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The Potential of Talking and the Challenge of Listening by Adam Kahane

Why is it that so often our talking fails and we end up trying to solve our tough problems by force? Regardless of the venue, when people become stuck in complex problems, they often can't even agree on what the problem is, so the situation just replays over and over again. Sometimes difficult problems get solved by force: The people with power—parental authority, executive positions, dollars, guns—impose a solution on everyone else, in some cases at terrible human cost. But sometimes the people involved take on the difficult work of coming to a peaceful solution.

Diverse teams of people in troubled regions, including South Africa and Guatemala, have grappled with some of the toughest conflicts in the world by talking and listening in new ways. The ordinary ways of talking and listening, *downloading* and *debating*, work fine for solving simple problems. But to solve complex problems, we need to use novel conversational forms such as *dialoguing* and *presencing*. By being aware of these different ways of interacting and having the capacity to move among them, we can become more effective in how we approach our thorniest problems.

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Systems thinking—and the range of tools associated with it—can lead to rigorous assessments and effective actions on issues that range from personal dilemmas to the biggest challenges confronting our world. But despite its promise, the field has had a surprisingly limited impact until now, perhaps because practitioners in particular areas sometimes imply that their approach is the only valid one. Fortunately, the whole spectrum of activities that stem from a fundamental understanding of systems can add value by offering insights far beyond traditional linear thinking. By using these tools to full advantage, we can change lives, improve businesses, help economies, and maybe even save the planet.

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What is your organization's true purpose? In his new book, *Who Really Matters: The Core Group Theory of Power, Privilege and Success* (Doubleday, 2003), Art Kleiner contends that the primary purpose of organizations is not—as most of us believe—meeting customers' needs, fostering innovation, or making a better world. Rather, organizations are set up, first and foremost, to fulfill the perceived desires and priorities of a "core group" of people. As such, the success or failure of the firm—and its ability to change—is determined by the behavior of this key set of individuals. Kleiner contends that, with this knowledge, we can improve our decision-making and how we work together.

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THE POTENTIAL OF TALKING AND THE CHALLENGE OF LISTENING

BY ADAM KAHANE

This article is adapted from Adam Kahane's keynote presentation at the 2003 Pegasus Conference, "Changing Our Organizations to Change the World: Systems Thinking in Action." Click here for information about video and audio recordings.

"If you're not part of the problem, then you can't be part of the solution."

—Bill Torbert

In December 2002, the entire world was arguing about what to do about Iraq. There were two sides to the argument. On one side, most of the world's leaders and most of the countries on the United Nations Security Council argued that we needed to keep talking, with each other and with the Iraqis, to try to find a peaceful solution to this tough, complex problem. On the other side, the U.S. government and its allies argued that talking could not work and that force was the only way to solve this problem. The second side prevailed, and the war started.

While this was happening, I was at my home in South Africa working on a book about how we can solve such tough, complex problems through open-minded, open-hearted talking and listening. Then my youngest stepdaughter, who is 27 years old, came home for the holidays and immediately lapsed into her old teenage behavior. She would go out without telling us, stay out partying until late, and sleep away the day. One evening she had spent hours on the phone having a weepy conversation with an old boyfriend. I was furious! I told her that this kind of behavior was absolutely unacceptable and that she needed to change what she was doing if she wanted to use my phone and stay in my house.

That approach didn't work. The next morning she left and went to stay with her sister. I had managed to do in my own home what the Americans were doing in Iraq. I had tried to solve a tough problem by using authority: by force.

Why is it that we so often end up trying to solve our tough problems by force? Why is it that our talking so often fails? The answer is both simple and at the same time subtle and challenging. Our most common way of talking is telling, and our most common way of listening is not listening. When we talk and listen in this way, we guarantee that we will end up trying to solve our tough problems by force.

Two Distinctions for Solving Problems

I would like to offer two sets of practical distinctions that you can use to solve your tough problems more effectively. The first distinction is that there is more than one way to solve problems. There is an ordinary approach that works for simple problems, and there is an extraordinary approach that works for complex problems. The second distinction is that there is more than one way to talk and listen. If we are to solve our tough problems peacefully, we need to learn an extraordinary way of talking and listening.

I will explain these two distinctions by sharing two dramatic, life-and-death stories. I'm not that sensitive to these distinctions, and so the volume has to be turned way up if I'm going to be able to hear them. These two stories involve situations in which the volume was turned way up, but the two sets of distinctions

apply to all human settings—home, school, work, meetings, and national and international affairs.

I learned the first set of distinctions in 1991. I was living in London working for Royal Dutch/Shell's scenario planning department, heading the social-political-economic research group. Our job was to tell stories about what might happen in the world outside the company, as a tool for Shell executives to use in making decisions today that would allow the company to do well no matter what happened tomorrow. One day, my boss, Joseph Jaworski, received a phone call from a professor in South Africa named Pieter le Roux, who wanted to use the Shell scenario methodology to help make plans for the transition in South Africa away from apartheid. Pieter was wondering if Shell could send somebody to provide methodological advice to the team he was putting together and to facilitate the workshops.

When I was chosen for this project, I knew almost nothing about South Africa, except that the country had a complex problem of apartheid, which most people thought could not be solved peacefully. I knew that the white minority government had been trying for years to deal with the situation by force and had failed, and that the opposition, led by the African National Congress, had tried to overthrow the government by force and had failed. I was also aware that Nelson Mandela had been released from prison a year before and that some negotiations were starting. But I didn't know much about the scenario team Pieter had put together, except that it was very diverse and included blacks and whites, people from the left and

right, professors, political activists, businessmen, establishment figures, trade unionists, and community leaders. I also knew that these people were heroes who had all, in different ways, been trying for a long time to make South Africa a better place.

