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OVER THE YEARS, THE WORDS OF MARTIN LUTHER KING, JR. HAVE inspired many. The simple phrase: "I have a dream" has often been quoted as an elegant example of both personal and collective generativity. Some have noted that King might just as well have said "I have a complaint," given the reality of the situation he faced. And while he certainly had his moments of doubt and disappointment, we know him as evoking vision, service, connection and action. In recent months, a number of SoL members have been quoting his 1967 address to the Southern Christian Leadership Conference. In it, he addressed the question, "where do we go from here?" He called on all those who would think of themselves as powerless to recognize and claim their ability to make a difference, while not developing a tyranny characteristic of the systems they have experienced as so disempowering. As many within SoL seek to transform organizations into ones that bring out the best in their members while also seeking to tackle tough issues that can only be addressed together, King's words ring true: "power without love is reckless and abusive, and love without power is sentimental and anemic." The truth of this observation is best observed in practice.

In "The Language of Power and the Language of Love: Solving Tough Problems in Practice" Adam Kahane builds on his earlier work, *Solving Tough Problems* (San Francisco: Berrett-Koehler, 2005) and King's observation in the lead feature of this issue of *Reflections*. Relating five stories of both successful and challenging projects leads him to ask, "How can we avoid the twin traps of power without love, and love without power?" One conclusion he draws turns an old saying on its head: you can't be part of the solution if you're not part of the problem. His examples offer practical insight into a personal stance that helps create the honesty and insight needed to connect diverse stakeholders sufficiently to work toward their common interests in situations that might otherwise evoke frustration and antipathy.

Social relationships may be one source of powerlessness, but intellectual confusion is surely another. In our second feature, Adrian Wolfberg and Dr. Michael Stumborg report on their recent work in "Achieving Clarity in a Constantly Changing Environment." George Santayana famously stated, "Those who cannot remember the past are condemned to repeat it." But what happens when our experiences become increasingly irrelevant? What happens when our environment changes so fast that *everything* we experience is unfamiliar? How can organizations learn lessons from past experiences? Some organizations still find themselves in the slowly varying environment of the past, but most see the pace of change accelerating so rapidly that it appears to be essentially constant. Organizational survival requires the methods they use to learn and impart operational knowledge to change as fast or faster. In this case study, the authors discuss a pilot project called Full Spectrum Analysis at the Defense Intelligence Agency's Knowledge Lab as one method that is already showing significant results.

SoL Consultant member Peter Pruyn has embraced Kahane's challenge to solve tough problems! He shares his learnings "In the Shadow of Windmills: Reflections of a Climate Project Volunteer." After Pruyn saw *An Inconvenient Truth*, Al Gore's award-winning call to arms on climate change, he applied to the Climate Project to become a volunteer trainer for the program. He finished the training in December 2006 and began sharing Gore's presentation soon after. In this article he reflects on a journey that found him continually reflecting on and challenging his own mental models, assumptions, and beliefs. What he

learned during the past year – from a new vocabulary, to how to avoid being overwhelmed by the implications of climate change – is that the capacity to learn is critical for generating "progress amidst complexity," especially in urgent situations that demand action. Having had the chance to participate in one of Peter's sessions, it seems to me that one of the things he is learning is the importance of being fluent in both the language of power and of love, particularly in the face of issues that stimulate our fight or flight impulses.

This issue's contribution to the emerging knowledge forum is "The Learning History: An Investigation into an Emerging Genre" offered by SoL Connections member Steve Amidon. Learning histories are a research and reflection tool developed at the Center for Organizational Learning at MIT, SoL's predecessor, to help organizations learn from their own learning and change efforts. In this article, Professor Amidon uses contemporary genre theory to examine this relatively new qualitative research methodology. Citing a dozen different learning histories, several authored by SoL members, he explains the ways in which the learning history can help organizational writers and researchers, and how it has evolved to merit serious consideration in the field. Several learning histories are available through SoL's website, as well as the definitive training guide, *The Field Manual for a Learning Historian*. Founding SoL member and leading learning historian George Roth offers a commentary.

Finally, as a continuation of research updates presented in our last issue, Otto Scharmer and Dayna Cunningham report on the first cycle of Project ELIAS (Emerging Leaders Innovate Across Sectors) and the findings they will integrate into the second round. Using the presencing methodology, the process develops greater capacity for creating community value for both the participating fellows and their organizations.

We hope that the articles in this issue of *Reflections* will be valuable springboards for conversation with your partners for change. We would like to express special gratitude to the authors who contribute to this journal for catalyzing and guiding our exchange. As 2007 draws to a close, we wish you a healthy mix of quiet moments and good company that restore your body, mind, and soul.

With best wishes for reflection that stimulates action,

C. Sherry Immediato
Managing Director, SoL

There are many online references to the work of Martin Luther King, Jr. http://en.wikiquote.org/wiki/Martin_Luther_King,_Jr. *is one source of quotes and references to his speeches.*

The Language of Power and the Language of Love:
Solving Tough Problems in Practice

Adam Kahane

Adam Kahane

Adam Kahane's first book, *Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities* (San Francisco: Berrett-Koehler, 2005) was excerpted here in *Reflections* in Vol. 6, No. 6. In this article, adapted from a speech he delivered at ExpoGestion in Bogota in September, 2007, he shares the lessons he has learned over the last few years about solving tough problems in practice. Relating stories of both successful and unsuccessful projects has led him to ask, "How can we avoid the twin traps of power without love, and love without power?" The five principles that begin to answer that question became clearer through his most recent work with the Sustainable Food Laboratory, a global initiative he helped found four years ago. This integral approach offers new hope in learning to solve our most complex problems peacefully.

For the past 15 years my attention has been focused on one question: How can we work together to solve our toughest problems peacefully? It is easy for us to try to solve our problems violently – to use our power or authority or money to make things the way we want them to be. And it is easy for us to be peaceful and leave things just the way they are. But how can we create real change in our social systems, not in a way that crushes people, but rather in a way that lifts them up? How can we together create new realities?

After 15 years, I think that I can now see the outline of an unexpected answer to this question. In order to solve our toughest problems peacefully, in order to address our most complex social problem situations, we have to learn to be bilingual. We have to learn to speak fluently two paradoxically different languages: the language of power and the language of love. By power I mean the drive to act, to achieve purpose, to effect real change in the real world. And by love I mean the drive to re-connect, with each other and with our world and what it needs of us. What I have learned from my experiences is that until we are able to exercise power and love together – to exercise power with love – we will never be able together to create new realities.

For the past 15 years I have been facilitating teams of leaders who have come together from across different sectors, organizations and communities to work on complex social problems that they all care about, and that none of them can succesfully address alone. I have worked with teams made up of businesspeople and politicians, generals and guerrillas, civil servants and trade unionists, community activists and United Nations officials, clergy and artists. With such teams, I have worked on, among other subjects, the transition away from apartheid in South Africa, the post-war rebuilding in Guatemala, the contested elections in the Philippines, civic rejuvenation in the United States, judicial reform in Argentina, child malnutrition in India, the health of aboriginal communities in Canada, and global climate change. I have participated in some very successful efforts and some not very successful efforts.

From these hard-won experiences, I have learned some lessons about how to solve tough problems. I am going to share these lessons by telling you five stories from five continents. From these stories I will suggest to you five bilingual practices that I think can be useful to you in addressing your own toughest problems.

Power in South Africa

I got into the work that I am doing now quite unexpectedly. I grew up in Montreal and studied theoretical physics at McGill and then energy economics at Berkeley. In 1988 I moved to London to take a job as head of global social-political-economic scenarios for Royal Dutch Shell, the multinational energy company.

I loved working at Shell because I loved the power. I loved being part of this huge machine that could deploy ideas and people and money around the world to achieve its purpose. I loved the company's practical capacity to create new realities.

One day, after I had been at Shell for three years, we received an unexpected phone call to our offices in London. A group of left-wing activists associated with South Africa's African National Congress, Nelson Mandela's party, wanted to use the Shell scenario methodology to develop strategies for the transition away from apartheid, and they wanted Shell to send someone to give them methodological advice. This is how, in September 1991, I came to travel from London to Cape Town, and from a life of observation to one of engagement.

South Africa has a long and painful history of a colonial white minority achieving their purpose through denying the black majority the right to achieve their purpose. By the end of the 1980s, it has become clear that the white government could no longer keep this apartheid system going, but neither could the opposition overthrow the government. So in 1990, the government released Mandela from prison and South Africans began, for the first time, to meet and talk and negotiate how to change their system: in essence, how to shift who exercised which kind of power to achieve what purpose.

When I showed up at the Mont Fleur Conference Centre outside of Cape Town, the first thing I noticed was that the scenario team was not composed as I had expected. The 28 members of the team included not only officials of the African National Congress, but also members of competing opposition parties, trade unionists, community workers, and academics, and also businessmen and other leaders of the then-white establishment. I was impressed with this team because they really wanted to use their various sources of power to create a new reality in South Africa.

This team met together four times over the year that followed and arrived at a set of understandings about how to handle the shift of power, especially the shift of economic power. These understandings ended up playing a role in the success of the transition in South Africa and especially in the unexpected success of the economic transition.

There was a joke that people used to tell in South Africa at that time, that faced with our extraordinarily tough problems, we have two options: a practical option and a miraculous option. The practical option is that we get out of our chairs and down on our knees and pray for a band of angels to solve this problem for us. The miraculous option is that we stay in our chairs, talk with one another, and solve this problem ourselves. In the event, South Africans chose and succeeded in implementing the miraculous option.

When I reflected on what I had seen at Mont Fleur, I realized that this project had not simply contributed to South Africa's miraculous transition, but had exemplified it. What I had seen at Mont Fleur is that it is possible for people who had been using their power to

achieve their separate purposes – in opposition, even in violent opposition to one another – to come together to use their collective power to achieve a collective purpose. South Africans succeeded in bringing together those people who needed to come together, in order to solve their tough problem peacefully. As one of the members of the Mont Fleur team said: "We outlined the way forward for those of us who were committed to finding a way forward." They succeeded in effecting concrete, practical change in their social system in a way that, rather than crushing people, lifted them up.

I was bowled over by what I had witnessed in South Africa. I fell in love with this way of working on tough problems, which I hadn't even known existed before. I fell in love with that beautiful country at its moment of liberation. And I fell in love with the woman who was the coordinator of the Mont Fleur project. By the end of the project, I had resigned from Shell, emigrated from London to Cape Town, and married the project coordinator.

