion. I do not consider myself very sensitive to these extraordinary phenomena, but if you turn up the volume like this, even I can hear it. I heard it then."

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<sup>61</sup> Nan (1994).

<sup>62</sup> Arthur (2000)

<sup>63</sup> Senge, Boston conversation, Sept. 19–21, 2000.

<sup>64</sup> Kahane (forthcoming).

Several members of the scenario project team have referred to this episode as the turning point. The third phase, which focused on using the scenarios as catalyzing objects for changing the country, very much depended on this turning point of stillness and accessing inner knowing. Says Kahane: “I would say that this was the moment where the shared will and shared commitment of the group became clear to the group, when everyone knew why they were there and what they had to do.”<sup>65</sup>

The Guatemala story exemplifies how the power of collective practice, if developed, lies in the relationship and sequence of co-sensing, co-inspiring, and co-enacting<sup>66</sup> a future that wants to emerge.

## 17. Organizations Must Develop Core Practices That Inspire Creativity and Action

To successfully operate in the emerging new environments, organizations will have to develop core practices that revolve around sensing and actualizing emerging business opportunities.<sup>67</sup> The following five practices appear paramount:

- observing: seeing reality with fresh eyes
- sensing: tuning in to emerging patterns that inform future possibilities
- presencing: accessing one’s inner sources of creativity and will
- envisioning: crystallizing vision and intent
- executing: acting in an instant to capitalize on new opportunities<sup>68</sup>

These five practices embody a single movement of co-sensing, co-presencing, and co-creating the reality that wants to emerge.<sup>69</sup>

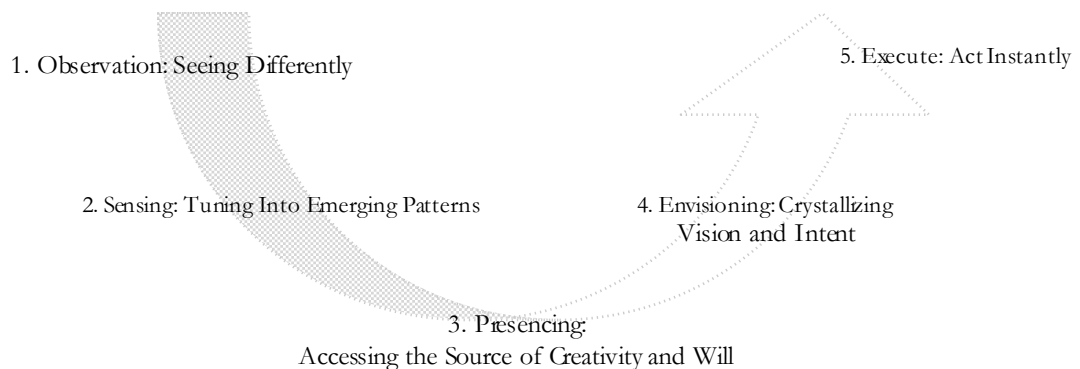


Figure 1: Sensing and Actualizing Emerging Futures: Five Core Practices (adapted from Jaworski and Scharmer 2000; Scharmer 2000)

<sup>65</sup> Kahane (forthcoming).

<sup>66</sup> To paraphrase the ancient triad of studying, meditating, and serving.

<sup>67</sup> Arthur (1996, 2000); Jaworski and Scharmer (2000).

<sup>68</sup> Jaworski and Scharmer (2000).

<sup>69</sup> Jung and Wendler (2000); Jaworski and Scharmer (2000); Nonaka and Toyama (2000).

## 18. The Leader’s Work Is to Allow New Social Spaces to Emerge

In order for the core process of sensing and actualizing emerging futures to evolve, leaders have to allow three spheres or spaces to grow that rarely exist in traditional organizations: the space of seeing and sensing, which allows people to immerse and tune in to the emerging patterns of future possibilities (SPACE I); the space of sensing, presencing and envisioning, which allows people to access their sources of primary knowing (SPACE II); and the space of incubating and rapid prototyping, which allows for fast-cycle venture and innovation development (SPACE III).<sup>70</sup>

Just as Total Quality Management (TQM) resulted in the development of a more methodical approach to quality management and an established body of shared processes, principles, and practices across organizations and industries over the past two or three decades, it is likely that over the next couple of decades another method will emerge. The emerging method and the processes, principles, and practices that it embodies will deal with the challenge stated above: how to sense and seize emerging business opportunities, and how to operate in high-velocity, hyper-competitive business environments.

Many companies recently began developing structures that emulate SPACE III (see Figure 2) by creating venture capital, business incubator, or venture development structures and infrastructures. We believe that this movement into the world of venture creation will continue in two ways: first, by improving what is best practice today through the creation of high-quality SPACE III–type infrastructures for innovation and rapid venture development; second, by moving upstream into uncharted waters through the development of SPACE II- and SPACE I-type infrastructures that allow companies both to rapidly turn ideas into new ventures (which is what SPACE III infrastructures do) and to methodically sense and tune in to emerging patterns (SPACE I) in order to develop the highest possible leverage and breakthrough ideas (SPACE II).

