Facilitating Organization Change

Lessons from Complexity Science

Edwin E. Olson and Glenda H. Eoyang

Foreword

In the mid-1990s, an issue of Fortune magazine had an unusually arresting cover. It was two pictures, actually-one above the other. The upper picture was of a group of half-dozen or so men in bathing suits, sitting disconsolately with backs to each other on a raft-like contraption that was obviously sinking. The picture below it was of a similar group on a raft, only this time they were happily facing each other as they paddled their buoyant and well-constructed craft across a lake.

The story inside was about new ways of conducting executive development programs in corporations. The two groups on the cover were all executives from one Fortune 50 company. They had each been given identical sets of materials and time limits to build a raft that would take them across a lake. There was only one difference: To build their raft, one team was required to follow all of the company's policies about new product development, planning, budgeting, and organizational structure. The other team-the happy crew of the seaworthy raft-had been left free to proceed in the best way they saw fit.

No doubt both the participants (and more broadly the whole field of executive development) could take many lessons from this experience. It certainly would have been unforgettable; and it is indeed an extremely ingenious exercise. Moreover, it is not an exaggeration to say that, over the years, many similar stories have accumulated, whether as training designs or formal research findings: The lessons are about the power of participation; about the energy that is released when command-control, top-down management is reduced or removed; about the innovations that emerge when formal structures are made more flexible and responsive; and about the capacity of teams to gel around a shared vision and to exhibit extraordinary determination to fulfill that vision.

Experiments with "self-managing teams"-or what in this book are called "self-organizing processes"-have been around Western management practices for forty years or more. Maytag, for example, was building washing machines with five-person teams alongside its 180-person assembly line in the early 1960s. IBM used self-directed teams to build Selectric typewriters in the same years. Volvo famously employed small teams to build whole automobiles, and, in Yugoslavia, workers were designing their own jobs and electing their own supervisors as part of the so-called "industrial democracy" movement. More recently, an entire book of examples of self-managing teams has been published.1 Probably the most dramatic examples in the entire genre are the "skunk works" that Tom Peters and Bob Waterman discovered and vividly documented in various companies2: "If you want high performance from a team," goes the message, "give them the problem, give them a deadline, give them some resources (they'll scrounge a lot more, of course), and leave 'em alone!"

Human innovation, team work, and commitment above and beyond the expected is so impressive and so charming when it occurs, and we have seen it so often, that we may

well forget to ask two all-important questions: First, why do self-

managing (or self-organizing) groups work at all, let alone so well? And second, how do we help an organization move toward self-organizing conditions, because after years of tight structure and top-down control, it is rarely clear to those involved that removing a lot of the controls and red tape will achieve anything in the longer run but anarchy.

1Charles C. Manz and Henry P. Sims, Jr., Business Without Bosses. New York: John Wiley, 1993.

2Thomas J. Peters and Robert H. Waterman, Jr., In Search of Excellence. New York: Harper and Row, 1982, p. 211.

Edwin Olson and Glenda Eoyang, the authors of this landmark book, have provided convincing concepts and theory to answer both of these questions. They have made self-organizing abilities and processes, not just one tool in the change consultant's bag, but instead the basis for an entirely new approach to organization change itself. Self-organizing is the fundamental thing we need to understand and to learn to work with.

Both authors are experienced organization change consultants, and they know all the traditional theories and practices first-hand. However, in this book they are trying something quite different: They seek to provide the organization change and development field with a new theoretical foundation on which to work with contemporary organizations. As the authors demonstrate thoroughly, present and future organizations will be sailing in waters of unprecedented complexity and instability. The old (what the authors call) "Newtonian" models are simply insufficient for the task.

As noted above with respect to self-managing teams, the organization change and development field-the OD field for short-is no stranger to experiments that try to release energy that is blocked by bureaucratic rigidity and oppressive management. Many ingenious experiments have been tried-to improve lateral communication; break down departmental silos; increase trust among disparate groups; improve the up and down flow of communication through more careful listening; design work that rewards more than mere creature needs; develop structures that are more flexible networks and matrixes; improve the learning climate in order to make the organization more adaptive.