Since I was very busy with my work at Shell, I didn't do what I normally would have done: read up on South Africa and form my expert opinion about what was going on and what they ought to do about it. Not having had the time to form such an opinion, I arrived with a greater openness to what this amazing team was going to be able to do. I had also never done this kind of work outside of a company, so we simply used Shell's scenario methodology. The team immediately launched into discussions about the ANC, the NP, the PAC, the SACP, the CP, and the UDF. I had no idea what they were talking about. One of the team members later said to me, "Adam, when we first met you, we couldn't believe that anybody could be so ignorant. We were certain you were trying to manipulate us. When we realized that you actually didn't know anything, that's when we decided to trust you." I had, by accident or synchronicity, managed to arrive with the perfect orientation: curious, respectful, and open.

What I came to understand in South Africa was that two parallel processes were occurring. There were the formal, official negotiations around a new constitution, which the newspapers reported about daily. But underneath these were hundreds of informal, unofficial meetings, such as the one I participated in, that brought together all the stakeholders—all the people who were part of the problems—to talk together about the problems and what ought to be done about them. It was through these myriad informal conversations that the formal process succeeded.

I also noticed that, even though we were using the exact same methodology as at Shell, the South African group brought a different energy to the work. In one way it was more serious, and in another more playful. What I eventually understood

is that although the methodology was exactly the same, the group's purpose was fundamentally different. At Shell we had been telling scenarios about what might happen as a tool to help the company adapt as best as it could to whatever might occur in the future. In the South African team, we were telling scenarios not so much to adapt but to create a better future. And this is what accounted for the different energy in the team.

Three Types of Complex Problems

So here's what I learned in South Africa: a problem can be tough and complex in three different ways (see "Two Ways to Solve Problems").

Socially Complex. A problem is socially complex when the people involved, the actors in the system, have highly diverse perspectives and interests. Problems that are socially simple can be solved by experts and authorities, because it's easy to agree on what the problem is and for an expert or a boss to propose and implement a solution that people will support. But a socially complex problem cannot be solved without the direct participation of all the stakeholders involved.

Dynamically Complex. A problem is dynamically complex when its cause and effect are far apart in space and time. This is the kind of complexity that is addressed by systems thinking. A dynamically simple problem can be solved piece by piece, but when dynamic complexity is involved, we have to look at the behavior of the system as a whole.

Generatively Complex. When a problem is generatively complex, the future of the system is unfamiliar and undetermined. A generatively simple problem can be solved using rules of thumb from what worked in the past. But when the problem is generatively complex, it can only be solved through a group of people working it through together, listening for and trying out emerging solutions.

To give you an idea of how this problem-solving model works, let's look at the simple matter of a police officer directing traffic at a difficult intersection. The problem is socially simple because everybody has the same objective: to get through the intersection safely and efficiently. The problem is also dynamically simple because all the causes and effects are right there, visible and immediate.

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TWO WAYS TO SOLVE PROBLEMS

Type of Complexity	Definition	Ordinary Approach for Simple Problems	Extraordinary Approach for Complex Problems
SOCIAL	Actors have diverse perspectives and interests	Experts and authorities	Actors and stakeholders
DYNAMIC	Cause and effect are far apart in space and time	Piece by piece	System as a whole
GENERATIVE	Future is unfamiliar and undetermined	Existing solutions	Emerging solutions

A problem can be tough and complex in three different ways; it can be socially, dynamically, and/or generatively complex. Ordinary problem-solving approaches work well for simple challenges. But when we want to solve complex problems, we need to use an extraordinary approach, in which stakeholders look together at the system as a whole and work through an emerging solution.

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And it's generatively simple because the way the officer directs traffic, based on what he or she learned at traffic-directing school, works fine. So the problem can be solved using the ordinary approach.

The ordinary approach works perfectly well most of the time. It's when we want to solve complex problems that we need to use an extraordinary approach, in which the people who are part of the problem—the stakeholders—look together at the system as a whole and work through an emerging solution. This is what I realized the Mont Fleur team had done in South Africa. They had gathered leading representatives from all of the stakeholder groups and used scenario planning as a tool for thinking about the behavior of the whole system and finding emerging solutions. My point here is that the ordinary approach cannot generate a peaceful solution to a complex problem. If we use the ordinary approach on a complex problem, we will end up trying to solve the problem by force.

I understood the significance of this realization in my work in South Africa, where people were experimenting with an extraordinary approach to solving complex problems that was applicable not just to the South African context, but elsewhere as well. What I didn't understand, because I was not experienced enough, is *how* the South African team was able to work with this extraordinary approach. In the years that followed, I got a lot of experience with this methodology through doing this kind of work with multi-stakeholder teams in South Africa, Northern Ireland, Israel, Argentina, Colombia, the United States, and Canada. I also began to develop, with colleagues, a family of tools for working with important complex problems in companies and governments.

It wasn't until 1998, however, in the course of doing some work in Guatemala, that I really grasped the essence of *how* a group could use the extraordinary approach. I don't know how well you know the story of Guatemala. It has the dubious distinc-

tion of having had the longest running and most brutal civil war in all of Latin America. Over a 36-year period, from 1960 to 1996, more than 200,000 people were killed and disappeared out of a population of only 8 million. More than a million people became internal refugees, and the country as a whole experienced a brutality such as humanity has rarely seen. By the time the peace treaty was signed in 1996, the social fabric of the country had been shredded.