Power Without Love in Canada

In 1993 I moved to South Africa and with Joseph Jaworski and Bill O'Brien started the international global consulting firm that has grown into, along with other entities, Generon Reos LLC. We started to develop this "Mont Fleur" approach of bringing together key leaders of all of the parts of a system to use their heads, hearts, and hands to change that system. We worked on this in Africa, Europe, and Asia, and in North, Central and South America. It was challenging, exciting, pioneering work. The approach often worked very well. But sometimes it didn't work well at all.

My second story is of a time that this approach of employing collective power to achieve collective purpose didn't work well. And it took place in Canada, my native country.

When I started working in different parts of the world after Mont Fleur, I always carried with me the confidence that I came from a country that had been successful in solving its

own tough problems. So I experienced an existential shock when I found myself in a meeting in Ottawa, where people were talking about the situation of Canada's aboriginal or native people. I hadn't grasped just how appalling this situation is, with rates of poverty, illness, and violence many times the national average: Third World conditions in a First World country.

System thinker Louis van der Merwe taught me that "a system is perfectly designed to produce the results it is now producing." So the Canadian system, of which I was part, is in a sense "perfectly designed" to produce these terrible results. One fundamental aspect of this system is the mental model that aboriginal people are viewed as irresponsible savages. This thinking was institutionalized in, among other practices, a residential schooling system that took children away from their parents to be educated by the church or the state. The founder of the residential school system characterized his approach as "kill the Indian and save the man." The last residential school in Canada was closed only in 1998 – and so this power relationship between aboriginal and non-aboriginal Canadians has been replicated for generation after generation.

After this meeting in Ottawa, I began working with a small team of government and aboriginal and other leaders to organize a process for unsticking this stuck situation. After four years of on-and-off efforts, we had hardly made any progress. What I noticed over these four years is that even within our little group, we managed to recreate the same stuck dance that we were trying to change. The government leaders wanted to remain in control and to fix the aboriginal problem. The aboriginal leaders didn't want to be controlled or fixed by anyone. And my colleagues and I from benevolent foundations, NGOs, and consultancies "just wanted to help." We all had our own different roles and models and purposes that never really moved and never really met.

So unlike the experience of the group in South Africa, we Canadians were in this instance not successful in solving our tough problem. We were not successful in exercising our collective power to achieve a collective purpose. On the contrary, we each used our own power to promote and defend our own purposes and to oppose and block the purposes of others.

I once heard Rabbi Moshe Waldocks of Boston give a sermon about the biblical story of Noah and the great flood. In the Jewish calendar, the story of Noah is always read one week after the story of Adam and Eve. Waldocks asked, "What are we to understand from the fact that last week we read that God created the world and this week we read that he destroyed it? We are to understand that man is made in God's image and that man also has within himself both the capacity to create and the capacity to destroy."

This is what I saw in Canada. I saw that power has two faces. It has a generative face, the power to create. And it has a degenerative face, the power to destroy. But what is it that determines whether our power is generative or degenerative?

Love in Guatemala

During this whole period during which I was becoming fluent in the language of power, I was starting to notice in the teams I was working with another, entirely different language also being spoken. This is the subject of my third story, which took place in Guatemala.

Guatemala has the dubious distinction of having had the longest-running and most brutal civil war in the Americas. It lasted from 1960 to 1996: 200,000 people were killed, mostly at the hands of the state, and 1 million were displaced, out of total population of only 7 million. Someone once told me that the Argentine torture instructors who had been hired by the

Guatemalan army were appalled by what they saw there. The social fabric of Guatemala was completely torn apart.

After the signing of the peace treaty in 1996, a group of Guatemalan leaders who had heard of the Mont Fleur process organized a similar project there. This Visión Guatemala team was at a higher level and more diverse than the one in South Africa; it included Cabinet Ministers, former guerillas, businessmen, journalists, young people, and aboriginal leaders – Guatemala is the country in the Americas with the highest proportion of aboriginal peopole, more than 50%. This team worked together over two years, and contributed to a remarkable stream of changes in the Guatemalan reality, including in the platforms of four of the main political parties, in the implementation of the peace accords, in fiscal agreements, in anti-poverty strategy, in academic curricula, and in local development policy. Visión Guatemala also made a major contribution to shifting the Guatemala's way of solving problems – and it's a country with serious problems – away from exclusive authoritarianism towards inclusive dialogue.

I was impressed with way the Visión Guatemala team had succeeded in exercising collective generative power and I wondered what the root was of their accomplishment. Several of my research partners from MIT and SoL, under the leadership of Katrin Kaeufer, interviewed members of the team some years after the project had ended, and many of the team answered this question by pointing to one five-minute incident that had occurred during their very first meeting together.

One evening after dinner, the team had gathered to tell stories about their personal experiences of the Guatemalan reality. A man named Ronalth Ochaeta, a human rights worker for the Catholic Church, told the story of a time he had gone to a Mayan village to witness the exhumation of a mass grave from a massacre. When the earth had been removed, he noticed a number of small bones, and he asked the forensics team if people had had their bones broken during the massacre. They replied that, no, the grave contained the corpses of pregnant women, and the small bones were of their fetuses.

When Ochaeta finished telling his story, the team was completely silent. I had never experienced a silence like this, and I was struck dumb. The silence lasted a long time, perhaps five minutes. Then it ended and we continued with our work.

This episode made a deep impact on the group, and many of them said that the strength the team, which enabled them to do the hard work they went on to do, could be traced to those five minutes of silence. One of them said to the researchers:

> *"In giving his testimony, Ochaeta was sincere, calm and serene, without a trace of hate in his voice. This gave way to the moment of silence that, I would say, lasted at least one minute. It was horrible! A very moving experience for all…If you ask any of us, we would say that this* moment was like a large communion."

Another said:

> *"In the end, and particularly after listening to Ochaeta's story, I understood and felt in my heart all that had happened. And there was a feeling that we must struggle to prevent this from happening again."*

What I hear in these words is the language of love. By love I mean the drive to re-unify that which was once united and that was then separated or torn apart. When this team, in Catholic Guatemala, said that this was a moment of "communion," they were using the technical meaning: being one body in Christ. And when they spoke of "a feeling that we must struggle to prevent this from happening again," they were speaking of a deep knowing

of what was going on in the system of which they were a part, and of what they had to do about it – what they could not not do.

Towards the end of Visión Guatemala, Elena Diez Pinto, the project's organizer mentioned to me that the sacred book of the Mayan Q'iche people, called the Popol Vuh, contains the following text: "We did not put our ideas together. We put our purposes together. And we agreed, and then we decided." Love is how we know collective purpose. Love makes power generative.

Love Without Power in India

After Guatemala, my colleagues and I focused our attention on working in this way to create new realities through acting from this place of re-connection and love. Bill O'Brien, who had been president of Hanover Insurance Company and one of the exemplars in Peter Senge's book *The Fifth Discipline*, taught us that in a corporate context a generative leader is one who lifts another up, and that love in this context means helping others complete themselves.[2]

This approach often worked very well. But sometimes it didn't work well at all.

My fourth story is of a time that this approach of focusing on re-connecting didn't work well. This was an ambitious project we were involved in in India. India has one of the highest rates of child malnutrition in the world, higher than in Sub-Saharan Africa: 50% of Indian children under five years old are mdoerately or severely malnourished, and 40% of all the malnourished children in the world are in India. When we organized a collective problem-solving process to address this situation, we encountered a loving response – "we cannot not act to help these children" – from almost everyone we invited to participate. We put together a team of 40 people from Indian government departments, corporations, and NGOs and community groups, and this team worked together full time for three months. We made an intense effort to connect these leaders from across the system to one another, to leading practitioners in this field, and to communities and children suffering from malnutrition. Through this approach we created a set of bold and innovative solutions.

But we made one mistake: we ignored power. This was a system with enormous power differences and power dynamics and power struggles. The basic structure of our project contained what must be one of the biggest power differences in the world: between we well-nourished middle class professionals on the team, and the malnourished, impoverished children our work was intended to benefit. And then there were the differences, in this status-conscious culture, between government and NGOs, between experts and novices, between funders and recipients, between bosses and staff, between men and women, and between we foreign consultants and the Indians. But we made these differences were undiscussable and therefore unaddressable. One day we were having a big conflict in the team, circling these difficult issues, when the most senior government official on the team declared: "There is no conflict here!" – and that was it, the issue had officially disappeared. So as a team we were able to speak the language of love but we were not able to speak the language of power. But ignoring power doesn't make it go away; it just sends it underground, where it becomes more degenerative and destructive.

At the end of these intense three months of work, we proposed the solutions that we thought were bold and innovative to the board of the project, who were the bosses of the team members: the representatives of the Indian "powers that be." They rejected our proposals almost entirely. Our solutions were too different from the usual way things were done and

had too little local ownership, and were therefore too difficult to implement. So the team was disbanded and much of our work was abandoned.

This experience in India left me depressed and confused. I had seen the generative face of power, the capacity to achieve purpose, and also its other, degenerative face. I had seen the potent face of love, of re-connection, and also its other, impotent face. And more disturbingly, I had seen all of these faces – generative, degenerative, potent, impotent – within myself. So what to do?

In the midst of my discouragement, I came across a speech that had been given by Martin Luther King Jr., the great American civil rights leader, in 1967, just six months before he was assassinated. I was stunned to see that in this speech King had articulated precisely the tension that I was wrestling with. He said:

> *"Power properly understood is nothing but the ability to achieve purpose. It is the strength required to bring about social, political, and economic change….And one of the great problems of history is that the concepts of love and power have usually been contrasted as opposites – polar opposites – so that love is identified with the resignation of power, and power with the denial of love. Now we've got to get this thing right. What [we need to realize is] that power without love is reckless and abusive, and love without power is sentimental and anemic…. It is precisely this collision of immoral power with powerless morality which constitutes the major crisis of our time."3*

This speech rang precisely true for me because I had seen in Canada how power without love is reckless and abusive and degenerative. I had seen in India how love without power is sentimental and anemic and impotent. And I had seen myself be reckless and abusive on odd-numbered days and sentimental and anemic on even-numbered ones. So how can we address this major crisis of our time? How can we avoid these twin traps of power without love, and love without power? How can we exercise power with love? How can we in practice solve our toughest problems peacefully?

Power With Love in Global Food Systems

My fifth and final story summarizes my current answer to these questions. My answer consists of five principles that I think represent part of the code, the DNA, of a promising integral approach to solving tough problems peacefully. These five principles correspond to the five movements in Otto Scharmer's Theory U.[4]

This fifth story started four years ago, when Hal Hamilton and some colleagues and I launched a global initiative that we called the Sustainable Food Laboratory.[5] The problem situation that we set out to work on is the following: our present food system produces lots of food; the food is inexpensive for rich people but expensive for poor people; much of it is not healthy for the people who eat it; it doesn't provide a decent livelihood for most farmers or farm workers; it's not good for the soil or the water or the atmosphere…but other than that the system works fine! If the food system is perfectly designed to produce these results that it is now producing, the Food Lab asked, how can we change this system to produce more economically, socially, and environmentally sustainable results?