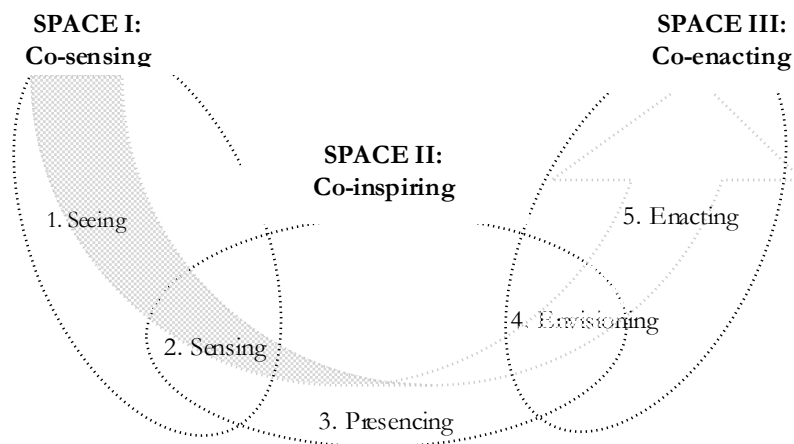


Figure 2: Three Spaces for One Movement: Sensing and Actualizing Emerging Futures  
(adapted from Jaworski and Scharmer 2000; Scharmer 2000)

<sup>70</sup> Jaworski and Scharmer (2000).

Nokia, the Finnish manufacturer of telecommunications equipment, is an example of a company that has moved upstream on the route described above.<sup>71</sup> Having started as a wood mill in 1865, Nokia came near to collapse in the late 1980s when the Finnish economy stumbled and the then highly diversified company proved too expensive to manage. Jorma Ollila, who had run the mobile phone unit of the business, was promoted to CEO and divested Nokia from every business but mobile telephony. The phenomenal rise of Nokia to become the world's premier telecommunications company is attributable to two features: One, it has a structural arrangement designed to give new business opportunities room to grow: the Nokia Venture Organization (NVO). It includes external venture capital activity, through which it funds a variety of start-up activities, and it also has internal "prototype" business units that are later folded into the core business or spun off. Two, its management philosophy is not wedded to any of its existing businesses and is ready to exit lines of business at any stage. In the context of this philosophy, NVO is not an add-on to an existing structure but the embodiment of a new leadership attitude that constantly engages in all three spaces of innovation by asking: What are the emerging patterns (sensing)? What is our role and focus as we participate in bringing forth this new world (purpose)? How can we better execute and capitalize on these opportunities?

## 19. The Quality of Places Is Foundational in Transforming Organizations

The physical, dialogic-social, and intellectual-spiritual qualities of places are foundational in transforming organizations.<sup>72</sup> A good *ba*, says Nonaka, is characterized by the following five elements:<sup>73</sup>

- Self-organization, with its own intention, direction, and mission. Participants in a *ba*, says Nonaka, must "get involved and cannot be mere onlookers." A good *ba* needs creative chaos, care, and love, as well as intention and direction.
- An open boundary. An open boundary allows for both cocooning<sup>74</sup>—i.e., developing one's own context—and openness to other contexts.
- Transcending the habitual patterns of time, space, and self. *Ba* lets participants share time and space and transcend their own limited perspectives or boundaries.
- Multi-discipline and multi-viewpoint dialogues. A good place enables essential dialogues, which allow participants to see themselves through one another. The quality of the conversations we create is one of the most important measures of the quality of place and the health of an organization.<sup>75</sup>
- Equal access to the center and maximum capacity with minimum conflict. Every participant in a good place, says Nonaka, is at the same distance from the center. However, the center is not a fixed point. "In a *ba*, anyone has the

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<sup>71</sup> The Nokia case is based on Day (2000).

<sup>72</sup> Jonathan Day, Boston conversation, Sept. 19-21, 2000.

<sup>73</sup> Nonaka, presentation at the 2000 Berkeley Knowledge Forum, September 27, 2000, University of California at Berkeley.

<sup>74</sup> Monthoux (1996).

