Emergence not only publishes the work of academics but also of practioners in the field. In this issue we welcome the contributions of Richard Knowles, who shares with us some insights drawn from his 30 plus years of managing complex environments and his sharable articulations voiced while writing a new book, *The Leadership Dance*.

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Self-Organizing Leadership: A Way of Seeing What Is Happening in Organizations and a Pathway to Coherence (Part II) <sub>Richard N. Knowles</sub>

oherent organizations achieve superior business results because the people in the organization are growing, learning, and finding meaning in their work. People are more creative and full of energy. People are having more fun in their work and are gaining a greater sense of satisfaction in their contributions. Information is flowing openly and freely. Relationships are more healthy and interdependent. People know a lot about the overall goals of the organization and are doing their best to help the whole organization be more successful. People make more of a difference to each other, their customers, their partners, and the other stakeholders. People are consciously working toward a more sustainable future. People make coherent decisions. They have struggled with and gained a deeper understanding of themselves and the organization through their work together on the nine perspectives of an organization presented in Part I of this article (Knowles, 2001). People step forward to take the lead in particular tasks because they care, knowing that the only behavior not permitted is behavior that has been expressly forbidden. The organization is leaderful.

Is this some utopian vision of the future? No!

Is this really attainable? Yes!

For example, when I was a plant manager in Belle, WV, the people in the organization made considerable progress toward this way of being and living. Our earnings rose 300 percent, our productivity increased by 45 percent, our accidental injury rate dropped by 95 percent, our emissions dropped by 87 percent—essentially, every aspect of our performance improved. Creativity and energy among people rose. Our rate of change moved from one or two major changes a quarter to two or three major changes a month. Mike Murphy, a shift supervisor, spoke about what a lot of people were feeling when he said, "You know, I don't have to be different at work or at home or at church any more!" People's lives were becoming more coherent and the stress of having to live in several worlds began to lessen. Energy and creativity were bubbling forth.

#### Organizations seen as living systems

Powerful metaphors for us to use when we think about organizations and the people within them as if they are a living system can be drawn from most of the developments related to self-organization, chaos, bifurcation, sensitive dependence to initial conditions, complexity, autopoiesis, dissipative structures, punctuated evolution, artificial intelligence, complex adaptive systems (CAS), simple rules, and complex responsive processes (CRP) (Stacey, 2002). In my work in and with organizations I have seen behavior related to all of these developments, profoundly affecting the way the organizations work. Such behavior tends to be outside the normal areas of consciousness and consideration when the organization is engaged in its operational and strategic work. While many management groups don't want to concern themselves with self-organization, chaos, complexity, autopoiesis, and so on, these phenomena are happening in one way or another all the time. This is the behavior that tends to go underground and become invisible to senior management.

Fritjof Capra (1996) points out that the three key criteria for a living system are:

- pattern of organization,
- ✤ life process,
- structure.

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The pattern of organization relates to autopoiesis. The process of organization relates to cognition. The structure is a dissipative structure.

I extend these ideas to consider the following:

- Autopoiesis is related to the sustainability of an organization.
- Cognition is related to the processes of thinking and behavior of the people in an organization.
- Dissipative structures are related to the physical and nonphysical structures of an organization.

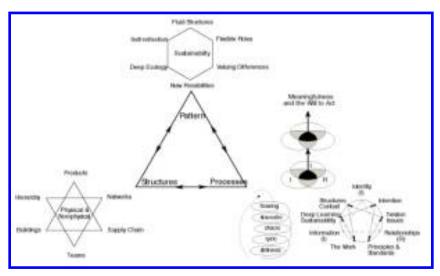


Figure 1 Congruence criteria for a living organization

These ideas are summarized in Figure 1. The patterns, processes, and structures are interacting all the time as each informs the others. The interactions are dynamic and emergent behavior is experienced continuously. Much of what we have learned from chaos, complexity, CAS, and CRP helps us better understand these patterns, processes, and structures of organizations.

## Self-organizing leadership

More and more we are coming to realize that the most effective leaders are those who are able to open up conversations among the people in their organizations, releasing creativity and energy. These are leaders who know that their organizations behave more like living systems than machines. They believe in the inherent creativity and vitality of most people. At the moment most leaders who use this approach are doing so intuitively. But as the theories of chaos and complexity continue to develop, more and more leaders and managers are finding these ideas useful tools as they learn to lead their organizations more effectively. This newly emerging way of managing and leading is a complement to the better-known forms of strategic and operational leadership and management. I have recognized this as a distinct and important area for further study and development by leaders and managers and have termed it "self-organizing leadership®."

