BOOK REVIEW

A review of *Complex Responsive Processes in Organizations: Learning and Knowledge Creation,* by Ralph Stacey, 2001. London, UK: Routledge, xii + 243 pp. ISBN 0-415-24918-8. \$56.95 USD

Reviewed by CAMERON D. NORMAN *University of Toronto (Canada)*

Complex Responsive Processes in Organizations: Learning and Knowledge Creation (Stacey, 2001) may be the most significant book I've read in the field of complexity science as it relates to human behaviour—ever. It also deserves to be considered among the most important books to explore the way organizations, or rather the people within them, learn and create knowledge. These are strong statements when one considers the depth of scholarship that has emerged in the past few years in systems thinking, knowledge and management sciences, and education (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Mingers, 2006; van de Ven & Johnson, 2006). The book, no longer a new release, is an easy one to miss, but hard to ignore once the reader dives into the arguments put forth within its slender 243 page frame.

While I believe this is an important book, it is not the most enjoyable read. That is not to suggest that the writing is at all problematic, or that it is poorly organized (neither is the case here), rather it is the sheer expanse of fields included in the book, the complexity of the ideas, and depth of the exploration that sometimes makes for slow, difficult reading. Yet, such effort makes the destination worthwhile and the journey an instructive one.

The introduction and second chapter provide a foundation for even a novice academic reader to this area in laying out the terrain of knowledge creation and learning scholarship to date. Stacey begins by mapping the relationships between the various perspectives on "knowledge creation systems" and how individual's mental models and actions interact within a larger social structure or cultural environment to generate what is known. This includes common descriptions of tacit and explicit knowledge, and a tendency to focus the attention on goals, management of knowledge/learning, and

control of information. These approaches are incongruent with those that seek to create environments closer to the "edge of chaos" rather than tightly controlled ones.

Chapter 3 continues with author's survey of the field and begins to carve out his perspective by illustrating how the individual and the social are distinguished within the literature and complexity science more generally. This is where Stacey takes a reader of complexity science into unfamiliar territory, particularly with a long discussion of psychoanalysis and its role on individual behaviour as expressed within groups. While Stacey continually refers to organizations, it is here and in the following chapter that he stresses the need to view organizations or any collective activity as created by individuals working together, not as some larger entity.

This emphasis on individuals within systems, rather than organizations, is what distinguishes Ralph Stacey's thesis from nearly every other book in this area since Peter Senge (1990) popularized the term "learning organization" in the early 1990s. Stacey brings the conversation full circle and ends up at a place that few systems-oriented texts wind up, placing the focus of learning, collaboration and knowledge development within the minds and bodies of individuals; independent agents of action. This focus on individuals sits counter to much of the literature that has developed on learning organizations and communication (Belanson, 2000; Chawla & Renesch, 1995; Dhanaraj, Lyles, Steensma, & Tihanyi, 2004; Wenger, 1998; Wenger & Snyder, 2000), which emphasize, as much of systems thinking does, the macro-level patterns that emerge from social interaction rather than on the individual as the focus of complexity. Instead, this book comes closer to the work of Brown & Duguid (1991; 2000) or Nonaka (1994) who view a tighter connection to the dynamic, contextually-bound relationships in which knowledge is produced, or the more recent evolution of these ideas towards the concept of knowledge integration (Best, Hiatt, & Norman, 2008). Yet, he goes far beyond that towards exploring the mechanisms of these relationships, including gestural responses, tools and artifacts, feeling states, bodily sensations, and habits (see Chapter 4, page 97 for his model of knowledge-based interactions). This is a truly embodied perspective on individuals within or as organizations, blending concepts from language development, psychoanalytic theory, and complexity science together.

Chapter 5 illustrates the ways in which these multiple factors interrelate within the practice of everyday organizational life. Through a series of personal reflections and case studies, Stacey demonstrates the way in which this embodied, gestural process of communicative action is lived through the use of symbols. Chapter 6 looks closely at the rules of language and how they structure communication within an organization. Here, concepts more familiar to the student of complexity science are brought into the discussion such as paradox, mutual influence, emergence and self-organization and are continued into Chapter 7, which positions this argument within the context of power relations. Here, Stacey argues "communicative interaction patterns itself in a self-organizing way in which patterns emerge from patterns, constituting the history of the interaction" (p. 147). This history serves as the foundation for rules and structures, while agency "is patterning process forming while being formed" (p. 147). Within these two processes power is created and maintained depending on the patterns that are

replicated—or not—and how one views themselves in relation to such patterning. Through further case studies, Stacey demonstrates how this plays out, showing how organizations can both entrench practices and how they can be broken by the way individuals replicate or resist pattern development in their interaction. This pattern development can result in exclusion/inclusion, development of ideology and occur at both the conscious and unconscious level.