Many brave and wonderful efforts, which continue today, have been made to try to put things back together again. One of these efforts, inspired by the project in South Africa, was called *Visión Guatemala*. The *Visión Guatemala* group brought together a group of leaders—even more diverse and senior than the South African team—from the military, the former guerrillas, business, church, academics, and youth leaders, to try to understand what had happened in the country, what was happening, and what ought to happen. Those of you who follow the news know that things are by no means all right in Guatemala, but in the five years they've been working together, this team has made a big impact in the country, on the platforms of all the major political parties, on restructuring the education and tax systems, on constitutional amendments, on anti-poverty programs, on dialogue processes at the municipal level and among politicians, and so forth.

Four Ways of Talking and Listening

In 2000 a group of researchers from the Society for Organizational Learning interviewed members of the *Visión Guatemala* team to try to pinpoint exactly what happened in their group to allow them to do such extraordinary work in such a highly complex system. The answer the researchers arrived at has to do with the way this group, over the course of their involvement together, progressed in the way they were talking and listening.

Downloading. In the chart “Four Ways of Talking and Listening” (see p. 5), based on the work of Otto

Scharmer of MIT, there are four quadrants. According to the researchers' observations, the *Visión Guatemala* group started their conversations in *downloading*. This is supported by an interview with Elena Díez Pinto, the leader of the group. She said, “When I arrived at the hotel for lunch before the start of the initial meeting, the first thing I noticed was that the indigenous people were sitting together, the military guys were sitting together, the human rights group was sitting together. I thought, ‘They are never going to speak to each other.’ In Guatemala we have learned to be very polite to each other. We are so polite that we say ‘yes’ but think ‘no.’ I was worried that we would be so polite that the real issues would never emerge.”

This first type of talking and listening is called *downloading*, because we merely repeat the story that's already in our heads, like downloading a file from the Internet without making any change to it. I say what I always say or what I think is appropriate, such as “How are you? I'm fine,” because I'm afraid that if I say what I'm really thinking, something terrible will happen, for instance, I'll be embarrassed or even killed. Listening in *downloading* mode is not listening at all. I am only hearing the tape in my own head.

Debating. The second kind of talking and listening is called *debating*. A wonderful example of this process occurred in *Visión Guatemala*'s first workshop. One of the interviewees said, “The first round in the first session was extremely negative, because we were all looking back to the events of recent years, which had left a deep imprint on us. Thus a first moment full of pessimism was generated. Suddenly a young man stood up and questioned our pessimism in a very direct manner. This moment marked the beginning of a very important change, and we continually referred to it afterward. That a young man would suddenly call us ‘old pessimists’ was an important contribution.” This was *debating* in the sense that the young man was saying what he really thought, which is what

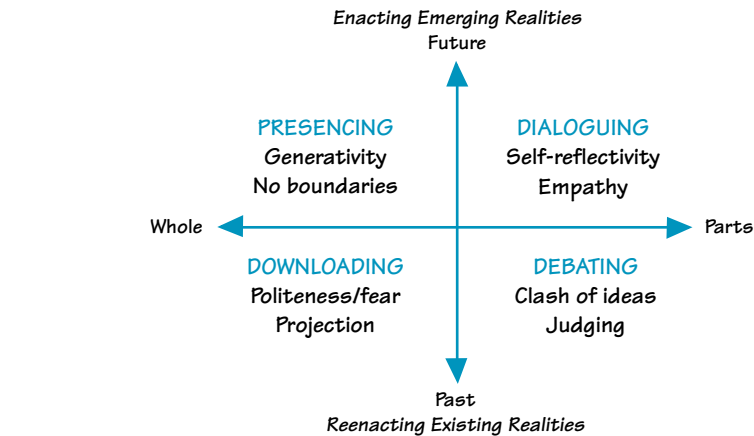
happens when people make the transition from downloading to debating. A clash of arguments occurs; ideas are put forward and judged objectively as in a courtroom.

I used to undervalue debating because it seemed so commonplace. But in the last few years, through observing how many countries and companies in which I've worked stay in downloading mode, where people are afraid to say what they think, I've come to appreciate the move from downloading to debating as a huge step forward. You can see more perspectives, that is, more of the system.

However, in debating as well as downloading, you're still seeing what is already there. Neither of those modes creates anything new. For example, in a debate or a courtroom, people have prepared what they want to say before they even enter the room. In that sense, both downloading and debating lead to a reenactment of patterns of the past or of existing realities. To bring forward something new, we need to talk and listen in an extraordinary way.

Dialoguing. The third mode is called *dialoguing*. My favorite example of this in the Visión Guatemala team occurred one day when the group was talking about an extremely difficult subject: the civil war in which hundreds of thousands of people had been killed. A general in the army was trying to explain honestly what the war had looked like from his experience and perspective, which was both a very difficult and an unpopular thing for him to do. He certainly did not have the sympathy of most of the people in the room. As he spoke, the woman listening beside him, Raquel Zelaya, the cabinet secretary of peace who was officially responsible for implementing the peace accords, leaned over to him and said, "Julio, I know that nobody enrolls in a military academy in order to learn how to massacre women and children."