We started off our initiative by looking for leaders of different parts of this system who understood and cared about this situation as a whole. We ended up recruiting leaders from food processors, retailers, financial institutions, non-governmental organizations, govern-

ments, and citizen and worker movements. Eventually we had a team of 45 committed, influential people from Europe, the United States, and Latin America who together made up a miniature version of the global social system that we were all committed to changing. So the first principle is: "Convene a Microcosm of the System's Leadership." This is a bilingual principle because in the language of power, this principle tells us to recruit leaders who have real capacity to change the system. And in the language of love, this principle tells us to recruit leaders who are committed to the health of the system as a whole.

One consequence of having a team that constitutes a microcosm of the system they are trying to change is that, if they can talk with one another openly and honestly, then they can all see the whole system, from multiple perspectives, in all its complexity and contradictions. Furthermore, the dynamics of the whole system – including the power dynamics – get replicated within the team's meeting room, where they are available for everyone to see and to work on. The Food Lab team did this, and also got out of the meeting room and into a series of "learning journeys" around Brazil, where the whole system – rural and urban, primitive and modern, sustainable and unsustainable – was visible on the ground. In this way, they built up a shared picture of the food system and how it worked and why it was producing the results that it was producing. So the second principle is: "Immerse in the Complexity of the System." In the language of power, this principle tells us to focus on understanding how things really work and what it really takes to change them in practice. And in the language of love, this principle tells us to focus on building connections and relationships across the system as a whole.

Now as a committed, influential, microcosmic team immerses itself more and more deeply in the reality of the system it is trying to understand and change, they begin to notice their own role in things being the way that they are. There was a slogan in the 1960s that said that "If you're not part of the solution, you're part of the problem." But, as Bill Torbert once pointed out to me, actually that slogan misses the most important point about effecting change, which is that "If you're not part of the problem, you can't be part of the solution."

If we cannot see how what we are doing or not doing is contributing to things being the way that they are, to the system producing the results it is now producing, then it follows that we have no basis at all for changing these results – except from outside the system, violently. But if the leaders of a system can step back, can retreat, from the complexity of the system they are part of, and reflect on what is going on and their role in it, then they will know what they have to do. The Food Lab team, after they had been working together for six months, went on a retreat that included 72 hours alone, in silence, in the desert of Arizona. And when they came back from the desert, they knew what they had to do – just as the Guatemalans had known after Ochaeta's story. So the third principle is: "Retreat to the Source of Insight and Commitment." In the language of power, this principle tells us to connect with our own deepest purpose and will. And in the language of love, this principle tells us to connect, not with what we need of the system, but with what the system needs of us.

When a team connects to this source of insight and commitment, within and between and around themselves, they can move mountains. Within only a few hours of coming back from the desert, the Food Lab team agreed on a set of six ambitious initiatives for creating more sustainable mainstream food supply chains, which they have continued to work on together during the past three years. These initiatives include connecting retailers in Europe and the United States to small fishermen and farmers in Africa and Latin America; connecting hospitals, schools and other public institutions to local producers of healthy food; and connecting buyers of food and bio-fuel commodities with sustainably-managed growers. It's not that the Food Lab team's work, having connected to their source of insight and commitment, has since then always been easy or successful. It is just that they have had the courage and strength to get out into the world and just do it: to try and fail and learn and try again, over and over. So the fourth principle is: "Try Out Systemic Innovations." In the language of power, this principle tells us to learn, not by theorizing or planning or recommending what other people ought to do, but rather by acting, by doing, by using our hands. And in the language of love, this principle tells us to undertake this action in partnership with other stakeholders from across the system.

This is how to solve tough problems peacefully. This is how to grow practical, profound, sustainable innovation and change. This is how to build better social systems. The Food Lab team, after these three years of trial and error, is gradually and organically building up an entirely new body of relationships and alliances and standards for mainstream sustainable food supply chains that is spreading within their own institutions and also across their suppliers and customers and competitors and allies. A web of ambitious, cutting edge, cross-institutional initiatives is spreading across Europe, Africa, Asia, and the Americas. The Food Lab has become an influential space for learning and for institutionalizing these learnings into living examples of best practice. So the fifth and final principle is: "Grow Ecosystems of New Practices." In the language of power, this principle tells us to keep our eyes on the prize of creating new and better realities, not in theory but in practice. And in the language of love, this principle tells us to keep our eye on the prize of creating these new realities, not violently but peacefully.

Conclusion

The Food Lab is making progress on its objective of creating living examples of mainstream sustainable food supply chains and so is itself becoming an important living example of this

way of solving tough problems peacefully. Peter Senge says that the Food Lab is "the largest systemic change project I have seen." Through trial and error we are gradually learning how together to create new realities.

That said, the approach to solving tough problems that I have outlined here is only about 15 years old and is still very much in its difficult teenage years. We have a long way to go before we can employ or replicate this approach to effecting change in complex social systems reliably. It is not easy to solve tough problems peacefully. It is not easy to employ power with love. The Jungian psychologist Robert Johnson wrote that "Probably the most troublesome pair of opposites [that we can try] to reconcile is love and power. Our modern world is torn to shreds by this dichotomy and one finds many more failures than successes in the attempt to reconcile them."[6]

In this work, there are no easy recipes or sure successes or straight roads. As the philosopher Immanuel Kant said: "Out of the crooked timber of humanity, no straight thing was ever made."[7] But I believe that there is a prize here that is worth the struggle up this steep and winding road: the prize of a better way to create a better world. This is a struggle to which I am committed. This is a struggle that I look forward to continuing to engage in together with you.

ENDNOTES

1 See Elena Diez Pinto, "Visión Guatemala, 1998-2000: Building Bridges of Trust." In *Civic Scenario/Civic Dialogue Workshop*, edited by Bettye Pruitt. (New York: United Nations Development Programme Regional Bureau for Latin America and the Caribbean: 2000).

2 See Bill O'Brien, *Character and the Corporation* (Cambridge: Society for Organizational Learning, 2002).

3 Martin Luther King Jr., "Where Do We Go From Here?" in *A Testament of Hope: The Essential Writings and Speeches of Martin Luther King, Jr .* (New York: HarperCollins, 1991).

4 Scharmer's five movements are Initiating, Sensing, Presencing, Creating, and Evolving. See Otto Scharmer, *Theory U: Leading from the Future as it Emerges* (Cambridge: Society for Organizational Learning, 2007).

5 See www.sustainablefoodlab.org

6 Robert Johnson, *Owning Your Own Shadow: Understanding the Dark Side of the Psyche* (New York: HarperCollins, 1993).

7 Quoted in Isaiah Berlin, *The Crooked Timber of Humanity: Chapters in the History of Ideas* (Princeton: Princeton University Press, 1990).

ABOUT THE AUTHOR

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Achieving Clarity in a Constantly Changing Environment

Adrian Wolfberg and Michael Stumborg

Adrian Wolfberg

Dr. Michael Stumborg

George Santayana famously stated, "Those who cannot remember the past are condemned to repeat it." But what happens when our experiences become increasingly irrelevant? What happens when our environment changes so fast that everything we experience is unfamiliar? How can organizations learn lessons from past experiences? Some organizations still find themselves in the slowly varying environment of the past, but most see the pace of change accelerating so rapidly that it appears to be essentially constant. Organizational survival requires the methods they use to learn and impart operational knowledge to change as fast or faster. In this case study, Adrian Wolfberg, from the Defense Intelligence Agency, and Michael Stumborg of Toffler Associates discuss a pilot project (still ongoing) called Full Spectrum Analysis at the DIA's Knowledge Lab as one method that is already showing significant results.

"There is wisdom in turning as often as possible from the familiar to the unfamiliar: it keeps the mind nimble, it kills prejudice, and it fosters humor."

— George Santayana

Nowhere is rapid change more evident than in "knowledge competition" organizations like the Defense Intelligence Agency (DIA). Knowledge competition is the struggle to create knowledge capital, to steal it from adversaries, and frustrate their ability to create and use it. Moving from the Industrial to the Information Age, warfare is such that information supremacy increasingly trumps physical destruction. We now see military operations designed to gather information, not to take or destroy physical objectives.[1] Knowledge competition is central, and adversary capabilities now make the consequences of losing this competition extremely dire. Adversaries rarely present the same challenge twice, reducing our ability to institutionalize and act on lessons learned. The ongoing "arms race" of improvised explosive devices is one powerful and painful example.[2]

While the technical embodiments of our challenges change almost daily, some fundamentals remain inviolate. Warfare is a form of competition, and a single unifying theoretical construct thoroughly describes all competition, be it a clash between military forces, between rival corporations, or between sports teams. Each group operates using the Boyd OODA Loop (Observe, Orient, Decide, and Act),[3] performing each step repeatedly as they compete to dominate their respective domains. Whoever executes this loop fastest is often victorious. Organizational learning enters primarily in Orientation so that fast learning of relevant operational knowledge engenders faster OODA Loop execution and victory. Given the OODA Loop's cross-disciplinary applicability, the lessons of fast organizational learning in defense intelligence apply to many other organizations engaged in a Boyd-like knowledge competition.

If the key to victory is fast orientation, then the question becomes "How do we create an organization whose members learn and implement operational knowledge (i.e. orient themselves) faster than the members of adversary organizations?" One approach accelerates the pace of established learning methods – a difficult task for large hierarchical organizations. The established methods require sequential time-consuming steps: leaders identify problems requiring new skills, identify the required new skills, develop and fund the training program, train the trainers, conduct the training, and convince their skeptical members that these new skills will not become immediately obsolete.

Attributes versus Skills

There is a better way to accelerate the speed of orientation. Instead of teaching skills in this top down approach, the organization can create a membership that takes the initiative to learn and implement operational knowledge from the bottom up. This reduces the complexity of organizational learning, compresses the OODA Loop, achieves competitive advantage, and more frequent victories. This is the philosophy behind *Full Spectrum Analysis* (FSA). Instead of imparting operational knowledge by teaching skills mandated from above, FSA identifies and imparts the attributes required of members who will proactively seek out new capabilities as they identify their own needs for them. FSA moves from skills to attributes, from organizational mandate to individual initiative, from reactive to proactive, and most importantly, from slow to fast.

