Reflections

The SoL Journal on Knowledge, Learning, and Change



Published by The Society for Organizational Learning reflections.solonline.org

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ISSN 1524-1734



C. Sherry Immediato

SUSTAINABILITY IS ONE OF MANY FOCUSED AREAS OF INTEREST

within the SoL community, and the theme of this issue of *Reflections*. Many of our corporate members became interested in the subject of sustainability when they recognized that they needed to lessen or neutralize the environmental impact of their processes, services, and products. Their need and desire coalesced interest, and SoL has been home to the SoL Sustainability Consortium since 1999. The Consortium supports its members' intention to create value and change by combining the analytical rigor of systems thinking with insight into how social networks improve the triple bottom line (people, planet, and profit).

SoL has also spawned a number of related initiatives in which SoL members participate, including The European Sustainability Group, Project ELIAS, and the Sustainable Food Lab. In addition, SoL's newest publication, *Profit for Life* by Jay Bragdon, represents a commitment to promote research and dialogue on the relationship between corporate practices, social and environmental impact, and business results.

In the opening feature of this issue, Peter Senge offers his view on "Systems Citizenship: The Leadership Mandate for This Millennium." When asked if the basic fundamentals for sound leadership remain the same in a changing world, Senge responds "yes." He offers a range of examples which highlight the fundamentals as he sees them: a deep capacity for systems intelligence, and building partnerships with the "other" in a context of openness of mind, heart, and will. These ancient and currently underdeveloped capacities are essential for helping us see the world we now inhabit, and to guide us in acting as good systems citizens.

Karl-Henrik Robèrt was recently interviewed by Manfred Mack for *Les Cahiers de SoL* – SoL France's version of *Reflections*. "The Natural Step: A Vision for Sustainable Societies" offers an overview of a systemic effort to affect the systems intelligence to which Senge refers. Many readers will already be familiar with the start of The Natural Step, a grassroots initiative in Sweden which resulted in widespread awareness of four principles of sustainable societies. Robèrt describes their work with companies to adopt and integrate these principles into practice.

Of course we all know that we tend to focus on and value what we measure. Inspired by the nation of Bhutan's measure of "Gross National Happiness," investment analyst Frank Dixon explores how we can measure real social wellbeing. In this article, based on an address to senior leaders in Bhutan, he summarizes the implications for an economy where social wellbeing is a critical indicator of success. Recognizing that significant social wellbeing requires collaborative effort between corporations, government and civil society, he offers "total corporate responsibility" as the way companies can and should work toward system level change in their role as system citizens. SoL research and Sustainability Consortium member John Ehrenfeld comments.

In a recent conversation hosted by the Sustainability Consortium, CEO Jeffrey Hollender discussed his company's founding and evolving purpose. The article developed from that conversation, "Seventh Generation: Education for the Consumer Products Business," provides a good example of a practical approach to total corporate responsibility. He discusses the company's quest to continue to improve product design, product delivery and customer education. This ongoing process of reflection, conversation, experimentation, and correction is one they see as strengthening relationships within the company, and with customers and other stakeholders. Readers can download the audio from the original conversation on the *Reflections* website, and view the full list of conversations at the Sustainability Consortium website.

While a clear corporate purpose can inspire innovations in management, we also need to consider how management education should change. In a contribution to *Reflections*' Emerging Knowledge Forum, Jeff Lindstrom, a SoL Connections member, shares the story of the birth of the Institute for Sustainable Development in eastern Russia. This new graduate program is a great example of thinking globally and acting locally, with a goal of establishing an international perspective while focusing on regional and national development.

However we accomplish it, new forms of education remain an important leverage point for systems citizenship. John Sterman and Linda Booth Sweeney began research many years ago to investigate how well-educated people make sense of data that requires an underlying appreciation of basic systems principles. In "Cloudy Skies: Assessing Public Understanding of Global Warming," they document the results of their research, showing the reasoning and faulty logic that cause many to support "wait and see" attitudes toward climate change at the personal, corporate, and national levels.

If indeed we decide that now is the time to act on climate change, and are persuaded that our action must be at a system level, what type of policy change should we pursue? Tom Fiddaman, this year's winner of the System Dynamics Society's Jay Forrester Award offers a commentary. In "Changing the Landscape for Profitable Control of Greenhouse Gases," he discusses the intended impact and unintended consequences of a variety of policy initiatives and their implications for management.