This was a remarkable statement. On the one hand, she was signaling that she had been listening to him with empathy, listening from his perspective and realizing that no matter what had happened, he certainly



Source: Otto Scharmer

Downloading and debating work fine for solving simple problems, but they don't work for solving complex ones. For complex problems, groups need to use dialoguing and presencing, and to be able to shift from one mode to another, as appropriate.

hadn't started out his life with a brutal intention. At the same time, through self-reflection, she was indicating her understanding that the way she thought about things mattered and affected how this situation would unfold. In other words, if you cannot see how what you're doing is contributing to creating the current reality, then by definition you have no leverage, no place to stand, no way to intervene to change the problem situation. When Raquel made that comment to the general, she was recognizing the way in which her attitudes were part of the polarization and needed to change to open up a new way forward.

So in dialoguing, I am both listening to you from within you and listening to myself knowing where I'm coming from. I am not just listening objectively to ideas; I am listening subjectively from inside you and me. And because I'm listening from inside a living, growing system, I can glimpse what's possible but not yet there. This type of talking and listening is the root of the potential for change and creativity.

Presencing. This fourth type of talking and listening is what Otto Scharmer, along with Joseph Jaworski, Betty Sue Flowers, and Peter Senge, has written a book about, which is due

to be released this winter and is titled *Presence*. For that reason, I am using the word *presencing*, because what I am referring to is the particular kind of talking and listening, of being and doing, that they describe in their book. In the Visión Guatemala group, we experienced this kind of generative dialogue one evening at the first workshop. The group had gotten together after dinner, and I had asked the participants to tell stories about their experiences, either recent or long ago. The exercise was a continuation of the scenario work of trying to understand what had happened and what was happening in Guatemala. But rather than use systems thinking as an objective tool to identify driving forces and key uncertainties, we were using a more subjective approach.

It was a dramatic evening. Helen Mack Chang, a prominent businesswoman, spoke about the assassination of her sister, a researcher, in broad daylight in Guatemala City some years before. She shared her experience of that day, after her sister had been murdered, and how she had run from government office to government office, trying to find out what had happened, and how the first person she had spoken to, who had lied to her and told her that he knew nothing, was the

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man sitting beside her that evening in the circle. We were long past being polite. Now people were really saying what they thought.

Then a man named Ronalth Ochaeta told a story. Ronalth was at that time the executive director of the Catholic Church's human rights office, which published the very important first report on the civil war called "Nunca Más" ("Never Again"). He spoke of how he had gone one day to be the official observer at the exhumation of a mass grave in a Mayan village. There were many such graves. As he stood by the side of the grave and watched the forensics team removing the earth, he noticed many small bones at the bottom. He asked them, "What happened here? Did people have their bones broken during the massacre?" They answered, "No, people did not have their bones broken. This massacre included several pregnant women, and what you're seeing are the bones of their fetuses."

You can feel a little bit now the quality of the silence—the quality of the listening, the realization, the understanding—that we have in this room right now. Perhaps you can imagine what it was like to hear that story in a group of 40 people, all of whom had lived through this experience and in one way or another been implicated. It was a silence such as I had never heard. It just went on and on, for five, maybe ten minutes.

At the end of the day, we were talking about what had happened, and several people used the word *communion* to refer to that moment when the whole group had been part of one flesh. I remarked that I thought there was a spirit in the room, and a Mayan man said to me afterward, "Mr. Kahane, why were you surprised there was a spirit in the room? Didn't you know that today is the Mayan Day of the Spirits?" When the SoL researchers interviewed the members of the Visión Guatemala team, six of the interviewees referred to those five minutes of silence as the moment when everything had turned in the team, the moment when the team understood

why they were there and what they had to do.

One of them said, "As to the story that Ronalth recounted, the one that caused such a big impact, that is one story and there must be a thousand like it. What happened in this country was brutal. Thirty years . . . and we were aware of it, I was. I was a politician for a long time, and this was one of the areas that I worked in. I was even threatened by the military commissioners on account of my political work. We all suffered, but as opponents, as enemies, always from our own particular points of view. As far as I am concerned, the workshops helped me to understand this in its true human dimension—a tremendous brutality. I was aware of it but had not experienced it. It is one thing to know about something as statistical data and another to actually feel it. To think that all of us had to go through this process. I think that after understanding this, everyone was committed to preventing it from happening again."

This is what we mean by *presencing*. It wasn't that people felt empathy for Ronalth; anybody could have told that story. It was as if, through Ronalth, we had all been able to see an aspect of the reality of Guatemala that was of central importance. It was as if, in those five minutes, the boundaries between us disappeared, and the team was able to see what really mattered to them and what they had to do together. In this way, the process of moving from downloading and debate to dialoguing and *presencing* can be described as one of opening, of developing the capacity to hear what is trying to come through.

Listening to the Sacred Within Each of Us

I have explained two sets of practical distinctions. First, there are two ways to solve problems: an ordinary approach that works for simple problems, and an extraordinary approach that works for complex problems. But the ordinary approach does not work for complex problems, and if we use it, we will end up trying to solve the problem by force. Second, there are four ways of talking and listening.

Downloading and debating work fine for solving simple problems, but they don't work for solving complex problems. For complex problems, we need to use dialoguing and *presencing*. If you want to be able to solve complex problems, you need both the awareness of these different ways of talking and listening and the capacity to move among them.

In 1998 Desmond Tutu retired as the Anglican Archbishop of Southern Africa. His successor, Njongonkulu Ndungane, wanted to hold a strategic planning workshop with the 32 bishops who would now be reporting to him. He asked me to facilitate the workshop. Although there were some tough issues to be worked out, it was a joyous meeting.