In short, change consultants have indeed been inventive about the contemporary problems of organizational life. But this inventiveness has tended to be ad hoc and intuitive, rather than systematic. Moreover, the change field has not evolved a research tradition by which the various innovations could be reported and reflected on in a systematic and cumulative way. Finally, I can't prove it, but I think it is also pretty much true that the change innovations that have been created have tended not to continue to produce positive results for the organization for much beyond a year or two of their introduction. As is well-known, new senior management often discontinues some innovation that was put in with the help of a change consultant, and sometimes has fired all of the internal change agents as well. Changes that work well in one part of an organization are often not transferred to other parts. In general, there are few if any organizations of which it can be said that they are regularly and routinely managing themselves in their changing environments with a conscious, systematic approach to change. Yes, there are many intriguing initiatives, but few that stay the course for very long.

Why might this be? I think the present authors might argue, and if they did I would agree, that without a theory or model of the organization that is adequate to the situation

the organization is in, planned change is always going to be a kind of random jabbing at the system. Research will tend not to evolve beyond interesting case studies to a body of knowledge about organization changing. Change projects will indeed fade away if organization members have not learned to think fundamentally differently about their system as part of the change-because learning to think fundamentally differently about the system is what the present times call for. Years ago, my colleague Jerry Harvey used to say, "The theory is the intervention." If theory is ad hoc and intuitive, it is not surprising that deeper, more sustained change does not occur.

These are the times of paradigm shift. But as Thomas Kuhn says somewhere, you often don't know the paradigm has shifted until well after people have begun to do their work and conduct their inquiries on the new basis. The old models are too deeply engraved in people's thinking. It takes time to understand at a conceptual level the kinds of intuitive insights change consultants have been having for the last couple of decades.

Olson and Eoyang are among the first to apply the principles of complexity science directly to the kinds of problems and situations that the OD field has always been concerned with. Over the past decade and a half, there have been several books about chaos and complexity science; these are discussed by the authors and listed in their bibliography. But until now, there has not been much work at the concrete level of how one is actually going to work with a client organization using ideas about "complex adaptive systems" as a base. That is what this book does, and as such, it really launches a new era in the field of planned organization change.

It is interesting to me that the authors manage to write their entire book without needing to dwell at great length on the interpersonal skills that are required of the consultant. The history of the OD field, of course, is replete with detailed discussions about the consultant's interpersonal skills, and a full measure of these abilities would be on anyone's list of requisite competencies. Olson and Eoyang clearly consider these competencies important, but they almost take it for granted that a consultant will possess these abilities to a high degree. The authors are really after another dimension of the consultant's behavior-the individual's frame or theory or conceptual basis for thinking the organization can change at all.

In the more traditional model, the possibility of change at all was not thought to rest on whether one understood the organization in the first place. Instead, it was assumed the organization was understood, but that the human relationships within this essentially pyramidal structure had to be improved. The way this would occur was through training and coaching in interpersonal skills, and by learning relatively simple psychological theories such as those of Maslow, Herzberg, and Rogers. Individual managers would learn to stop creating negative feelings in their associates, would learn to stop violating principles of good communication, would learn to stop assuming that people had to be told exactly what to do and. . .the organization would change. This approach-a bit simplified admittedly-didn't really presume organization development at all! It presumed development of human relationships within the organization.

It seems to me that it has become clearer and clearer in the past two decades that "organizations" are not the Tinker-Toy," pyramidal structures that are so deep in our cultural psyche. "Organizations" might be modeled under some conditions as simple pyramids, but for at least thirty years the actual, concrete entities called "organizations" have found they could not do what needed to be done in that mode. So all kinds of informal structures and processes and channels and practices have had to be invented in order for work to get done, for requisite communications to occur, and for high quality

human attitudes and actions to emerge.

"Complex adaptive systems" (CAS) theory is a new vessel, so to speak, that renders visible, legitimate, and significant a great deal more live human behavior than the older bureaucratic structures can countenance. A CAS is an entity that is going to change! It is going to evolve, adapt, develop, and exhibit extraordinary ingenuity in the process. All kinds of forms of human energy that are invisible and often taboo in the older structures are going to be present and available for engagement continually. Complex adaptive systems ideas are ways of talking about human systems that don't presume a lot of heavy-handed "leadership" and "management." Complex adaptive systems aren't on automatic pilot, of course; human judgment, creativity, and passion are as present as ever. But they are present as part of the system, woven into its essence, rather than as some add-on supplied by a "transformational leader" at the top, or an inspirational guru-consultant from the outside. For consultants, by the way, this means a more profound relationship to the system than older models that pretty much had the consultant as a detached free agent.