> *"The FSA techniques revolutionized how quickly I can synthesize an analysis process to its essence and standardize it. The next person to do this particular work will not only learn my position and be productive in a fraction of the time it took me, but there will be no loss of continuity should I not be here to mentor."*
>
> — FSA Alumnus

In 2003 the DIA determined eighteen workforce attributes in five categories required for successful mission execution in the Information Age environment.[4]

Several of these attributes, or hybrid combinations of them, also enable fast-learning organizations. First is *the ability to be a life-long learner.* Since rapid change renders both recently acquired and long-held knowledge and skills obsolete, the ability to just as quickly jettison them in favor of new knowledge and skills is prerequisite. To not refresh yourself is to become irrelevant. Tied to this attribute is *the ability to internalize new ways of learning, thinking, and problem solving*. It is not just about learning new material: but about learning to learn it in new ways – continuously.

> *"FSA changes the way you conceptualize and the way you behave. It prompts analysts to think about how intelligence problems are defined and the way you solve them. FSA encourages active information seeking, collaborative interaction, and r eflection. It's dynamic!"*
>
> — FSA Alumnus

Another attribute is *the ability to proactively seek out new information sources, analytical techniques, and enabling technologies*. Proactivity is the critical piece. One cannot simply

Chart title	
Cognitive Attributes	
Culturally Intuitive	Permeates “hearts and minds” of target; nuanced thinking
Identifies Patterns	Draws connections between nonlinear events and occurrences, considers low probability/high impact events
Global Thinker	Understands global operating environment; sees implications in diplomatic and economic contexts
Imagining	Formulates highly original concepts and perspectives
Multi-Disciplined	Brings a range of ideas to group discussions
Judgment Attributes	
Questions Assumptions	Guards against allowing “group think”
Calculated Risk Taking	Offers (inherently risky) predictive intelligence
Communication Attributes	
Interaction Oriented	Communicates “live” with customer; conversational manner
Networked	Seeks experts with diverse knowledge sources, keeps them at the ready.
Real-Time Collaboration	Adapts to new technologies and customer’s desire for speed
Story Telling	Uses narratives to allow understanding of complexity
Scenario Writing	Develops scenarios based on facts and intuition
Presents Context	Provides on-going, additive perspective to customers
Technical Attributes	
Technology and Science	Understands something about both disciplines; aware of technological and social science issues, impacts, and solutions
Shapes Technology	Identifies, selects, and tailors technology solutions to needs
Role Attributes	
Anticipatory, Proactive	Seeks to understand and anticipate client needs
Customer Focused	Works to ensure data is useable for client success
Outcome Oriented	Seeks tangible mission outcomes

learn anew when told to learn. Survival in rapidly changing environments requires the inquisitiveness to be aware of new tools, and the individual initiative to go get them. Related to this attribute is the ability to quickly distill, assimilate and creatively synthesize new and seemingly unconnected information, techniques, and technologies into novel capabilities.

Several attributes address interactions with customers, teammates, adversaries, and yourself. The ability to continuously understand customer needs comes first. Many things change quickly. Customer needs may change faster than our ability to meet them – the ultimate metric of irrelevance. Today’s intelligence issues require diverse teams that rapidly form, execute (on multiple issues in parallel), disband, and move on to the next issue. Thus, the ability to rapidly acclimate to, and maximize contributions from cognitively diverse teammates becomes paramount. Equally diverse are our knowledge competition adversaries. New and unfamiliar groups continually challenge us, as do familiar groups employing unfamiliar tactics or possessing unfamiliar perspectives. This requires the ability to see problems through the eyes of a con-

stantly shifting adversary. Since everyone approaches analysis through the lens of their own experience, the ability to rapidly identify, challenge, and discard the personal biases and prejudices of our teammates, our customers, and ourselves is essential.

Full Spectrum Analysis and the DIA Knowledge Lab

Noted deficiencies in analytical tradecraft[5] point to the need for adopting different ways of learning, thinking, and problem solving. The DIA Knowledge Lab is one initiative to address this need. With support from successive agency leaders, and an intellectually risk-free environment where volunteers and FSA pilot participants are free to try new approaches, the Knowledge Lab is in some ways similar to "Skunkworks-like" activities. It is similar because it recognizes the need to change and innovate, and the general inability of large organizations to do so effectively, but dissimilar because its initiatives are not secret. The Knowledge Lab creates change at the DIA through the iterative application of well-advertised pilots that change one or more dysfunctional behaviors. Effective Knowledge Lab pilots transition into the DIA organization, to effect large-scale change.

FSA is one of those pilots.[6] It recognizes that competition is the basis of intelligence – competition to obtain the information needed to advance one's aims while thwarting the adversary's, and competition to protect and grow critical information. Preparing for its fourth iteration, FSA broadens the horizons of participants in three areas: the full spectrum of information sources, the full spectrum of technical and analytical tools, and the full spectrum of cognitive abilities and perspectives. This may seem a simple task, but significant cultural impediments, born of the need for secrecy within the intelligence community, auger against easy transition to an environment where intelligence professionals are comfortable reaching out to a wider spectrum of available capabilities, and are encouraged and rewarded for doing so. Despite the "A" in FSA, it is not only about analysis. It is about new ways of learning, thinking, and problem solving – attributes required of every DIA employee, thus the inclusion of non-analysts in the FSA pilots.

"The one-voice thing is very damaging to analysis – and one kind of cubicle, one kind of chair, one kind of anything… one thing doesn't fit everyone."

— FSA Alumnus

The literature regarding organizational transformation points to the key ingredients required for success, present in both public and private sector organizations.[7] FSA addresses several of these, and when combined with other Knowledge Lab pilots, addresses others.

Transformation occurs at three levels based on the tenure of individuals within the organization: the entry/working level, the middle management level, and the leadership level. Rarely will top-down transformational efforts succeed. Even when leaders dictate change, powerful cultural inertia is difficult to overcome. Regular and fairly predictable leadership changes at public sector and military organizations exacerbate this problem further. Entrenched opponents of change just wait out the current leadership and its transformation initiatives.

Change is easiest at the entry/working level, where "the way we've always done it" is not ingrained. While slow change can occur from a bottom-up approach, urgent transformation focusing on bottom-up approaches tend to fail since enthusiastic change agents injected at the bottom of the power structure cannot flourish without "top cover" from a long-lived leadership. Max Planck, a founding father of quantum mechanics noted, "An important scientific innovation rarely makes its way by gradually winning over and converting its opponents. . . What does happen is that its opponents gradually die out and that the growing generation is familiarized with the idea from the beginning." The difficulty in accelerating change then becomes what some have described as the "iron middle": middle managers who outlast the leadership, and use established incentive structures to quash change from below before it takes root.

"There is a willingness to change – and there are so many young people at the agency, things will change. It is inevitable."

— FSA Alumnus

"The first level supervisor like me doesn't know what he can do to push the envelope."

— Supervisor of an FSA Alumnus

FSA, coupled with an ongoing commitment of successive DIA leaders to the Knowledge Lab approach, and other Knowledge Lab initiatives, initiates change by seeding the organization with change agents from the bottom and sustained commitment from the leadership to influence the middle from both ends. A significant part of the FSA approach is the mutually supportive network created by the interaction of FSA alumni. FSA participants do not "graduate from a course of instruction and go back to work." They become part of a cadre expected to interact with, aid, and support, those that come to FSA after them, forming the core of a guiding coalition schooled in the attributes of FSA, gradually anchoring the new approach in the organizational culture. Done correctly, alumni become effective recruiters for successive iterations of the pilot and soften the barriers to implementation with each success achieved by practicing FSA in the work place.

"The benefit [of networking] comes from the connections you make between other people, you yourself are a conduit, not an endpoint. That is something honorable and inspiring because you are part of a larger whole, working to enrich others."

— FSA Alumnus

What is FSA?

To describe FSA is to describe the behavior it produces. By definition, FSA is fungible, making it difficult to describe its alumni as people with a certain repertoire of skills. They are people with a certain repertoire of attributes. Each iteration of the FSA pilot seeks to impart these unchanging attributes, including the attributes of fast organizational learning. The specific information sources, analytical techniques, technology tools, and perspectives covered do change, so that if participants limit their experience strictly to acquiring exposure to these new capabilities, they find themselves with an almost immediately obsolete skill set. If they instead learn the attributes – the ability to seek out the new incarnations of these tools on their own as they evolve, and to share them, then they constantly refresh their skill set, keeping it up to date and relevant. An unwavering concept from one iteration of the pilot to the next is that knowledge competition is the key to victory, which requires participants to identify and assimilate new knowledge and knowledge manipulation tools and techniques faster than their adversaries.

The FSA pilots employ several feedback loops, and are thus able to adjust on the fly as new needs emerge and as the demographic composition of each FSA cohort (about twelve people for each pilot) changes. FSA facilitators constantly check with the participants to understand their expectations of the FSA experience, their assimilation of the targeted attributes, and to determine what is working, and what is not. They make real-time adjustments to address these changing needs and expectations. After pilot completion, facilitators and FSA participants (now alumni) identify, keep, and improve successful material and discard less successful material in favor of new approaches.

FSA is a journey, not a destination. It is not a "train the trainer" approach. It is not the imparting of skills mandated from above, but rather an awareness of, and inculcation of, the attributes required that enable organizational members to continually and proactively hunt for new capabilities on their own as their work environments shift and new capabilities and information sources become available. The ultimate goal is large-scale organizational behavior change, which begins on a small scale and expands informally through the alumni support networks.

"The more people you know, the better your analysis – networking is key. You can't come up with everything yourself, you ask who else to talk to. You come up with sources that you could never come up with yourself."

— FSA Alumnus

Recruitment criteria and conventional training prove generally inadequate at imparting these attributes. FSA selection criteria does screen for the likelihood that participants are amenable to adopting the attributes once exposed to them. Selection interviews look for courage, a commitment to collaboration, and a willingness to effectively and respectfully challenge authority. In *Five Minds for the Future*[8] Howard Gardner contends that education

today focuses on the skills we need today, and not on the cognitive qualities (disciplined, synthesizing, creating, respectful and ethical) critical to success in tomorrow's environment of accelerating change and information overload. These ways of thinking must be cultivated, not trained to. He further contends that no one knows how to create an educational system to do this. A large part of facilitation in the FSA approach cultivates the attributes through coaching and mentoring: a practice that does not stop when the pilot concludes, and enlists the active assistance of the FSA alumni. FSA is a prototype of the cultivating educational system that Gardner claims is missing.

How is FSA Conducted?