Right at the beginning, I noticed that these bishops were remarkable listeners; they seemed intuitively to understand and be able to navigate among these four ways of talking and listening. For example, when we were making ground rules for the workshop, they seemed concerned about the danger of downloading and not listening (they might have called it *pontificating*). One of the bishops proposed the ground rule, "We must listen to each other's ideas." A second bishop said, "No, brother, that's not quite it. We must listen to one another with empathy." Then a third bishop said, "No, brothers, that's not quite it. We must listen to the *sacred within each of us*."

I think the bishops got it right. If we can learn to listen to each other truly, with empathy, and if we can learn to listen to the sacred whole as expressed through each of us, then we can peacefully solve even our most complex problems. ■

Adam Kahane is a founding partner of Geronon Consulting (www.gerononconsulting.com) and of the Global Leadership Initiative (www.globalleadershipinitiative.org). He is an expert in the design and facilitation of processes that help diverse groups of people work together to sense and actualize emerging futures, and a leading thinker and practitioner in the merging of strategic management, scenario thinking, and collaborative problem-solving. His book, *Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities*, will be published by Berrett-Koehler in 2004.



TAKING A SYSTEMS VIEW: A REFLECTION

BY DAVID W. PACKER

Over many years of working with systems thinking as a student, manager, and consultant, I have developed an increasing respect for and fascination with the diversity of ways that people and organizations benefit from its application. Likewise, I have come to appreciate the power these concepts and tools can bring to issues that range from personal dilemmas to the biggest challenges confronting our world. Taking a systems view involves looking at how dysfunctional behaviors result from interactions among the parts of a system over time. It provides a way of examining the potential unintended consequences of proposed interventions and of recognizing the impact of time delays and feedback. As such, it can lead to better assessments and more effective actions than traditional linear thinking.

This long and broad view is in direct opposition to the “quick-fix” mentality that increasingly dominates our complex world. Perhaps the reliance on “band aids” results from our economic system, in which managers focus on short-term results to keep stock prices and option values high, and shareholders care more about quarterly returns than long-term corporate health (accentuated by technology that provides instant access to massive amounts of data). Perhaps it comes from our political system, in which politicians invest in symptomatic rather than fundamental solutions—which take longer to show results than the person’s term in office—in order to ensure reelection. Or perhaps it is an outcome of our educational system, which fails to expose people to the basic ways in which feedback processes work in the world.

Whatever the reason, despite the promise of systems thinking, its impact has been surprisingly limited. But I fear

that, unless a critical mass of people and organizations adopt a systems view, our organizations will continue to fall short of their potential. Even worse, the dire consequences of non-systemic approaches to issues such as global terrorism, the environment, and poverty will threaten the world for us, our children, and future generations. By offering the perspectives that follow, I hope to widen the circle of systems thinkers by attracting newcomers and convincing experts to stay the course.

The Systems Thinking Difference

Let me start with a personal story. As a student, I attended a lecture by Norbert Wiener, the famed mathematician. He discussed a key project in which scientists of the day were working—unsuccessfully—to get computers to translate text from one language to another. Wiener identified a possible breakthrough in the project: The goal should be to create a *system* for excellent translation by including a computer component to perform routine elements and a human component to handle the non-routine tasks. Together, they could elegantly and affordably achieve the overall goal. The fundamental idea of a *system* as an entity that was different from its components—and not merely the sum of the components—was, to me, original, new, and powerful.

Over the years, I have heard many people say that the simple act of thinking systems rather than components, the whole rather than the pieces, enables them to better understand why things behave as they do and take more effective actions. I have seen, for example, executives who are dealing with a critical product issue come to the realization that the answer is not in making marketing or manufacturing work better, but in

improving the quality of interaction and influence *between* the two functions. The notion of recognizing the interactions among component parts as critical to the system’s performance leads people to accept the system as the major determinant of the behaviors and events that occur.

Once we can see the whole (the system) as something different from its parts (the components), it isn’t too far a leap to accept Deming’s observation that optimizing a system *requires* suboptimizing its components. This idea is profoundly paradoxical. It says that functional excellence will not guarantee overall success and that working “across the stovepipes” provides the greatest possibility for superior performance. Bridging the gap between functions requires compromises from each department for the benefit of the firm as a whole. My observation is that once people “get” the concept of systems, they become sensitive to the harm the stovepipe mentality can bring, and they open themselves to seeing linkages among the pieces that may be important, even in areas beyond their control.

Because talking across stovepipes is not easy, the mastery of dialogue, skillful conversation, and concepts such as the ladder of inference—all part of today’s organizational learning focus—are essential to fundamental and sustainable performance improvement. A dozen years ago, I scoffed at such things as too soft and fuzzy. Now I am convinced that these tools play a critical role in improving systems. (Of course, Peter Senge already understood this point in 1990 when he popularized systems thinking and integrated it with team learning and other skills in his surprise best-selling management book, *The Fifth Discipline: The Art and*

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Practice of the Learning Organization!)