Finally, we're delighted that there is good evidence to support what we've all believed to be true – that a commitment to life-sustaining business practices is actually good business. This issue's book excerpt features the introduction to Jay Bragdon's new book, *Profit for Life: How Capitalism Excels*. While we all recognize that there are many aspects of our economic system that do not encourage us to be good systems citizens, he reports a group of firms – some of which will surprise you – have been able to adhere to their values and produce the kind of financial results revered by conventional investors.

One of SoL's guiding principles is titled "Aligning with Nature." This guiding idea speaks to how we learn not only from each other, but from the living world around us: "It is essential that organizations evolve to be in greater harmony with human nature and with the natural world." We hope the range of articles in this issue will help you both harmonize and influence the systems of which you are a part.

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Systems Citizenship: The Leadership Mandate for this Millennium

Peter Senge



Peter Senge

or all of human history, societies that endured appreciated that their economies could be no healthier than the larger natural and societal systems upon which they depended. Historian Jared Diamond, in *Collapse: How Societies Choose to Fail or Succeed*, has shown how many one-time flourishing cultures that forgot this truism passed into oblivion, often with surprising speed. But there is one big difference today. The society whose future is in question is increasingly a global society. Speaking at the fiftieth anniversary of Japan's entry into the post–World War II "Bretton Woods" monetary accords, World Bank Vice President for South East Asia Mieko Nishimizu pointed out just how unprecedented our interdependence has become:

The future appears *alien* to us. It differs from the past most notably in that the Earth itself is the relevant unit with which to frame and measure that future. Discriminating issues that shape the future are all fundamentally global. We belong to one inescapable network of mutuality: mutuality of ecosystems; mutuality of freer movement of information, ideas, people, capital, goods and services; and mutuality of peace and security. We are tied, indeed, in a single fabric of destiny on Planet Earth.

Policies and actions that attempt to tear a nation from this cloth will inevitably fail.

As individuals and organizations, we have never had to be concerned about how our dayto-day decisions, like the products we make and buy and the energy we use, affect people and larger living systems thousands of miles away, even on the other side of the planet. This is the real message of "globalization," and it is, indeed, an *alien* one for all of us. We've never been here before.

Societies Waking Up

Societies and their governments around the world are waking up to the fact that industrial growth as we have known it is now encountering severe social and environmental limits, whose costs are getting harder and harder to ignore.

For example, CO_2 in the atmosphere is 30 percent higher than at any time in the past 400,000 years, and the rate of CO_2 emissions, which itself is rapidly rising, is approximately four or five times the rate at which CO_2 is being removed from the atmosphere through carbon sequestration, according to the September 2005 *Scientific American*. This means that stabilizing CO_2 in the atmosphere will require cuts in emissions of 75 percent or more, far beyond what the Kyoto protocols or any other current plan call for. While environmentalists have been warning about possible CO_2 effects on global climate for a long time, the human

and economic costs are starting to become hard to ignore for governments and insurance companies faced with the consequences of weather instability and spreading tropical diseases.

Or consider the simple fact that, to support the average American's lifestyle, we cause over one ton of waste to be generated, per person per day. Closely related to the volume of waste is the chemical footprint of manufacturing industries and the related toxicity of everyday products and the processes that produce them. Like the CO_2 effects, these costs are also starting to show up, in terms of waste disposal, cancers in middle-aged people that were unheardof two decades ago, and overall public health.

As these costs become recognized and their sources understood, they are starting to be allocated back to the businesses and industries where they originate. For example, the European Union (EU) recently began to require that makers of automobiles take them back for recycle or remanufacture at the end of their lifetime. Similar EU regulations are now in effect for many consumer electronics products. The EU has also begun a systematic phasing out of diverse sources of toxicity in products, starting with heavy metals like mercury, cadmium, and hexavalent chromium. These regulations are part of historic steps in the direction of making "extended producer responsibility" the norm for industry. Similarly, President Hu of China speaks frequently about an idea that takes extended producer responsibility to its logical conclusion: the "circular economy," an economy that works like natural systems, where there is no "waste" and all materials move in continuing cycles of reuse.