<sup>75</sup> Day, Senge, Boston conversation, Sept. 19-21, 2000.



potential to be a center, and the center can change as the context evolves. *Ba* as a sphere is constantly moving.”<sup>76</sup>

NTT DoCoMo, a Japanese cellular phone company, is a good case in point.<sup>77</sup> NTT DoCoMo is currently the world’s most valuable and largest single-country cellular phone company, with a market capitalization of \$335 billion and 27.1 million Japanese subscribers. Its i-mode service, which allows subscribers to connect to the Internet via their cellular phones, makes it “the most advanced wireless Net access service on the planet,” according to *Business Week*. The DoCoMo product development team in many ways reflects the principles of *ba*. In January 1997, the CEO of DoCoMo chose Keichi Enoki to lead the development of a new cellular phone project. The CEO knew Enoki as a person who could think for himself. He also knew that Enoki did not have specialized knowledge about wireless technology. Enoki created a small and diverse team by recruiting in-house and by hiring external talent. From the outside he hired both an Internet entrepreneur and the editor-in-chief of a classified-ad magazine for women, who brought with them experience with young consumers and technical knowledge about the Internet. The group operated largely on its own, and Enoki served as an interface with the rest of the DoCoMo organization, which was much more bureaucratic and less entrepreneurial. Thus, the team could operate in its own cocoon as well as occasionally open itself up to other contexts and perspectives. The evolving field (*ba*) of the team allowed the members to bring in and share their context and their different interpretations of and expectations for the emerging cellular phone business. For example, Enoki perceived the emerging cellular phone business as an evolution of DoCoMo’s telecommunications business. The Internet entrepreneur saw it as a new way to connect to the Internet. The editor-in-chief envisioned it as something that would be fun for its users, not just something useful. The various content providers were encouraged to engage in a similar process of co-sensing and co-creating.

Thus, the concept of *ba* is best captured in the image of a moving sphere that transcends organizational and institutional boundaries and that lives and evolves through a multi-paced “breathing rhythm” between openness and closure, between immersion in different contexts (co-sensing) and retreat into one’s own cocoon in order to co-create the new.

## 20. Seven Principles for Changing the Quality of a Field

So, from the action perspective of the leaders, what design principles do organizations need to apply in order to evolve in high-velocity business environments? Although we do not claim to have the answer to this question, the following seven principles appear to be key:<sup>78</sup>

*Immersion—becoming fully engaged in the contexts at issue.* In the words of Brian Arthur: observe, observe, observe. All profound innovations occur in an atmosphere of

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<sup>76</sup> Nonaka, Boston conversation, Sept. 19–21, 2000.

<sup>77</sup> The NTT DoCoMo case is based on Nonaka and Toyama (2000).

<sup>78</sup> For a more detailed discussion: Scharmer (forthcoming).

immersion. In that atmosphere, or sphere, one fully observes all that is happening and is also open to ideas from outside its boundaries.

*Interpretation—becoming conscious of one’s own and other people’s views and moving across all of them with ease.* Nonaka’s principle of multi-discipline and multi-viewpoint dialogue supports the development of new interpretations. McKinsey’s Richard Foster brings artists into corporate strategy conversations to inspire new interpretations.

*Imagination—a quality of observation that involves seeing and sensing:* seeing objects and sensing emerging patterns that suggest future possibilities. The imagination, says Henri Bortoft, is an “organ of perception.” To imagine is to “redirect one’s attention,” as Varela puts it, from objects to sources and patterns.

*Inspiration and Intuition—the senses that allow one to recognize and strive for the highest possibilities.* This is the level of primary knowing that Eleanor Rosch talks about, the level of presencing one’s highest possibility. And it is the level Kahane was speaking of when he talked about the turning point of stillness in his Guatemala story.

*Intention—the alignment of one’s will with what is trying to emerge as the larger whole.*<sup>79</sup> One of the best leverages for changing the structure of organizational fields lies in the conscious use of one’s intention. “Intention is not the most powerful force” says Brian Arthur, “it is the *only* force.”<sup>80</sup>

*Instant execution—rapid experimentation and prototyping in order to capitalize on emerging opportunities.* At this stage, a laser focus on instant execution and fast-cycle experimentation and learning are paramount. Execution also means terminating experiments and options that do not work.

*Implementation—embedding and embodying the seeds of innovation in appropriate structures.* These structures facilitate the next phase of evolution, emergence, and flow.

To embody these seven principles in everyday practices, business leaders have to focus on creating three spaces that allow people and project teams to move from co-sensing (SPACE I) to co-inspiring (SPACE II) and to co-creating the new (SPACE III) in order to unleash and sustain large-scale innovation and change.

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<sup>79</sup> Senge and Jaworski, Boston conversation, Sept. 19–21, 2000.

<sup>80</sup> Arthur, Boston conversation, Sept. 19–21, 2000.

#### IV. Questions for Further Research

The following questions will be key for future research:

- How does one consciously pursue deep change within institutions without drawing attention to that effort (without programmizing it)?
- Is there a collective analogue to cultivation?
- Is there a new kind of social science and management science emerging? If so, how can its emergence be accelerated and enhanced?
- What is the role of attention, awareness, and consciousness in high-performing systems and teams, and what determines the different qualities of attention and awareness?
- What does a new social technology look like that would enable people to develop the capacity for sensing and enacting emerging futures, both individually and collectively?

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