FSA participants meet formally as a group one day weekly for twelve weeks. Interleaved throughout is a "Capstone Question" – a real-world intelligence question of interest to the DIA leadership. The need to apply FSA techniques to the Capstone Question, and to present their findings to the DIA leadership, create frequent interaction among participants beyond regularly scheduled sessions. Most sessions are a half-day led by the facilitators, followed by a half-day working session where the participants lead and address the Capstone Question.

Each session has a unifying theme that ties back to at least one FSA attribute. The transmit-receive method of imparting the attributes is avoided scrupulously. Starting with learning objectives for each session that provide participants with insights about their craft or themselves, the facilitators design material using a theory-to-practical-application dyadic approach. Theory presentation occurs through an interactive exercise, followed by opportunities to put the theory into practice, often through a role-playing exercise using an historical or contemporary intelligence problem.

For example, one theme is "biased perspectives," at the individual, team, customer, and organizational levels. Participants learn that they carry into the analytical process with them, everything that ever happened to them to shape their world-view, and that that can lead to erroneous conclusions if it goes unrecognized. By the end of the activities, participants understand and recognize their own internal biases, and those of their teammates, their customers, and their adversaries. Furthermore, they are aware of how understanding these biases help them to win the knowledge competition by dampening their negative effects on their side, and exploiting them in their adversaries.

The day has four major exercises: *Implicit Associations, Operation Barbarossa, Winning the Battle of Algiers,* and *Operation Anaconda*. In *Implicit Associations,*[9] a fill-in-the-blank exercise drives them to the "wrong" answer by faulty association. They quickly fill in twenty blanks with historical information. The exercise begins:

> *The tragic events of _____ (date) came as a great surprise to the world, the American public, and to _____ (political party name) President _____ (name). . .*

The opening phrase drives about 90% of participants to facts associated with the 9/11 attacks on America, but they are equally germane to the December 7, 1941 Pearl Harbor attack. After showing the "correct" answers, the facilitator discusses how phrases such as "The tragic events of" created an implicit association in their mind that led to 9/11.

Participants discover that they must be vigilant against implicit associations and biases in themselves and everyone they work for, with, or against.

Operation Barbarossa, based on the German invasion of the Soviet Union in 1942, provides a first opportunity to witness and address such biases in practice. Many analysts have an inherent bias toward the logical – toward the facts of the case. Joseph Stalin was anything but logical. Stalin's personal paranoia and rabid hatred of Winston Churchill shaped his actions and interpretation of the facts, driving him to trust Adolph Hitler.[10]

Participants receive an intelligence dossier with all the facts Stalin possessed on the eve of the invasion. The facilitators use a list of factors shaping Stalin's worldview and instruct participants to read the dossier and play the role of junior Soviet intelligence analysts assigned the unenviable task of convincing Comrade Stalin that the Germans are coming. The analysts construct and present rock-solid fact-based assessments of the situation. The facilitators, role-playing Stalin, respond irrationally and dismiss the facts as English deceit, and infer a date with the firing squad if this line of reasoning persists – just as Stalin did. Analyst and customer (Stalin) talk past each other. Logic does not prevail. Stalin's bias prevents him from seeing the truth. This re-enforces the notion that biases exist within the minds of the people who receive their analysis results, and that they must be prepared to recognize and deal with that. The exercise concludes with some advice on how to recognize and deal with difficult people.

Following this exercise is a working lunch with a discussion on war fighter perspectives. One of three similar sessions throughout the pilot, a tactical-level military officer recently returned from a war zone gives participants his perspective on intelligence needs. Participants gain a better understanding of this key intelligence customer segment. The other two intelligence customer groups that provide their perspectives on later dates include a Department of Defense policy maker, and a commercial CEO.

Participants then shift to *Winning the Battle of Algiers,* another case study, this time involving the 1950s uprising against the French in Algeria. They gain insight into how cultural baggage and different perspectives influence actions (and reactions) by role-playing the French military, the Algerian insurgents, and the Algerian populace. After watching the Gillo Pontecorvo movie *The Battle of Algiers* (before the session), the French and Insurgent role players develop action plans that will serve their interests and win the hearts and minds of the Algerian people. The Algerian people role-players vote on who will have their allegiance (and why) after hearing the planned moves and counter-moves. French and Insurgent role players trade the advantage of briefing first in successive rounds of the scenario. Participants discover that even with perfect hindsight (from watching the Pontecorvo docudrama) it is difficult to understand what moves adversaries will make without a clear understanding of their motivations and perspectives.

The difficulty ratchets up further during the Operation Anaconda role-playing exercise. Foreshadowed by the lunchtime discussion, and set in modern day Iraq, participants no longer have perfect hindsight, and there are now more than just two sides in the competition, with the U.S. military, local insurgents, foreign fighters, pro- and anti-American local sheiks, and individual agents-provocateur who appear to be part of a group, but really have their own hidden agendas and rivalries with other groups. By now, participants have become keen to discover the true biases, perspectives, and motivations of the competing actors as they seek to achieve their strategic objectives.

The day ends, as each session does, with a recap of the learning objectives, a discussion of how each exercise re-enforced those objectives, and thoughts from the FSA participants on

how they might apply what they discovered in their work, and on the Capstone Question.

The same theory-to-practical-application dyadic approach achieves the following learning objectives, designed to impart required attributes:

Fostering team dynamics and trust, and "getting the question right." Fast work environments require working on multiple teams at once, and on teams that change composition with every new problem, making teamwork attributes critical. Dealing with diverse customers with diverse needs and sometimes-limited understanding of the team's capabilities makes the ability to continuously understand true customer needs another critical attribute.

Developing proactive and inquisitive behavior patterns, building testable hypotheses and challenging assumptions from within. Intelligence analysis is ultimately about applying all available and unavailable-but-attainable data to a hypothesis that answers the customer's question. Viewing this application through lenses undistorted by biased perspectives and assumptions is critical.

Getting smart fast. A major part of FSA is tapping the full spectrum of available data – often referred to within the intelligence community as all-source analysis. All source analysis is a necessary, but not sufficient component of FSA. Participants learn how to reach out beyond the traditional intelligence community information sources, and beyond most of their comfort zones by employing open-source research (information available to the general public, as opposed to secret information available only to the intelligence), knowledge networking, and interviewing.

Analysis and synthesis. FSA, it is not a course about intelligence analysis, or exclusively for analysts. It is a new way of learning, thinking, and problem solving. (Wolfberg, 2006) Analytical skills are just one part of FSA. The emphasis here is on the attribute of proactively hunting

out non-traditional and emerging capabilities – in this case analytical tools and techniques – from disparate sources.

Making and breaking hypotheses. A critical shortcoming of analytical tradecraft is the proclivity to cling to a hypothesis, once formed, sometimes in spite of emerging evidence that refutes it. (National, 2004) Because of the critical importance of this skill, not only are the methodologies of hypothesis testing covered, but also the personal attributes of someone willing to revisit and challenge their own cherished hypotheses.

The "Logic of the Model." What are those few key and relatively "static" dynamics that drive decision makers? Participants learn how to get inside the head of their adversaries, and even their customers. Participants revisit Joseph Stalin and try to discern his logic of the model and how they failed to sway him before because they could not discern the dynamics that drove his decision-making process.

Delivering analytical results by compelling storytelling. Attempting to drive intelligence analysis away from a dry and uninspiring regurgitation of collected facts, the "so what" module ties analytical results back to getting the question right. Participants learn how to develop analysis products their customers truly want and need, with the capability of creating actionable recommendations. The "storytelling" module emphasizes this millennia-old form of human interaction and how to harness its power to deliver memorable analysis results.

Being a proactive hunter instead of a reactive gatherer of technology tools. Participants visit a technology developer charged with adopting and adapting analytical tools from outside the intelligence community for use on the inside. Titled "Out of Left Field," this session drives home the attribute of maintaining a wide aperture for new technology tools, similar to the attribute that drives them to seek information from all sources.

> *"I think we need to focus more on liberating the analysts. Letting them do analysis. I think sometimes we are too prescriptive on what we require from them. It doesn't allow them to be challenged well, and that can hurt morale and turnover."*
>
> — Supervisor of FSA Alumnus

> *"The best supervisors really set guidelines and expectations up front and then let me go. Give me free reign. Then you don't bump into obstacles. Freedom within bounds is liberating and you can get more creativity with it."*
>
> — FSA Alumnus

Conclusion – Where Do We Go From Here?

One lesson common to transformation and innovation is the difficulty of re-integrating people with new operational skills back into an organization that is not yet accepting of these new, and often disruptive, techniques. It is pointless to impart new operational knowledge to junior employees and expect them to collectively push on the sluggish rudder of the organization, hoping to change its direction without experiencing resistance. Two complementary initiatives under development create for FSA alumni an environment where they can flourish and succeed.

Full Spectrum Leadership (**FSL**) addresses the "iron middle." Instead of just pressuring the middle management level with leadership directives from above, and enthusiastic FSA alumni

from below, FSL shapes the middle managers by educating them on the advantages of FSA to the organization. It shows how managers can best employ and utilize the FSA alumni to achieve personal success and contribute to organizational success. This process begins even before the participants "return home," when FSA facilitators visit each participant's supervisor to explain and support the new approaches.

Full Spectrum Remote (FSR) recognizes that the success of FSA depends on a very solid foundation of FSA alumni to form the mutually supporting change-agent network. DIA is a worldwide organization whose members have a diverse set of roles, responsibilities, and availabilities. Many in the workforce cannot accommodate a once-weekly twelve-week commitment. FSR is reworking the elements of FSA to deliver it to the unique needs of this diverse and geographically dispersed workforce.

Expansion Beyond the DIA Knowledge Lab – FSA has already grown beyond the DIA, with participants coming from several intelligence agencies for each pilot conducted thus far. The Knowledge Lab leads the charge to introduce new ways of thinking at DIA and spreads their lessons-learned throughout the intelligence community.

Epilogue

Everyone is an analyst. You do not have to have that word in your job title or description for that to be true. This is one reason why FSA invites participants from the entire DIA work force, not just the analyst core. Recent FSA participants include travel office and budget shop personnel. The lessons of FSA are applicable not only beyond DIA into the rest of the intelligence community, but beyond the intelligence community as well into any field where knowledge competition is the key to success.

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In the Shadow of Windmills:
Reflections of a Climate Project Volunteer

Peter W. Pruyn

Peter W. Pruyn

Not long after SoL research member Peter Pruyn saw *An Inconvenient Truth*, Al Gore's award-winning call to arms on climate change, he applied to the Climate Project to become a volunteer trainer. He finished the training in December, 2006 and began sharing Gore's presentation soon after, including one with SoL members at the SoL Boston offices. In this article he reflects on a journey that found him continually reflecting on and challenging his own mental models, assumptions, and beliefs. What he learned during the past year – from a new vocabulary, to how to avoid being overwhelmed by the implications of climate change – applies to anyone working in this arena. The capacity to learn is critical for generating "progress amidst complexity," especially in urgent situations that demand action. Pruyn continues to speak to diverse groups about climate change, and to further his own learning.