In short, whether it's weather instability, waste disposal, health effects of rising toxicity levels, or depletion of aquifers, fisheries, and agricultural topsoil, formerly "externalized" costs for businesses are starting to show up on the profit statements of insurers, health care providers, and producers of diverse products and services. The era of privatizing profit and socializing many social and environmental costs is passing. These costs are growing and they can no longer be regarded as somebody else's problems at some indefinite time in future. For more and more, the future is now.

The future appears alien to us.

Insurers, Consumers, and Investors Taking a Stand

Ironically, the business stakeholders leading the charge in coping with privatized environmental costs are traditionally conservative insurers – because increasingly they are paying the bill. Writing in *Fortune* in January 2006, Eugene Linden says that "Corporate leaders could soon feel the heat too" regarding climate change. In 2004, Swiss Reinsurance, a \$29 billion financial giant, sent a questionnaire to companies that had purchased its directors-and-officers coverage, inquiring about their corporate strategies for dealing with climate change. D&O insurance protects executives and board members from the costs of lawsuits resulting from their companies' actions. If Swiss Re judges that a company is exposing itself imprudently to climate-related lawsuits, it may in effect say, in the words of Christopher Walker (who heads Swiss Re's Greenhouse Gas Risk Solutions unit), "Since you don't think climate change is a problem, and you're betting your stockholders' assets on that, we're sure you won't mind if we exclude climate-related lawsuits and penalties from your D&O insurance."

Social and environmental imbalances are also becoming salient to more and more consumers. For example, growing numbers of consumers are realizing that the terms of global trade often unfairly favor the rich. For example, Oxfam's report on global trade's "rigged rules and double standards" has catalyzed a growing "make trade fair" consumer movement in Europe,



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which more and more businesses are watching closely as an indicator of shifting consumer values. Today, "Fair trade" coffee, once assumed to be a small niche product for well-off consumers, is the fastest-growing segment of the coffee business in the United States and Europe.

Even the presumed last bastion of business-as-usual growth at any cost, investors, are seeing the risks in present strategies and starting to be a force for change. Today, over 10 percent of equity capital in the United States goes through a social or environmental "screen," a number that has grown from virtually zero a decade ago. A small but increasingly influential group of investors are making sustainability the cornerstone of their thinking. I learned this firsthand from the president of one of the world's largest pension funds four years ago when, in a private meeting, he shared his 10 criteria for managing his investment portfolio: each an aspect of social and environmental responsibility that he regarded as the best indicators of "good management and long-term financial return. The current corporate social responsibility (CSR) movement seems to be just a first step in major shifts ahead, driven by one simple fact: As Frank Dixon, former research director of a major investment advisory firm, notes, "The current economic and political systems essentially force firms to be irresponsible and unsustainable by not holding them fully accountable for negative impacts on society."

The terms of global trade often unfairly favor the rich.

Businesses Discovering They Cannot Go It Alone

A small but growing group of global firms are seeing these historic changes in their environment as being truly strategic. In the fall of 2005, Wal-Mart CEO Lee Scott committed the company to long-term goals of zero waste, 100 percent renewable energy, and selling sustainable products. Six months earlier, GE's CEO declared the firm's intent to invest in a broad range of more sustainable products. By these actions, GE and Wal-Mart joined a small group of industry leaders who have been pursuing strategic opportunities relating to sustainability for many years. For almost a decade, Unilever, one of the largest consumer goods companies in the world, has had three strategic imperatives: sustainable agriculture, sustainable fishing, and water. In the late 1990s the company began working toward a global certification process

The global food system is the world's greatest generator of poverty. for sustainable fisheries, now established as the independent Marine Stewardship Council. BP and its CEO John Browne have spurred the oil industry to take global climate change seriously, starting with Browne's historic speech at Stanford in 1997, the first ever by an oil company CEO on the subject.

But what even the most powerful firms cannot achieve in isolation is limited. The goals of these companies, in Dixon's words, "cannot be achieved without large-scale change in areas including supply chain, regulatory and consumer awareness." All businesses sit within much larger commercial systems, and it is these systems that must change, not just individual company policies and practices. In a real way, the most important role of leading organizations like GE,

Wal-Mart, Unilever, and BP is to catalyze development of larger learning communities and to, as Dixon says, "proactively work with others to achieve system changes." And the partners in these larger communities will be not only other companies *but NGOs and governmental organizations as well.* There is very little historical precedent for such learning partnerships. But then, there is very little precedent for learning challenges of the scope we now face.