Olson and Eoyang are trying to help us look at the basic stuff of a human organization differently-especially a human organization in a turbulent and rapidly evolving environment. They draw their ideas from many sources, including, as I said above, the history of OD itself. But they also are out to introduce some ideas from chaos theory and complexity science that have never been an explicit part of the OD field.

Interestingly enough, one of the most powerful elements of the OD tradition-the so-called T-group or sensitivity training group-is not nearly as well-explained by OD's own traditional theories as by complex adaptive system theory! Amazingly, OD has as powerful a demonstration of the efficacy of CAS theories as it could possibly want right on its own professional doorstep! Using the author's three fundamental characteristics of self-organizing processes, we can say that a T-group is (1) a very special kind of "container" in time and space that needs to be very carefully created and sustained; within which (2) the true individual "differences" that make each human being special and unique can blossom alongside each other and energize each other, without any pressure to homogenize into each other; and that this occurs because of (3) a series of "transformational exchanges" that tend not to occur in a sustained, group-level way anywhere else. The result of the ongoing operation of these three characteristics is a guaranteed, but impossible to predict, self-organization of this type of grouping wherein no two are alike, yet all are interesting, memorable, and life-changing. Significantly, anyone experienced with these groups will say that if you want to guarantee failure in one of these settings, you will try to manage and control it. You have to "trust the process." As I have noted elsewhere,3 it is unfortunate that the OD field never asked why we can trust the process, and instead left it as a rule of thumb. Complex adaptive systems theory explains why we can trust the process. Even more importantly, the authors show how we can trust the process of self-organizing on a much wider variety of organization problems. An organization does not have to be a T-group for there to be processes to trust, but we do have to learn how to think about a complex adaptive system in order to perceive what these processes are. This kind of learning I consider to be this book's most important contribution.

3Peter Vaill, "Integrating the Diverse Directions of the Behavioral Sciences." In Robert Tannenbaum, et al., Human Systems Development. San Francisco: Jossey-Bass, 1985, p. 562.

As a final observation, I would like to mention a personal significance for me of the authors' work. As some readers know, I have for some years myself been writing and

speaking about rapid, chaotic change, under the rubric of "permanent white water." I have developed many vivid examples of these conditions in organizations and their environments. I define "permanent white water" as a continual succession of surprising, novel, ill-structured, and messy events, which force themselves on a manager's attention and which, as an ongoing kind of disruptive event, cannot be planned out of existence. As I like to say, we're never going to get back to paddling our canoes on calm still lakes (read "orderly organization structures"), where we can pretty much go where we want to go, when and how we want to do so.

But there has always been a problem with the concept-at least until my exposure to complex adaptive systems thinking. How does anything get done in permanent white water? That's the problem. How do we still work productively in the midst of the swirl? What happens to the setting and pursuit of objectives? What becomes of acting intelligently in the midst of so much paradox and contradiction? What are the managerial and organizational equivalents of shooting an endless string of class 5 rapids, of making it through more or less in one piece and having some fun in the process? How are we to think of "leadership" in such contexts?

I have had a few ad hoc ideas, as has the OD field I've been a part of, band-aiding some concepts and rules of thumb because I didn't know how else to proceed. But I have never been satisfied with my ability to talk about taking action in permanent white water. Olson and Eoyang by no means have provided me with a complete recipe for action in complex adaptive systems, but the many ideas they do share in this book derive from a more consistent frame than I have found before, a frame moreover that is itself the object of much creative reflection and research, which means it will become richer and more powerful in the months and years to come.

This book is a kind of conceptual call to arms for thinking about organization change. Quite properly it is full of specific "best practices" in complex adaptive systems that managers and consultants can use to do what the authors advocate. But even more importantly in my view, Olson and Eoyang introduce us to some new "best theories" that are going to be shaping our thinking about human organizations for quite some time to come.

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