The ability to visually represent the interrelationships among the components of a system through different kinds of diagrams represents another benefit of systems thinking. These “maps” reveal the cause and effect linkages thought to underlie behaviors by depicting the “system behind the story.” Causal loop diagrams are especially effective in displaying the feedback processes at play. By recognizing the behaviors associated with each of the two kinds of loops (balancing and reinforcing) and through the process of collaborating on creating the diagrams, people are able to reach important and sometimes profound insights. Stock and flow diagrams are especially effective in displaying the dynamics among accumulations or stocks (such as backlog, inventory, or morale) and the flows (such as orders, shipments, and successes) that increase or decrease them. By identifying stocks and flows, we gain knowledge about a system’s behavior and take a step toward building simulation models. We know that the “map is not the terrain,” but maps of structure predictably add insight to our ability to better know the real terrain by giving us a shared view of its complexity.

System archetypes also provide a strong basis for learning about systems. Archetypes are a set of relatively simple structures that have been observed to occur again and again in social systems. These structures typically consist of two or three causal loops and have names like “Fixes That Fail” (the story of unintended consequences), “Shifting the Burden” (the story of addiction), “Limits to Growth” (the story of resource depletion), and “Escalation” (the story of violence and war).

It has been interesting to see the rapidity with which relative newcomers can relate to an archetype and apply it to their own experiences. In workshops, the energy and insights that emerge from archetype examples are often startling. More than once, I have heard someone say that the understanding of a single archetype changed his or her life!

Breadth and Depth

The most rigorous end of this spectrum is computer simulation, which stems from the breakthrough work of Jay W. Forrester at MIT in the 1950s. He brought the first application of engineering control theory to social systems, taking advantage of advances in computer technology for simulating non-linear systems. His 1963 book, *Industrial Dynamics*, provided the initial codification of the ideas, tools, and learnings of the nascent field and remains a classic today. (It was, by the

All approaches that stem from a fundamental understanding of systems—whether broad or deep—can add value by offering insights far beyond traditional linear thinking.

way, my privilege to be a research assistant in Forrester’s group during the early phase of the field. That was how I was hooked!) Simulation enables users to view the system’s behavior in action and to experiment with various scenarios. These are very powerful capabilities.

Efforts involving simulation models around specific organizational issues have had a positive impact on corporate decisions and strategy assessment in a number of cases. However, building such simulations takes enormous time, money, and expertise. In addition, decision-makers who don’t fully understand the model may be uncomfortable changing policies based on its outcomes.

A broader or at least more visible source of impact, I think, has come from “models for learning” developed in academic and other non-corporate environments around major social issues and generic problem behaviors. *Limits to Growth* (by Donella Meadows et al.) and *World Dynamics* (by Jay Forrester) were based on simulations that explore the extent to which our planet’s resources can support the rapid growth of human population and industrial activity. Forrester’s *Urban*

Dynamics deals with the system structure underlying the growth and decay of cities. These bodies of work have created a widespread awareness—with significant controversy—of the critical environmental and social issues facing humankind by demonstrating the potentially catastrophic trends that can result from certain systemic structures.

As another example, my own work on the dynamics of corporate growth (a master’s thesis also published as a monograph) outlines how balance among functional decisions in a growing company can be more important than specific functional expertise. The study used computer simulations to show how a company, by its own actions and with inadequate understanding of its systemic structure, could easily fail even though its market was virtually infinite. It demonstrated how an enormous range of behaviors, from wildly successful growth to stagnation to collapse, depended *solely on the firm’s internal decisions!* As the cartoon character Pogo said, “We found the enemy and it is us.” I contend, though it is impossible to prove, that this work had a positive impact on the company that sponsored it (which was highly successful for more than 20 years afterward).

The very breadth of the systems arena has created some barriers that I believe have slowed acceptance of the field. From a systems perspective, the obstacles I have seen relate to our own stovepipes, represented by different approaches such as simulation, causal loop analysis, stock and flow diagrams and the like. When practitioners in particular areas imply that their approach is the only valid one, the credibility of the whole spectrum of activities suffers. Here, I have tried to convey that all approaches that stem from a fundamental understanding of systems—whether broad or deep—can add value by offering insights far beyond traditional linear thinking. As in most systems, the right balance among the components is the path to a stronger whole.

Looking Ahead

In closing, my objective in this article has been to present my observations of the compelling potential for creat-

ing a better world through applying systems concepts and tools to our own circumstances and issues. Thinking systematically can change lives, improve businesses, help economies, and maybe even save the planet. Equally important, the broad range of approaches for application provides great accessibility. Opportunities for demonstrating the impact of systems thinking should be

embraced, wherever they happen, and the diversity of approaches should be used to full advantage! I hope I have provided some incentive for doing just that. ■

David W. Packer is a founding member of the Systems Thinking Collaborative (www.stcollab.com), bringing extensive business experience and systems thinking capability to its membership. He holds a

master's degree in management from MIT, where he was a member of the system dynamics group at the Sloan School, and is a graduate of the executive program of the Darden School at the University of Virginia. David participated for many years in the growth of Digital Equipment Corporation and now serves on the board of directors of several organizations, including Pegasus Communications, the Home for Little Wanderers, and the Policy Council of the System Dynamics Society.



F R O M T H E R E S O U R C E S H E L F

GETTING TO THE CORE OF HOW ORGANIZATIONS WORK

BY KALI SAPOSNICK



Who Really Matters
by Art Kleiner

Many theories exist as to why it is so difficult for organizations to change and thrive in today's complex work environment. Systems theory, for instance, points to the structure of a system as a key determinant in how well people can work together to achieve an organization's objectives; it asserts that no matter how much any one individual might change, unless the structure simultaneously changes, the system will ultimately revert to the status quo.