For example, in 2002, Unilever, Oxfam, and the Kellogg Foundation began conversations about the challenges of shifting global agriculture systems. Despite little public recognition in rich northern countries, the global food system is arguably the greatest generator of poverty, and consequently social and political instability, in the world today. Prices for agricultural commodities have fallen 30 percent to 90 percent over the past 50 years, making cheap food readily accessible for the rich northern societies and simultaneously making living incomes increasingly inaccessible in poorer food-producing countries. For example, a 2002 Oxfam report showed how falling prices for coffee have created a "crisis for 25 million coffee producers around the world," many of whom "now sell their coffee beans for much less than they cost to produce." Rich northern countries spend \$500 billion dollars a year in subsidies to protect their farmers against falling prices, something that is not possible for poorer southern countries.

Only by getting enough of the key players in this system working together is there any chance of reversing the tragic "race to the bottom." Today, the "Sustainable Food Lab" involves more than 50 major businesses, NGOs, and governmental organizations working together to "bring sustainable food practices into the economic mainstream." While there is a long way to go, an extraordinary and diverse network of committed actors has developed and a host of initiatives demonstrating alternatives have been launched. For example, a "business coalition for sustainable agriculture" that includes many of the largest food businesses wants to establish clear and agreed-upon standards for sustainability that could guide all. Others are working to make the total distribution of profits in food supply chains visible to all key actors – including consumers. Imagine going to the grocery store and seeing two bins of green beans: one 30 percent more expensive than the other. Atop each is a picture showing where the money goes in each supply chain, along with an assessment (verified by an independent body) of the extent to which each provides a living income to all the players, including the farmers. Which would you purchase?

What Does All This Mean for Leadership?

A simple, penetrating question led me to write this article: "Are the basic fundamentals for sound leadership the same and we are just responding to a different world, or are the fundamentals shifting?" After some thought, my response is an unequivocal, "yes."

For me the fundamentals start with a set of deep capacities with which few in leadership positions today could claim to have developed: systems intelligence, building partnership across boundaries, and openness of mind, heart, and will. To develop such capacities requires a lifelong commitment to grow as a human being in ways not well understood in contemporary culture. Yet, in



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other ways, these are the foundations for leadership that have been understood for a very long time. Unfortunately, this ancient knowledge has been largely lost in the modern era.

Systems Intelligence

Problems like those created by our global food systems are largely invisible because people do not know how to see such systems. "The inability of leaders to see the systems and patterns of interdependency within and surrounding our organizations threatens our future," says Ford's former CIO and head of strategy, Marv Adams. "Many big problems that could be solved are sitting there unsolved because of this failure."

Two particular systems thinking skills are vital: *seeing patterns of interdependency* and *seeing into the future*. It is one thing to say "we are interdependent," and it is another to actually understand what this means *specifically*, especially for problems created by the present systems that no one knows how so solve. Before the members of the Food Lab could work together effectively, they needed to share understanding of the systemic forces driving the "race to the bottom" and how they were all part of creating these forces: as companies pursuing business-as-usual business models with little regard for the effects on farming families and communities or on environmental systems, as farmers unable to moderate pressures for

continual production growth, and all of us as consumers whenever we buy food at the cheapest price with little thought as to where the food comes from.

Once people start to see systemic patterns and understand the forces driving a system, they also start to see where the system is headed if nothing changes. The power of the "race to the bottom" metaphor for the Food Lab participants is that it helps everyone think about what "the bottom" means to them and their organizations, and to realize why this is not a future in

which they want to live.

Once people start to see systemic patterns and understand the forces driving a system, they also start to see where the system is headed if nothing changes.

"Seeing into the future" is not a prediction in the statistical sense; it is simply seeing how a system is functioning and where it is headed. Today, the world is in desperate need of seeing into the future regarding problems like CO_2 emissions and climate change, the globalization of food and other industries, and the spread of poverty. The inability or unwillingness to see where we are headed is a massive failure of leadership foresight.