Walking towards the end of the peninsula, Hull Wind 1 is hard to miss: a 200 foot-tall light gray tower, its three sword-like blades rotating persistently in the on-shore breeze. Even though I'm still a quarter of a mile away, I can just begin to make out the *woosh woosh* of its blades. Visiting Hull at the invitation of a fellow Climate Project Volunteer, I will be departing this small seaside community just south of Boston on the next ferry. But before I leave, I feel compelled to pay my respects in person.

Less than a year ago I would have regarded a pilgrimage to a windmill as peculiar. A lot can happen in a year.

The first time I mentioned to my family that the polar ice caps were shrinking due to carbon emissions, one relative asked incredulously if I was suggesting that all airliners be grounded. It was therefore significant when, only a few months later, they raved about a new film they had just seen, *An Inconvenient Truth*.

Using the profits from his Oscar-winning film, Al Gore founded a non-profit called The Climate Project whose purpose was to train 1,000 volunteers to deliver the PowerPoint presentation he delivers in the film. Three months later, still in disbelief that my application had been accepted, I landed in Nashville, Tennessee along with 200 others from each of the 50 states. I giddily arrived at the training room at 7:30 A.M. on Saturday, only to discover that many others had already claimed the front-row-center seats even earlier.

Gore arrived shortly thereafter and spent the entire day with us, going through his presentation twice, once at a normal pace, and once giving detailed explanations of each of his 260-odd slides. Putting aside his compelling ability to communicate complex science to lay audiences, I was struck most by how much he made me laugh. Taking a few more liberties with epithets as he preached to his choir, he would make under-his-breath asides which I found hilarious: "Two miles of ice over your head would ruin your day"; "Skeptics are diminishing

faster than glaciers"; "Hikers saw a 5,000 year old man – which you don't see very often."

After paying our airfare and hotel to be there, this two-day training program was free. But in return, each of us pledged to give Mr. Gore's presentation a minimum of 10 times over the next year in our local communities, strictly on a volunteer basis. For someone who has kept an arm's length from terms such as "activist" and "environmentalist" his entire life, this was something altogether new.

As a recovering WASP, I was raised to be polite. As an eight year-old, I can vividly remember watching a black Zodiak raft on the evening news, dwarfed by a Goliath super-tanker, zig-zagging across the tanker's enormous bow wave in a attempt to stop it. The writing on the side of the raft said, "Greenpeace." I distinctly remember thinking to myself, "That's *rude*." With this single act of insolence, my mind closed to Greenpeace and its objectives for decades. Throughout my adult life I saw this same dynamic play out over and over again: angry activists recruit the half of their audience which already agrees with them at the expense of thoroughly alienating the other half that does not. This strategy never seemed to make much sense to me. So what did that make me now?

How about an "environmentalist"? To me, that term means "environmental fundamentalist." Once again, the words turn me off. I am continually struck by how fundamentalism, of *any* kind, only serves to build walls in a world that appears to be in dire need of the opposite. Am I willing to say that in every choice I or society face, we should choose the environment? As a trend, perhaps. But words of the early conservationist Theodore Roosevelt come to mind: "In popular government, results worth having can only be achieved by men who combine worthy ideals with practical good sense."

When Mr. Gore first introduced himself to our volunteer group, he spoke about how he had been talking about global warming for 30 years. Each year he would say to himself, "Any minute now, the cavalry will come. Any minute now, from just over that hill...." He waited for 30 *years*. After a dramatic pause, he then announced to all of us that *we* were the cavalry. Despite the resulting thundering applause that enveloped me, I didn't feel much resonance with that term either.

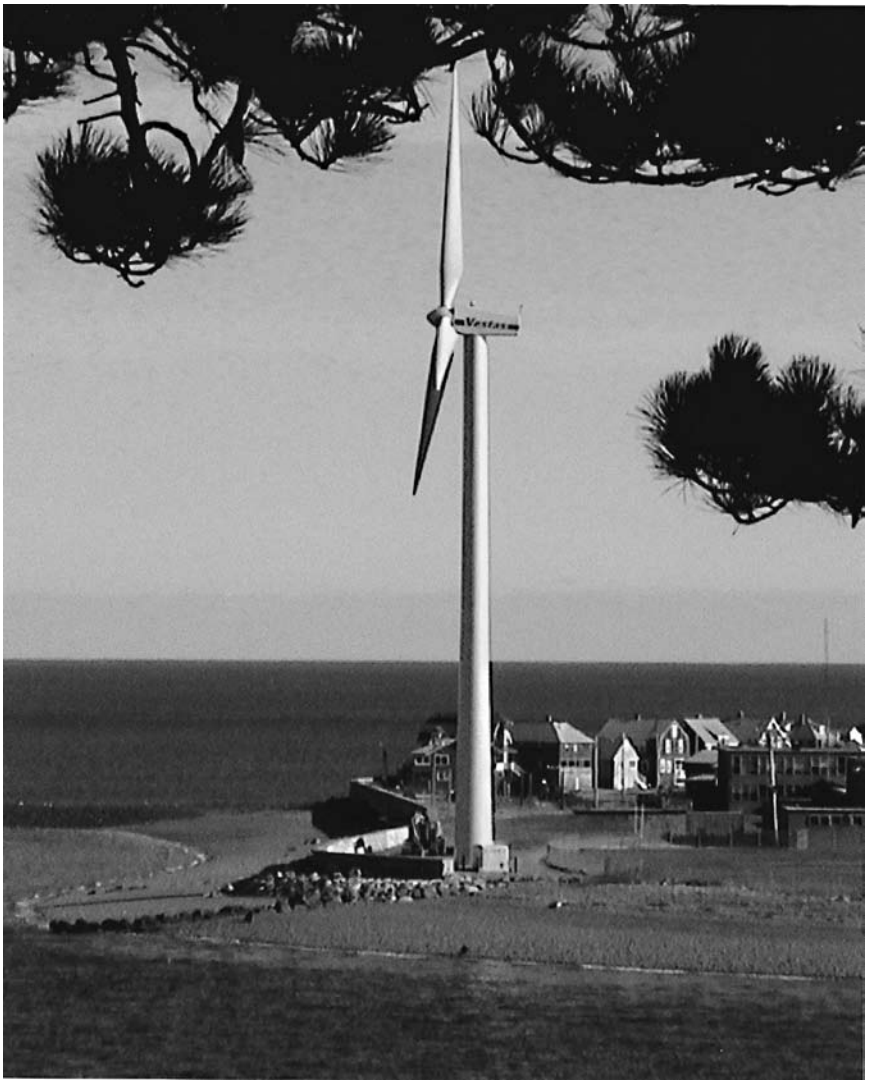
A name for my new role was still left wanting.

The library of the Runkles Elementary School is beginning to fill. The "little people" chairs and the "big people" chairs are arranged in a semi-circle around a make-shift screen and LCD projector. Three months have passed since Nashville. After a number of run-throughs with friends and family, this will be the third time I have presented to a "real" audience.

Only as the audience begins to show up, however, does it sink in that this audience won't just be made up of adults. Easily half the audience is 5th and 6th graders. I wonder: should I "dumb-down" my talk? Perhaps speak more slowly and deliberately?

As I begin, I explain to the audience that I am no climate scientist, and that while I have learned something about climate change in preparation for this presentation, it is my hope that an audience member will know more about some aspect of this complex issue than I do. But my major learning in preparing for this talk hasn't been so much the science of global warming, as the psychology of global warming. This was first brought to my attention by a friend, deeply concerned about the environment, who confessed that she hadn't seen the film yet because, as she confided, she wasn't "ready." I then share that one person in my own family is what I would describe as a global warming skeptic, and another who believes it's too late to do anything about it – all in one family! Imagine the diversity of perspectives,

values, and interest we need to make room for in any audience if we are to have a productive conversation on such a complex topic.



As I go through my slides, the audience is engaged. I explain that during the last ice age, fresh melt-water from North America disrupted the Gulf Stream current that normally warms Europe. I ask rhetorically if there are any other large pieces of land-based ice in that part of the world that we might want to be concerned about. I'm taken aback by the ten-year-old in the front row who immediately blurts out the answer: "Greenland!" There are a lot of adults who don't get that one. Later as I discuss the loss of coral reefs, a 7th grader excitedly points out that if the warming trend continues, permanent species loss is predicted into the tens of thousands. I ask how he knows this, and he explains that he just wrote a term paper on global warming. I guess I don't have to worry about dumbing anything down.

The kids get it. They're the ones who will have to live with the consequences of our generation's actions. What obstacles are there to others understanding this?

A public library talk by Professor John Sterman of MIT entitled, "Overcoming Public Complacency About Climate Change" is so full that the librarian has to tell the people standing at the back of the room to leave. They're not happy about that.

Prof. Sterman is discussing my favorite topic: how people's ways of thinking can be barriers to learning. In the case of climate change, one barrier is that human beings are chronically poor at understanding the dynamics of exponential growth, whether the growth is dollars in a savings account or the build-up of CO_2 in the atmosphere.

He observes that many people think about global warming as akin to the Manhattan Project. In this mental model, climate change is viewed as a problem that is so big that only the government can solve it by getting a bunch of really smart people together in one room who will just "figure it out." Prof. Sterman then offers a different mental model: the civil rights movement. In this paradigm, a grassroots movement started by just a handful of people spreads through local action, until the government can no longer ignore the issue and passes legislation to enforce the changes that have been successfully prototyped at the local level.

In other words, global warming is something that was created by millions of individual actions over a long period of time. The only way to undo what we've done is to do the reverse – with the minor qualifier that we don't have quite as much time to undo it.

The most efficient energy solutions are those which are adapted to the local environment. Solutions imposed from a national level will never be as sustainable as those grown locally. The government is not going to save us; Washington can only learn from how local communities save themselves.

So how do we do that?

On a Saturday morning in Eastport, Maine – the "Easternmost City in the United States" – about 70 residents have chosen to spend the better part of a precious summer day to hear a series of presentations on tidal power generation. With a population of just 1600, that's a pretty good turnout. Sitting a stone's throw from Canada, Eastport is right next to the Bay of Fundy, famous for the most extreme tides in the world. In the last few years, these tidal currents have attracted attention as a possible source of renewable energy. This morning, three separate initiatives are being discussed. Arriving late, I miss the first, a dam project. But the second and third are a little more intriguing.