In his new book, *Who Really Matters: The Core Group Theory of Power, Privilege and Success* (Doubleday, 2003), Art Kleiner looks at the barriers to institutional change from a different angle, beginning with the reason why organizations exist in the first place. He contends that the primary purpose of organizations is not—as most of us believe—meeting customers' needs, fostering innova-

tion, or making a better world. Rather, organizations are set up, first and foremost, to fulfill the perceived desires and priorities of a "core group" of people. As such, the success or failure of a company—and its ability to change—is determined by the behavior of this key set of individuals.

Kleiner's theory suggests that core groups exist in every organization, large or small, for-profit or not-for-

Organizations are set up, first and foremost, to fulfill the perceived desires and priorities of a "core group" of people.

profit, private or public sector. Members of this elite set take their power not from their position in the hierarchy, but from the way they influence decisions at every level of the hierarchy. Every organization, at any given moment in time, has its own unique core group pattern; the most influential people might be high-profile shareholders, critical technology specialists, key suppliers, major customers, or members of the company's found-

ing family. Core groups often include "bottlenecks," people who control or manage essential parts of operations, such as the graphic design and production staff of a publishing company, or the veteran school bus administrator of a local school system. In other words, the core group doesn't necessarily comprise just people with hierarchical authority but those who are, for whatever reason, perceived as central to the enterprise by the people who work there.

Managing Organizational Complexity

According to the author, core groups are not inherently bad or good; they are simply part of the nature of organizational systems. Without them, it would be impossible for organizations to exist, simply because the complexity of most organizational environments would be too great to manage. Art says that, just as a baby instinctively recognizes human faces, most of us are instinctively attuned to the people who we have come to believe are important. Instead of making decisions based on the balance of customer and shareholder priorities, we say to our-

Continued on next page >

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selves, “I don’t want to be the one to walk into Cheryl’s office and say we can’t do that.” We let Cheryl, whom we probably know only slightly, represent the full range of factors affecting the decision we have to make.

For those who resist the idea of a core group, Kleiner asks us to examine our thinking when faced with a complex decision. Do we consider how it will sit with our boss, our boss’s boss, or someone else entirely? If so, then we’re basing our choices on the needs of the core group. The reason that the influence of these key people “trumps all other concerns,” the author explains, is “not because of some mystical resonance, but simply because of the cumulative effect of the decisions made throughout the organization. If people believe the core group needs and wants something to happen, they assume that making it happen is a part of their job.” As such, those who do make it happen often get rewarded and recognized, while those who act based on other criteria usually get left behind.

Creating Great Core Groups

One of the reasons that Kleiner developed the core group theory was

his awareness of the rapid proliferation of organizations in the world. If we are to be successful in a society of organizations, he says, we need a theory that allows us to clearly see how enterprises function. Companies in which core groups behave in self-serving and exploitative ways, such as Enron, are dismal places to work and often end in failure. Organizations in which decision-makers expand the core group by creating structures that take into account the welfare and development of everyone in the firm, such as Springfield Remanufacturing Corporation and Southwest Airlines, are typically high-performing work environments with deeply committed workforces. In other words, behind every great organization is a great core group.

The author contends that, by understanding the characteristics and principles of the core group in their organizations, people can act far more effectively than if they don’t have that knowledge. Employees can decide, for example, if they’re interested in building a career in the company even if they never get into the core group. People trying to change the business from within can increase their chances of achieving their goals

by seeking sponsorship from core group members. And those at the top can consider how to galvanize spirit and productivity among employees by creating the conditions for the core group to expand to a larger group of people. When leaders guide core groups to work in the best interests of everyone in the organization, they can amplify the capabilities of their enterprise and create a legacy of which they can be proud.

Thus, in many ways, *Who Really Matters* offers a tool for evaluating how companies make decisions at the most fundamental level and for improving the way people work together to achieve notable outcomes. As with any hypothesis about how organizations work, as managers test the core group theory in their own settings, we will get a sense of its validity and whether we can use it over the long run to generate the kind of systemic change we need for our enterprises to survive in the world today. ■

Kali Saposnick is publications editor at Pegasus Communications.



S Y S T E M S T H I N K I N G W O R K O U T

AMERICANS’ STRUGGLE WITH WEIGHTY ISSUES

It’s all over the headlines—Americans are getting heavier. The statistics are sobering: As documented by the Department of Health and Human Services, in 2000, an estimated 64 percent of U.S. adults were overweight or obese. Today, almost three times as many adolescents are overweight as in 1980. With these developments has come a rise in diabetes, heart diseases, and other

chronic health problems; approximately 300,000 Americans die each year from factors related to being overweight, at a cost of around \$100 billion.

Some groups argue that the solution to the problem lies in the realm of personal responsibility—Americans need to curb their appetites, keep themselves from giving into temptation, and exercise. But several news

sources, including ABC anchorman Peter Jennings and *Consumer Reports* magazine, have gone beyond pointing the finger at individuals for their immoderation to delve into the social, economic, and political trends that make it easy for us to pack on the pounds. The findings may help explain why so many people find it difficult to maintain a healthy weight and hint at systemic solutions that

would help all of us make wiser lifestyle choices.