Building Partnerships with "The Other"

In some ways the most challenging aspect of the Food Lab has been simply getting such diverse actors to be willing to work together. "Doing something about sustainable agriculture will require bringing parties together that normally do not cooperate," says Andre van Heemstra, recently retired member of the Unilever management board. This not only means diverse businesses collaborating across complex supply chains, it means leaders from NGOs and government who would never normally work with business counterparts.

Transforming larger systems will not arise from the traditional transactional relationships that characterize interactions among business, government, and NGOs. "The relationships among leaders across normal boundaries might be the most crucial ingredient to major change," says Hal Hamilton, director of the Sustainable Food Lab. Building genuine partnerships takes time and real commitment. It is not just that those who might form potential partnerships have never worked together; they have mostly fought each other, often seeing one another as the primary obstacle to progress as they defined it. When they have interacted, it has been almost entirely to pressure one another to achieve their individual aims. It took many months of close work in a process that fostered deep reflection and candor before participants in the Food Lab found themselves developing real connections, trust, and respect for each other, gradually recognizing that their strength as a team *came from their differences*.

This same challenge of working with those who are very different from us arises within organizations as well. "Organizations are coercive systems," as Edgar Schein says. They tend to enforce a party line, either overtly or subtly. Listening to the periphery, those who do not share the views of the management mainstream, is a skill that more and more leaders will need because, more and more, the management mainstream will have only limited understanding at best of the forces shaping change.

Openness

Leaders who can build partnerships for seeing larger systems must also be open to not having all the answers. There is no "right model" for a complex system. To all intents and purposes, the global food or energy systems are infinitely complex. Good system models like those used in the Food Lab are by their nature incomplete and flawed. The criterion by which they must be judged is usefulness, not absolute accuracy.



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This means that effective leaders must cultivate open-mindedness in order to challenge continually their own favored views and to learn how to embrace multiple points of view in

the service of building shared understanding and commitment. This is easy to say but extraordinarily difficult to do. The Sustainable Food Lab was designed so that its members have to continually face their very different ways of seeing. For example, after a visit with a small farmers cooperative, a list of observations from the team included the following items: "hard working, very political, not sustainable, very sustainable, needs to be modernized, needs time to mature, an excellent model." One lab team member commented, "I am so amazed that this number of people can look

To become a leader, first become a human being.

at the same thing and see something so different. . . . There is so much I don't understand about others' perspectives."

But open minds ultimately also require open hearts, becoming vulnerable to see how *we* are all part of the problem. If people do not see how they are part of the problem, they will remain in blaming mode and never tap the deeper forces for partnership and change. Their attitude will always be that "they need to change," an especially disempowering signal when it comes from leaders at the top of an organization.

The third opening, of the will, involves discovering that our deepest commitments arise almost despite ourselves. It involves letting go of the last remnants of what Otto Sharmer in the book *Presence* calls "our small 's' self" and letting come "the future that comes into being through us and with what we are here to do." This opening has been described by countless poets and mystics—indeed it is one of the oldest and most universal aspects of diverse spiritual traditions. It is what George Bernard Shaw called, "The true joy in life, the being used for a purpose you regard as a mighty one." Or, as one of the Food Lab team members said, "We had come to a profound place of connection, with one another and with what we are here to do." Speaking in ways like this may seem romantic for today's times, but the subtle developmental processes behind these three openings have been understood for a very long while and the loss of them may be a major reason we now struggle. In the famous "The Great Learning," Confucius described "seven meditative spaces" through which those seeking to become leaders must pass in letting go of old ideas and identities and coming to a place of stillness and peace where the mind no longer imposes itself on reality. He summarized by saying that to become a leader, "One must first become a human being." The meaning of this simple assertion remains hidden so long as we think we understand humanness. On the other hand, if we regard the human as a great mystery, if we understand humanness as being connected to the universe in ways that we can barely imagine, if we believe that the journey to discover and actualize who we actually are is the journey of our lifetimes, then there may be some chance that the leadership required for this new millennium will come forward.

ABOUT THE AUTHOR

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The SoL Journal on Knowledge, Learning, and Change

Volume 7, Number 3

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Reflections: The SoL Journal is published quarterly in electronic format and once per year as a hard copy compilation by the Society for Organizational Learning. Inquiries regarding subscriptions, address changes, back issues, reprints, and permission requests should be directed to:

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ISSN 1524-1734 EISSN 1536-0148

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Design & Production: DG Communications (NonprofitDesign.com)