If we use the metaphor of a tree, the leaves and the little branches holding them, reaching out into the open air, can be considered as strategic leadership. They are reaching to the future, just as we need to do in our work of strategic thinking. Continuing with the metaphor, the trunk and main branches hold everything up, providing nutrient flows through all parts of the tree. We can consider the trunk and main support branches as operational leadership and management. The part of the tree that is usually ignored is the root system. This is invisible and taken for granted. Yet the roots are where we are supported and grounded. They hold us up and help to nourish us. We can consider the roots as being like self-organizing leadership.

Effective leaders need to have a wide range of knowledge and skills. They need a solid understanding of their basic business technology, such as chemistry, agriculture, aviation, and so on, and business practices like marketing, sales, accounting, manufacturing, human resources, legal and regulatory requirements. These business technologies and practices are the visible aspects of work that are seen and used every day. In the tree metaphor, they relate to the leaves, branches, and trunk.

To be most effective, leaders and managers need to understand and use self-organizing leadership and understand what I call the "leadership dance" (Knowles, 2002). This is the work related to the roots, the often-neglected part of the system. We can begin to see what is going on here when we look at the patterns and processes operating within organizations.

In Part I of this article (Knowles, 2001) some patterns and processes were introduced that are basic to developing an understanding of the leadership dance. The web presents a way to look at organizations from nine different but interconnected perspectives. Within the web are a multitude of potential patterns and processes, including the commandand-control process, the process (or domains) of self-organization, and the process by which work takes place. Another pattern shown was where Emergence

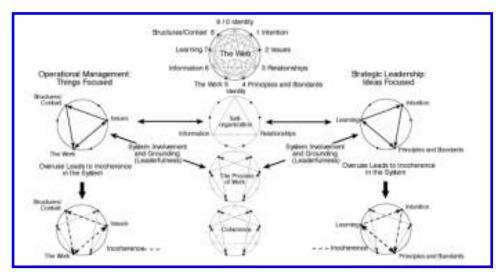


Figure 2 Overview of the living systems processes

the process of self-organization and that for work are integrated, called the process enneagram.

These patterns and processes as well as other important ones are summarized in Figure 2.

#### The leadership dance

The self-organizing leadership processes shown in the central column of Figure 2 lead to more coherence. These are the processes of self-organization and work that, when combined, become the process enneagram. Figure 2 also shows the necessary balance among, and the interplay with, operational management processes on the left-hand side and the strategic leadership processes on the right. These patterns and processes are all within the web. The web is a way of seeing organizations as a whole, and in its unity we can see all the multiplicity of the leadership processes.

In this article the terms "operational leadership" and "management" refer to working with specific things and events whether they are happening now or in the future. "Strategic leadership" relates to working on future possibilities. When a selection from among many possibilities is made, the work moves from a strategic leadership process into operational management and implementation. For example, when considering the idea of traveling to new places, that work is strategic leadership. Having chosen a particular trip and begun the detailed planning, the work becomes operational management.

In practice, strategic and operational distinctions become blurred because of their endless interaction. Complexity theory teaches us that the old ways of strategic planning break down because of these complex interactions. Operational management—that is, working with things and events to make sure that things get done—and operational leadership stepping out and taking the initiative to get things done (just get up, get going, and do it)—are also intertwined. It is best to keep both of these ideas in mind because operational work requires both of them to happen.

In the complexity in which we live and work, it is necessary constantly to use both operational and strategic processes in dynamic balance with the central, self-organizing processes in order for the people in the organization to be coherent and to function well with an abundance of energy and creativity. This ability to be continually conscious of what is happening, knowing when and which processes to use, is the leadership dance.

When we use the operational management approach, for example, we need to be quite explicit with the organization about what we are doing. For example, in a recent Niagara Falls, NY leadership team meeting with the mayor, city administrator, and all the department heads, the city administrator issued a directive about a specific, critical issue. Since he wanted to be clear that he wasn't reverting to a command-and-control mode, he asked each department head and the mayor to explain what he or she was doing as it related to the process enneagram model they are using to lead the city. Each person talked about the directive and how it was consistent with and made sense of the model. They all understood the need for the directive and the use of this approach to leading in this situation.

### Incoherent leadership

All of our leadership processes have weaknesses. If we overuse either the operational or the strategic processes, or fail to connect the self-organizing processes to real work of importance to the people in the organization, we begin to create problems and drive the organization into incoherence.