Chapter 8 concludes the second section of the book and brings together the individual with the organization. By illustrating how clustering—of people, ideas, and ideologies—takes place within organizations, one can begin to develop strategies to enhance learning. Stacey refers to Kauffman's (1993) work on simulation of complex systems as an illustration of how the number of connections between agents within a system determines its dynamics. Few connections between agents encourage repetitive patterns and thus, stability. However, many connections introduce competing constraints and lead to instability.

The final two chapters bring together the arguments, however inconsistently. Chapter 9 provides a summary of the book's primary arguments, while Chapter 10 is designed more for managers who are seeking ways to take Stacey's ideas into the field of practice in management sciences and educational environments.

One of the central strengths of the book is that it is firmly grounded in the literature. The author has done a masterful job of taking the various strands within the vast, complex, and disorganized "field" that goes by various names from knowledge management (Rubenstein-Montano et al., 2001) to knowledge translation (Graham et al., 2006) to education and learning. Almost every chapter starts with a summary of the "mainstream" position and its central tenets. This alone makes this book an indispensable guide to the field. Yet, it is this strength that also serves as a weakness in parts of the book. Stacey is so thorough in presenting the arguments that he seeks to critique that, at some points in the text, the reader may be left forgetting what Stacey's position is. Indeed, in some chapters, more than one third is devoted to summarizing the central argument put forth in the established literature. Combined with his frequent references to what is the status quo, a reader could be forgiven for not recalling what Stacey's unique take is on the topic at hand.

Whether Stacey's arguments about organizational learning being rooted in the individual and their relationships holds up over time is a question to consider as the arguments put forth in the book are debated. However, try as I might, I have not come up with reasons to seriously question this perspective, which might suggest a kind of clarity and thoroughness of the argument put forth in the book. Stacey achieves a rare feat with this book by connecting social, educational and organizational psychology to systems science in a pragmatic manner, but also providing a platform for greater discussion on the very nature of complex systems in human activity. It is this latter reason that prompts me to consider this among the most important texts in systems science and human behaviour to date.

My copy of *Complex Response Processes in Organizations*, obtained brand new, is now dog-eared with "flags" stuck throughout it indicating something of high importance and

is a testament to the importance of this text in reframing the discussion of systems and individuals within the context of learning.

References

- Belanson, A. T. (2000). Leading the learning organization. Albany, NY: SUNY Press.
- Best, A., Hiatt, R., & Norman, C. (2008). Knowledge integration: Conceptualizing communications in cancer control systems. *Patient Education and Counseling*, 71(3), 319-327.
- Brown, J. S., & Duguid, P. (1991). Organizational learning and communities of practice: Toward a unified way of working, learning and innovating. *Organization Science*, 2(1), 40-57.
- Brown, J. S., & Duguid, P. (2000). *The social life of information*. Boston, MA: Harvard Business School Press.
- Chawla, S., & Renesch, J. (Eds.). (1995). Learning organizations. Portland, OR: Productivity Press.
- Dhanaraj, C., Lyles, M., Steensma, H. K., & Tihanyi, L. (2004). Managing tacit and explicit knowledge transfer in IJVs: The role of relational embeddedness and the impact on performance. *Journal of International Business Studies*, 35, 428-442.
- Graham, I. D., Logan, J., Harrison, M. B., Straus, S., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: time for a map? *The Journal of Continuing Education in the Health Professions*, 26(1), 13-24.
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly*, 82(4), 581-629.
- Kauffman, S. A. (1993). Origins of order: self-organization and selction in evolution. Oxford, UK: Oxford University Press.
- Mingers, J. (2006). Realising systems thinking: knowledge and action in management science. New York, NY: Springer.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14-37.
- Rubenstein-Montano, B., Liebowitz, J., Buchwalter, J., McCaw, D., Newman, B., & Rebeck, K. (2001). A systems thinking framework for knowledge management. *Decision Support Systems*, 31(1), 5-16.
- Senge, P. (1990). The fifth discipline: The art and practice of a learning organization. New York, NY: Doubleday.
- Stacey, R. D. (2001). Complex responsive processed in organizations: Learning and knowledge creation. London, UK: Routledge.
- van de Ven, A. H., & Johnson, P. E. (2006). Knowledge for theory and practice. *Academy of Management Review*, 31(4), 802-821.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge, UK: Cambridge University Press.
- Wenger, E., & Snyder, W. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*(January-February), 139-145.

[©] Copyright 2009. The author, CAMERON D. NORMAN, assigns to the University of Alberta and other educational and non-profit institutions a non-exclusive license to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive license to the University of Alberta to publish this document in full on the World Wide Web, and for the document to be published on mirrors on the World Wide Web. Any other usage is prohibited without the express permission of the author.