Two separate projects propose to submerge underwater turbines in the bay. The first is basically an underwater windmill with short, squat blades not unlike an enlarged outboard-motor propeller. The second device looks like the rotating cylinder of blades on an old-fashioned hand-pushed lawn mower. Multiple assemblies of these rotating cylinders can be stacked on top of one another to cover a larger and larger cross-section of the tidal current.

Both projects are at the stage of installing a prototype turbine as proof-of-concept to generate electricity. One of the presenters points out that during the testing phase the prototype turbine will not be hooked up to "the grid" and therefore he is looking for suggestions of how to use up the electricity that it will produce. The most popular suggestion so far is to use the electricity to drive a fountain that would shoot straight up out of the channel. In this way, the height of the stream from the fountain would act as a visual "thermometer" showing how much power the turbine is producing at any one time. Otherwise, the final turbines would be submerged and completely hidden from view.

Tidal power. How simple. How elegant. How perfectly suited to the local environment. Could tidal power become the way that Eastport's depressed economy can finally shift its focus away from the 4th of July tourists?

Beyond the innovative technology, though, what I am struck by most at this gathering is the pervasive civility. The audience is attentive. They raise their hands. They ask questions. People don't interrupt each other. They wait their turn. The presenters are open about the fact that these projects might not succeed, for either technical or bureaucratic reasons. There is real listening going on, followed by hot dogs and potato salad. From following the national news, it's sometimes hard to believe that democracy can actually work like this – let alone, at all.

Now nine months after Nashville, I have given my *Inconvenient Truth* slide show 13 times to about 350 people, in total. My audiences have ranged from four people in a huge room at the local library, to 150 students in a high school auditorium. (The four seemed to pay more attention than the 150.) If we assume that I am an average volunteer, one can extrapolate that, collectively, the 1000 Climate Project volunteers have reached 350,000 people in that same period, give or take.

So what have I learned?

To begin with, I've learned a new vocabulary. "Icequakes" are seismic events that occur on land-based ice-sheets such as Greenland's as the ice shifts due to melting. A "localvore" is someone who only eats locally grown food to reduce the carbon emissions that would normally transport the average food item 1500 miles to reach our supermarkets. "Green-collar"

jobs are jobs that are part of the growing the environmental sector, such as manufacturing and installing solar panels. "Carbon offsets" are donations to renewable energy projects designed to balance out carbon emissions from another activity, such as the use of your car or flying on an airliner.

I've learned a myriad of details about home appliances that I never would have imagined. I've learned that for the average homeowner, the electricity required to power the clock on their microwave is more than the amount of electricity used to operate the microwave to heat food. This is because the clock is on continuously, while most people actually use their microwave for only minutes a day. I've learned that the only common appliance that can come close to the electricity consumption of a refrigerator is a plasma television. I've re-learned something that my grandparents already knew: it is possible to survive without a clothes dryer. All that stiff clothing from a clothesline magically becomes soft after just a few minutes of wear.

I've learned that a drip-dry polyester shirt is more environmentally friendly than a cotton shirt – if you consider the energy required to iron the cotton shirt over its lifetime.

I've learned that reducing consumption is partly dependent on developing a new concept of beauty. At our Climate Project training, we were each given a three-ring binder whose cover was made of brown corrugated cardboard. My automatic reaction to seeing it was, "Wow, that's ugly." But then I took a second look. Obviously, the typical plastic cover had been left off for environmental reasons exposing the brown cardboard. But I also noticed that the metal binder mechanism was attached to the cardboard with screws rather than the typical rivets. As a result, all the metal could be removed to allow it and the cardboard to be recycled. Understanding this, my second reaction was, "How elegant!" Perhaps our new esthetic should be related to evaluating an object's relationship to its future rather than merely its appearance.

I've learned about the "climate dividend," the economic benefits of being more energy efficient. But this dividend is not merely limited to the monetary benefits of fighting global warming; there are other more intangible "dividends" as well. One is the renewed potential to develop a sense of community.

In my opinion, our national democracy is broken. It is broken, in part, by the fact that most citizens receive information about our country via a one-way medium: the television. The result is that when a politician says something nonsensical on the evening news and we yell at the television, he doesn't hear us. The epitome of democracy is not the act of voting. It is the creation of a vibrant marketplace of ideas which must precede an effective vote. The average citizen simply no longer has a regular venue for participating in this marketplace anymore.

But perhaps, with an issue which requires local problem-solving to determine the most effective local solutions, there is an opportunity to create a local sense of community through engagement that has not happened in a long time. It might start through activities as innocuous as ride-sharing, community gardening, or making friends at a block party. I can attest to having met some pretty amazing people in the last nine months: climate authors Ross Gelbspan and Bill McKibben, two former gubernatorial candidates, as well as my other fellow Climate Project volunteers and Mr. Gore.

I've learned the value of "productive struggling." One of the most common criticisms of *An Inconvenient Truth* was that it did not spend enough time talking about what people should actually do. I disagree that this was a fault. The solutions that people will have the most ownership of are the ones that they figure out for themselves, that are connected to their own communities and way of life. As such, the film served as a giant conversation-starter to motivate local answers. In my neighborhood, there are an amazing three independent community organizations that go about these conversations and activities in a variety of ways.

The truth is that no one has all the answers as to how we should "solve" global warming. All we know is that ultimately, we must consume less. How we all go about that is a deeply personal question which each of us must grapple with in our own way. Oh, and by the way, the sobering timeframe of this grappling is nothing less than the rest of our lives. There is no silver bullet. What we need to find is silver buckshot.

The first step is awareness. After that, you do what you can.

And I've learned that, when facing a problem the size of a planet, doing what you can is the only way to keep your sanity. It is downright oppressive to live with the awareness that virtually every act of consumption is damaging my niece's planet. Prof. Ron Heifitz of Harvard has suggested that the measure of success on complex issues should be progress. With apologies to Eleanor Roosevelt, better to smile at one Prius than to curse the SUV. ("Better to light one candle than to curse the darkness.")

Finally, having passed on "activist," "environmentalist," and "cavalry," I think I've finally found a name for my role that I can live with. I propose that the fundamental capacity which can generate progress amidst complexity is the capacity to learn. That's really all scientists are: professional "learners," desperately trying to learn about our ecosystem as it changes before our eyes. That's all a community is doing when they engage in productive struggling with sustainability. They're trying to be good "learners." No doubt the noun form of this word will sound corny to some, but so far I have been unable to find another word that is more apt.

We create the world around us through our own actions. If we go about our lives in anger, one morning we will wake up convinced that the world is inherently defensive and belligerent. Conversely, if we start a conversation by doing more listening than talking, we increase the probability that at some point the other person just might ask, "So, what do you think?" No, I am not so naive to think that if I help an old lady across the street in Boston, Osama bin Ladin will suddenly wake up in Pakistan and turn himself in. All I am saying is that investing in understanding someone else increases the probability that they will invest in understanding you. I know of no better way to encourage learning.

The sun is slowly getting low enough for an LCD projector to be visible here in Vellucci Plaza in Cambridge. I've wanted to do my presentation outside in a park at night for a while now, and, in spite of a killer head cold, the clear skies beckon that tonight's the night. The efforts of volunteers distributing flyers around the neighborhood is unlikely to peak again. Something also tells me that this may be my last presentation for a while.

My experimenting with various projection screens has finally hit on a combination that I think will work: a bed sheet draped over two home movie screens standing side-by-side. Meanwhile, three benches away, a homeless person appears to be sleeping off what used to be in the bottle next to him. As I strategically apply masking and duct tape to the sheet, I hear a *thud* behind me, followed by a groan. I look up and see that the homeless person has fallen out of bed onto the concrete sidewalk.

"Are you O.K.?" I ask. I interpret the lethargic hand gesture I receive in response as a "yes" and continue my taping.

About 20 people come for the entire 90 minute presentation. I would say the audience is more diverse than many of my other slide shows: two elderly Portuguese couples who have lived in the neighborhood for 40 years; random college students; an Italian student named Giuseppe; a few African Americans. Meanwhile, about 10-15 people walking by just stop and listen for anywhere from five to 45 minutes. Even the homeless person sits up and appears to be listening for some period of time before mumbling something about democracy and lying back down on his bench. It will take me several weeks to realize that he has the lowest carbon footprint of anyone in the audience. What can I learn from that?

The slides are punctuated by ambulances heading to and from the hospital up the street

and the occasional fire engine from the fire house across the way. But all in all, it goes well. I am able to encourage a few small-group discussions, including Giuseppe sharing the anecdote that his family in Italy just lost 90% of their olive crop in an unprecedented heat wave.

Finally standing at the base of Hull Wind 1, I have completed my pilgrimage. The base of the windmill tower is huge, as big-around as a barn silo, bolted to a concrete slab with hundreds of hefty bolts in a neat circle. I arch my neck, look skyward, and squint. As its 75-foot long gray blades slice through the air above, I time their rotation: "One thousand one, one thousand two...." With one of the three blades passing by every second, the windmill is turning at about 20 RPM in what I would guess is a 10 knot wind. Hull 1 can generate a maximum capacity of 660 kilowatts – but that's only a third the capacity of Hull Wind 2.

Built on the top of what used to be a landfill, Hull's second, much larger windmill a few miles away can produce 1.8 megawatts. Combined, these two windmills currently produce 15% of the total energy needed by this community of 11,000. And when Hull installs the four new windmills that they are planning to, that will bring their total wind power output to 115% of the town's needs – in other words, they'll have excess power to sell.

I regard the giant composite gray blades of Hull 1 whizzing by above me. I find the *woosh woosh* sound as each blade passes curiously mesmerizing. What exactly is making this sound?

The part of the blade that is moving fastest is the tip. The sound it makes as it cuts through the air is modified by the Doppler effect: as the blade tip approaches you on the down-stroke, its wind-noise is higher in pitch; as the blade tip passes bottom-center and starts to go back up, it is moving away from you, so the wind-noise pitch drops – just like a passing train. A second later, the next blade tip repeats the effect. I suspect the blades' curious mix of size and grace would have been enough to give even Don Quixote pause.

As I take a seat on the seawall and watch the wake of passing boats crash against the rocks, I utilize another product of the windmill: shade. The town of Hull has been able to undertake this initiative, in part, because it owns its own municipal utility company. As a result, local will has been free to innovate. And by innovating locally to exploit local resources – in this case an on-shore breeze – the resulting solution is eminently sustainable. What else remains for us to learn from the likes of Hull and Eastport? I wonder if some day monuments as large as Washington's obelisk will not only just stand there but actually produce something.