In the command-and-control process that results from overuse of operational processes, incoherence usually emerges around the issues, because what managers are saying doesn't make sense to the people having to do the work. For example, when the management announces a new

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initiative, often the first thing that happens is that people begin to raise lots of questions and issues about the initiative. Why do it? Where's the money coming from? We don't have time. What will happen to me? Managers see this as resistance to change, so to get on with things they force a change in the structure, reorganizing and moving people into different jobs. They then impose new or different work on people. But since most people don't like to get shoved around, they push back. Since the questions and issues they have raised are often poorly addressed, people are not only upset over the changes, they don't understand why they even have to make them. The levels of confusion and tension get very high, often diverting everyone's attention away from the fundamental need to change. The level of incoherence goes up and energy and creativity go down.

Incoherence in strategic leadership processes occurs when the leaders and managers are restrictive, closed, and exclusive. For example, a few years ago the quality movement was initiated. With the effort to improve quality and lower costs, a new language and elaborate, complex procedures were imposed on people. New principles and standards of behavior around quality-control issues were imposed with little broadbased understanding or support for why these were really necessary. People had to learn really new ways to do their work. They often felt that the quality efforts being imposed were getting in the way of doing the real work that they thought they were supposed to be doing. Many times the quality initiatives were in conflict with established work-incentive programs. Elite quality gurus were assigned to lead the effort and to make people conform to the new quality principles and standards and the additional work requirements.

Incoherence showed up around learning when the new principles and standards that the leaders and managers were preaching and imposing didn't make sense to the people actually living in the system and trying to do the work. In this environment people's energy and creativity shut down.

Incoherence in self-organizing leadership processes occurs with a failure to connect self-organizing processes to work that is important to the people in the organization. This leads to an excessive amount of time being spent going ever more deeply into the esoteric aspects of identity, relationship, and information. People take their eyes off the important, concrete work that the organization needs to do, so things start to degrade. Energy and creativity melt away.

In all situations where leadership processes are misused, the espoused values and principles of behavior that the leaders preach and those actually in use—the invisible undiscussables—are in deep conflict. This is the management trap, as Chris Argyris calls it (Argyris, 2000). The defective practices described above show up in what he calls Model I organizations (see also Knowles, 2001: 117–18).

# Coherent leadership

Our goal needs to be a dynamic, healthy balance of strategic and operational patterns and processes, centered on the self-organizing leadership patterns and processes. The use of the process enneagram is an effective way for the organization to become much more coherent. We begin to be more like what Argyris would describe as a Model II organization, where the espoused theory and the theories-in-use are more nearly the same. The people in organizations like this are more coherent and their energy and creativity flow abundantly.

Leaders must be centered in the self-organizing leadership processes while simultaneously using the operational and strategic processes as the dynamic, changing situations in their environments demand. In this way of leading, the organization is alive, vibrant, and far from equilibrium, with energy and creativity bubbling forth. Moving among self-organizing, operational, and strategic processes is the leadership dance. This demands that the leaders and all the other people in the organization be more conscious, paying careful attention to what is happening around them, both inside and outside the organization. Effective leaders engage the people in the organization to address the challenges they face, so this is not a case of dancing around trying to avoid serious issues.

Where do people begin? How can people step into this way of leading? It begins with a focus on the four most important aspects:

- Developing more flexibility in their roles.
- Paying attention to what is happening around them and thus being able to learn from and respond to what is emerging.
- Developing measurement criteria and tools so that they can be sensitive to the potential impact of the changes on and in the organization and their environment.
- Encouraging them to move relentlessly toward building more sustainable organizations and a more sustainable world.

### Role flexibility within leadership

Perhaps the most important and challenging role in any organization is that of leading. What is the right style or styles? Who makes the decisions? Is participation or command and control more appropriate in a particular situation? It is important that people in the organization understand that the necessity for leaders to move among different roles and styles is important for the organization's survival, and that it is not a sign of weakness or a lack of clarity or purpose. A flexible leadership style is a very complex mode of operating for an organization and its people. But if the work the organization has done with the process enneagram is visible and used and people's behavior is grounded in strongly held principles and standards that have been co-created, everyone will learn to function quite well.

At first, beginning to lead with this kind of flexibility feels a little disorganized and chaotic, but it is an important way to achieve maximum leadership effectiveness. As organizations initially begin to move through the transition from a machine to a living system, the message for leaders is often seen as: "Stop being top-down, autocratic drivers and become relationship builders, team builders, and do everything by consensus." There seems to be a feeling that if the leaders don't do everything in a participative way, they have somehow abandoned the "new religion." We all have a strong tendency to view the world in a polarized way, thinking that it is either command and control or total participation. However, it is not either/or, but rather both/and (illustrated in Figure 2).