Battle with the Bulge

Americans' struggle to stay slim isn't new, but health statistics show that, during the mid-1970s to early 1980s, something changed in our battle with the bulge. What occurred was likely the confluence of a number of different factors, among them:

- **The Growth of Low-Cost Fast Food.** The number of fast-food restaurants per capita doubled from 1972 to 1997.
- **Supersizing.** According to a study by nutrition experts Marion Nestle and Lisa R. Young, "Portion sizes began to grow in the 1970s, rose sharply in the 1980s, and have continued in parallel with increasing body weights." Vendors found that they could increase profits by charging slightly more for larger helpings.
- **The Expansion of Food Choices.** New candy, snack, cereal, soda, and other high-calorie food products have flooded the market in recent years. At the same time, the food industry has spent around \$33 billion a year on advertising, especially to children.
- **The Reduction in Smoking.** According to "Finding Fault for the Fat" by Daniel Akst (*The Boston Globe Magazine*, December 7, 2003), "Giving up smoking was responsible for about a quarter of the increase in the number of overweight men over a decade and for a sixth of the increase in overweight women."
- **The Reliance on Cars.** Especially in the suburbs, people now spend more of their time driving than walking.

According to some experts, these factors have been exacerbated by certain public-policy decisions. Federal farm subsidies have led to an overabundance of corn, rice, soybeans, sugar, and wheat in this country. These staples are then used to create processed foods and fatten hogs and cattle—the foods we should eat less of to maintain a healthy weight. Because of subsidies, the prices of products high in calories and saturated fat have risen much less quickly than those of fresh fruits and vegetables.

The USDA food pyramid is also under attack for leading Americans to bulk up on refined carbohydrates while rejecting all fats. Government

If the majority of Americans are struggling with weight issues, then clearly larger forces are at play than lack of individual resolve.

officials thought the distinction between a good and bad fat and a good and bad carbohydrate was too complicated. They simplified the message and gave license to unbridled consumption of white bread, white rice, pasta, and potatoes—foods that the body metabolizes much more quickly than their whole-grain cousins—while preaching wholesale rejection of fats, even unsaturated fats, which are important for good health.

Even school officials have contributed to the problem through efforts to balance their budgets. To save money, some school districts have reduced or eliminated physical education classes. And with so-called "pouring contracts," soft-drink makers pay fees to put vending machines in schools. The American Academy of Pediatrics recently called for a ban on soda in schools as part of an effort to battle childhood obesity.

Food for Thought

Whenever we see a pattern of behavior that escalates over time, we can be pretty sure that some strong reinforcing processes are at work. We all need to take responsibility for our own actions and choices. But if the majority of Americans are struggling with weight issues, then clearly larger forces are at play than lack of individual resolve. And unless American society finds ways to intervene in the escalating obesity problem, according to pediatric nutritionist Keith-Thomas Ayoob, "This may be the first generation of kids [in the United States] that has a life span shorter than that of their parents." That's some sobering food for thought. ■

—Janice Molloy

Sources: "Obesity in America: How to Get Fat Without Really Trying," an ABC news report by Peter Jennings, broadcast on December 8, 2003; "Cut the Fat," Consumer Reports, January 2004

Causal loop diagrams don't need to be complex to offer insights—hone your skills by drawing one or more of the loops described in this or other articles about the obesity epidemic in America. Also, where are the leverage points for change? How might a healthy food production and consumption system operate within a society?

YOUR WORKOUT CHALLENGE

Systems Thinking Workout is designed to help you flex your systems thinking muscles. In this column, we introduce scenarios that contain interesting systemic structures. We then encourage you to read the story; identify what you see as the most relevant structures and themes; capture them graphically in causal loop diagrams, behavior over time graphs, or stock and flow diagrams; and, if you choose, send the diagrams to us with comments about why the dynamics you identified are important and where

you think leverage might be for making lasting change. We'll publish selected diagrams and comments in a subsequent issue of the newsletter. Fax your diagrams and analysis to (781) 894-7175, or e-mail them to editorial@pegasus.com.

Receive a Free Audiotape! Please send your responses by **March 1**. Those whose responses are published will receive an organizational learning audiotape from a previous Pegasus conference—free!



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The complete set of video recordings of the 2003 Pegasus Conference now includes the keynote presentation by Harry Spence, "Beyond Quick Fixes: Transforming Complex Organizations at Their Core." Harry's keynote address was highly acclaimed, and we received an overwhelming number of requests to make it available on video-cassette and DVD. We're glad we can now offer it for sale.

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Free Systems Mapping Tool

Simtegra, a company dedicated to providing software tools that facilitate learning in all walks of life, recently released a free systems mapping tool. This software, called MapSys, lets users draw causal loop diagrams and stock and flow maps using simple drag-and-drop operations. Users can save their diagrams for future editing or sharing with others. They can also export the diagrams to popular applications such as Microsoft Word or PowerPoint.

To download the MapSys software, go to www.simtegra.com/download/index.html and click on "Download MapSys." You may also have to install Microsoft's .NET framework on your computer for MapSys to run. The "Help" feature in MapSys provides instructions for how to use the program and customize how your diagrams appear.

For information about reading and using causal loop diagrams, go to www.pegasus.com/cld.html.

To explore the latest "At Any Rate"™ learning lab, go to www.pegasus.com/AAR/model.html.

Search for Common Ground

www.sfcg.org

Search for Common Ground is an international nonprofit organization committed to building models showing that even the most difficult problems can be resolved peacefully. The web site includes information about the organization and its current activities, as well as links to a quarterly newsletter and other publications.

Ecological Footprint Quiz

www.myfootprint.org

This 15-question quiz estimates how much productive land and water is needed to support your lifestyle—what you use and what you discard. The results are then compared to what other people around the world use and to what is available on the planet.

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