As we become more flexible and mobile in our roles, people around us begin naturally to expand their roles, taking on more responsibility for the wellbeing of the whole organization. This can lead to some really interesting surprises, but we don't need to be fearful of the organization falling apart. When people have a good shared sense of the organization's identity and culture, then increased flexibility and expanding roles become quite effective.

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In the leadership dance we live in an environment where a lot of things are happening all of the time. People interact with each other, with the immediate environment of equipment and things, with the external world of customers, competitors, and neighbors. They interact with the patterns and processes of behavior like those illuminated by the process enneagram and experience the rhythms of change (Knowles, 2002: Chapter 8). In all these interactions, novelty is created and new things happen. We cannot predict exactly what these will be because so much is going on. Who can establish just what caused what?

A high level of consciousness is required. It is critical to pay attention to what is going on and emerging. Leaders and managers play a key role in setting the conditions embodied in the principles and standards *actually* in use. Helping to set the conditions is essential leadership work. Depending on the level of openness and involvement, different behaviors will emerge from self-organizing, operational management and strategic leadership processes (Knowles, 2002: Chapter 10).

#### Measuring the whole system

In addition to role flexibility and paying attention, leaders must have a good sense of how the organization as a whole is doing and how fast they are moving. While I was the plant manager at the Belle Plant and we were well into our journey, we sensed that matters were going very well. Many plant units were running better. There were fewer disciplinary problems. Safety and environmental incidents were declining. There were fewer quality problems. Our overall sense was that we were doing a lot better, but the only data we had was on the parts. How was the whole of the enterprise running?

I had just read Bart Kosko's book Fuzzy Thinking (1993) and H. Richard Priesmeyer's book Organizations and Chaos (1992) and I began to wonder if we could use fuzzy, not sloppy, thinking to measure our system. Kosko talks about qualitatively measuring things to see if they are about right. For example, asking if the carpet is clean enough after we've run the vacuum cleaner over it. Priesmeyer talked about chaos and considered how things affect each other in an organization. In his examples he looked at earnings, investment, and the growth of organizations. I began to wonder what would be seen if we tried to get some qualitative sense of the impact on the organization of all the changes we had made over the previous five years. We needed something simple that would lend itself to a fuzzy thinking approach. We decided to try to assess the impact of all the plant-wide changes and found simple, fuzzy ways to make some judgments about how things were changing. The maps we developed gave us deep insights about how we were doing (explored more fully in Knowles, 2002: Chapter 10).

#### SUSTAINABILITY

The ideas about sustainability and living systems are deeply interconnected. The upper part of Figure 1 shows the six attributes of sustainability. Leaders need to pay attention to whether the changes being proposed are leading toward more fluid structures and more flexible roles. They also need to be open and attentive to the changes around them and value these disturbances as a source of valuable information. They need to pay attention to the changes they are making and ask themselves whether or not they are enhancing the health of the systems around them. They need to take the time to engage their organizations in conversations about what they are doing and learning. And finally, they need to provide time and space for everyone to have the chance to explore new possibilities. Leaders create the conditions for these things to take place.

#### CONCLUSION

Leaders learning to use the self-organizing leadership approach know the importance of deeply involving people. They know the importance of sharing information, developing relationships and interconnections, and inviting people to be partners in co-creating their future. They know the deep value of having people engaged, even though they may not have quantitative data to support this nor, often, the language to talk about it. They also know that while they need to be centered in the self-organizing approach, from time to time they need to get quite operational to deal with immediate issues. They know that there is a need to move among the various leadership approaches as conditions and circumstances change. Leadership is a dance requiring a high level of consciousness on the part of both the leader and the other people in the organization.

Complexity and other ideas from science offer these leaders many insights into the dance and provide useful metaphors for what is happening in organizations. Self-organization, ambiguity, paradox, bifurcation, entropy, free energy, dissipative structures, sensitive dependence to initial conditions, strange attractors, and so on are ideas that I have found useful.

This article offers a way of seeing what is happening in the organization and how we can stay consciously in the leadership dance. It provides some models and language that we can use to help us create more coherence in our organizations. This is consistent with the ideas flowing from the work on CAS and CRP. The work described in this article is based on almost 20 years of having led and now successfully teaching organizations how to do this. This approach is simple, fractal, and easy to use. It works with all sorts of people with various levels of education, ranging from those who couldn't read to college professors—almost everyone gets it.

In this process of discovery we can see what is happening and together take the necessary steps to work our way through the challenges and issues facing us. In the process people come alive, energy flows, and creative solutions emerge.

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