Sitting in the shadow of this windmill overlooking Boston harbor, I realize something else. In addition to clean energy and a little shade, this highly functional monument is capable of generating a third, potentially even more potent renewable resource: hope.

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The Learning History:
An Investigation into an Emerging Genre

Stevens Amidon

Stevens Amidon

Learning histories are a research and reflection tool developed at the Center for Organizational Learning at MIT, SoL's predecessor, to help organizations learn from their own learnng and change efforts. In this article, Professor Stevens Amidon uses contemporary genre theory to examine this relatively new qualitiative research methodology. Citing a dozen different learning histories, several authored by SoL members, he explains the ways in which the learning history can help organizational writers and researchers, and how it has evolved to merit serious consideration in the field. Several learning histories are available through SoL's website, as well as the definitive training guide, *The Field Manual for a Learning Historian*.

The learning history is a new genre emerging in business and organizational communication. Developed in the late 1990s at MIT's Center for Organizational Learning, the genre is a kind of analytical research report, with a difference – instead of presenting the univocal voice of a researcher or a research team, the learning history attempts to foreground multiple and sometimes divergent voices in an organization to present what Van Maanen calls a "jointly-told tale."[1] The learning history is specifically "designed to help organizations become better aware of their own learning and change efforts."[2] The genre is also noteworthy for its unusual format – side-by-side columns of text, one column representing the words and stories of the organizational participants, and the other column typically the analysis of a learning history team.

My interest in this genre stems from a number of factors. First of all, the emergence of new genres of writing in organizations tells us something about the changing nature of those organizations. Second, the fact that the learning history, like the ethnography, is both a *text* and a *research method* is of particular interest to academic researchers. Third, I have adapted simplified versions of the genre and used them in my classes in advanced organizational writing, to introduce my students to the genre, as well as to the experience of reflective learning.

Genre Study: Some Thoughts on Method

Genres are a particularly good example of what Peter Senge calls mental models[3]. Inexperienced writers tend to see genres as a fixed set of rules, which place boundaries upon their work, in the same way that the rules of grammar place boundaries on the style of their writing. Like the rules of grammar, genre boundaries are socially constructed and change over time. Just as few writers use "thee" and "thy" in their written or spoken communication these days, few writers follow the rules for formatting and writing business letters found in the secretarial handbooks of the 1950s. The technological emergence of the word processor, with its formatting, font, and design choices, have produced a letter design we call the "block format" – by moving all of its text "flush left" and by using white space to separate paragraphs, it has a cleaner visual look, and is actually easier to type.

Written genres are flexible, dynamic, and deeply embedded within the institutional cultures that created them. As I frequently remind my students, just because

grammar rules or the rules of genre are socially constructed, doesn't mean you shouldn't follow them. However, as you become more experienced in organizational writing, and more knowledgeable of the needs of the institutional culture you work in, you will find that you can begin to question these mental models, and adapt or revise them to aid in institutional change.

In this examination of the learning history, a genre analysis is used to explain the ways in which the learning history serves the aims of the writer. Unlike other forms of textual analysis, in genre analysis the researcher is not particularly interested in the content of the text. Instead I focus on three broad aspects of the mental model we call a genre: its social image, its rhetorical dynamics, and its formal features. Understanding these aspects of the genre will help organizational writers and researchers better use and adapt learning histories to local needs.

The Research Process. Because the learning history is a relatively new genre, there are few examples. My search of the literature uncovered 16 examples in which the writers identified all or part of the text as a "learning history.". E-mail conversations with Art Kleiner and George Roth led me to some others, and there are undoubtedly many more examples buried in proprietary corporate archives. I reduced the sample to an even dozen to reduce the amount of data coding and to prevent the sample from being dominated by a few writers.

The next task was to code the data. I broke the textual data into segments for analysis, choosing conversational units since learning histories have been described as "reflective conversations"[5] among stakeholders in an organization.

The final task, generating coding categories, was a relatively complex process which I will not describe in detail here. I will simply say that I use the "grounded theory" approach recommended by Strauss and Corbin[6] to generate coding categories, but also relied upon my knowledge of genre theory to label those categories, a process grounded theorists refer to as "theoretical sensitivity."[7] This was the source of the three broad categories of analysis I describe below in the findings.

An Analysis of the Learning History Genre: Findings

The use of this coding process had a distinct advantage – once the coding and analysis stage was completed, the aims of this study were basically complete. The only task left was to summarize the most significant aspects of the findings.

Social Image of the Genre

While we tend to think of genres as groups of texts, in one sense genres are not texts at all, but rather the ideas readers and writers hold about texts. This is what I mean when I use the term *social image*. The following coding subcategories describe and define that image.

Generic Exigency. By exigency, I am referring to the purpose, or reason a text comes into existence. Kleiner and Roth, who coined the term "learning history," tell us that the genre grew out of an MIT Center for Organizational Learning practicum conducted in March 1994. The business people and academics who attended were interested in answering the question: "How do you take the experience and understanding which a pilot team has learned, and make it relevant to the rest of the organization." From that very first meeting, researchers noted two challenges which conventional business research had difficulty addressing: how to understand what the entire pilot team learned without the direct experience which each team member underwent; and how to "document projects so that others could read about, inquire, and build upon" them. From its inception, the reason for the existence of the genre was dualistic – it was both a research method, as well as a kind of research text.[8]

This exigency led to the formation of a pioneer's group which met first met in late 1994 brainstorming ideas for doing this kind of research.[9] The group used a major automobile company's RFP (request for proposals) to generate ideas. The group then met quarterly from July 1995 through October 1995, conducting retrospective interviews and creating the internal version of the learning history for the company. That learning history was then re-edited for publication

by Oxford University Press in 1999 to describe the "Epsilon program" car launch at a pseudonymous automobile corporation called "AutoCo."[10]

Another early corporate learning history emerged from the same group. According to the president of "Electro Components" (another pseudonymous company) the learning history was intended to "create a more open culture that would support people and improve processes."[11] The purpose here seems a bit more general than the first learning history's focus on knowledge capture of a specific corporate event.

As the genre moves outside the internal corporate context, exigencies for the texts begin to become more complex. One example in the corporate/non-profit category documents a collaboration between MIT's Sloan School of Management, a private consulting firm, and a large financial services company. Each of these three players had different reasons for participating in the project. MIT was interested in validating a research tool developed at the Sloan School, a "'handbook of organizational processes' stored in a database" and in documenting the communication processes involved in cross-functional project management. The consulting firm was interested in learning from the experience so they could become more efficient at transferring academic knowledge into "commercializable research" – their primary focus was in using the learning history to demonstrate the success of their adaptation of the research tool so they could sell the consulting model to future clients. And the financial firm was interested in the learning history because they wanted to document the successful re-engineering of their hiring processes.[12]

Another learning history in this category also has a very complex exigency: the set of relationships between four groups (five if you count the researcher) is explored: Shell Oil Corporation, its Nigerian Subsidiary, Living Earth – an international environmental group, and the Nigerian chapter of the group. According to Shah, Shell International's exigency for participating in the project was to restore the damage to its reputation caused by "protests and claims of environmental devastation" in the Niger Delta which was endangering corporate profits in environmentally conscious European Union (EU) countries. Shell Nigeria's interests were more local – its operations were threatened by violence and local protests – and focused on improving "the efficacy of its community work in the Delta" Living Earth participated because they hoped to move "Shell towards adopting a participatory approach to development." Living Earth Nigeria was interested in improving the efficacy of the local environmental education efforts it was promoting, and ensuring that local voices were actually heard. As a whole, Living Earth was concerned that its own reputation could be damaged since some international and local environmental organizations were "suggesting that Living Earth was naïve in the assumption that Shell would genuinely engage with them and warned that they would be used for 'greenwash.'" Finally the researcher had another exigency for doing the work: the learning history was a chapter in his 2001 dissertation towards his Ph.D. in Management from the University of Bath (UK).[13]

Completion of an academic degree through a thesis or dissertation was also the exigency for two of the researchers in the non-profit group (Bradbury and Peers), and two in the educational group (Hashman and Kline), although most of these had exigencies similar to the corporate learning histories.

One outlier among the learning histories is that of the Memorial Health Foundation which seems to be aimed at telling the entire 25-year history of the non-profit organization, rather than on analyzing a specific organizational initiative or event.

Short Definitions/Descriptions. A second factor contributing to the development of the social image of a genre is the repeated use of short definitions or description which readers can distill and carry with them into their own writings. Most first-time readers of a learning history don't have any idea about what a learning history is, and are confused by its unusual form. In 11 of the 12 texts analyzed, the writers took it upon themselves to define or describe the genre for the benefit of the reader. Most of the 12 corporate texts do this in similar ways. A typical example comes in Househower's text written for an oil-refining company. In a section titled "The Learning History

Approach," Houshower notes that "the learning history is designed to spark constructive conversation by presenting first-hand interview and review comments on the same page and in two columns."[14] He goes on to present a sample page, and uses Van Maanen's term to describe the format as a "Jointly Told Tale." He then describes the purpose of each column of text. All but one of the learning histories take a similar path – only the Memorial Health Foundation's learning history contains no genre description at all – its simply labels the text as a learning history, and leaves the meaning of that label up to the reader.

Recurrence. Modern genre theory defines genre through the concept of recurrence. In recurring situations, exigency or purpose becomes not just a set of conditions which lead to the production of a text, but rather conditions which exist in a recursive relationship with genre. The writers memory of the previous situation and the textual response to that situation is used by the writer to identify correspondences which suggest a the same sort of text should be written again.

In an emerging genre, recurrence is not well established. The exigencies we described earlier were very specific to the context in which the learning history was conducted. However, some general trends can be noted. Seven of the twelve learning histories functioned as kind of an "analytical report" responding to specific organizational initiatives or events. Five of the twelve were used as a research method towards the completion of a dissertation or thesis, although they also served purposes for the organizations which were analyzed.

Rhetorical Dynamics of the Genre.

Besides a social image, generic texts carry within them a history of residing in social and institutional relationships. For example, the executive summary, an independent genre as well as a component of many organizational reports and proposals, emerges out of the relationship between an executive and other members his staff whose need for details may vary. By rhetorical dynamics, I am referring to the set of relationships between the writer, the audience, and the text.

Dynamism. Rather than a fixed set of conventions, genres are sites or contact zones where forces of stability and change are in conflict. They are inherently dynamic, constantly (if gradually) changing over time in response to the needs of individual users. On the surface the learning histories from the pioneer's group at MIT displayed little such dynamism, which is natural for a group attempting to "brand" a research methodology. However the genre morphs as it moves out of the purely corporate context – in other words, once we move away from the work of the MIT group, we begin to see dynamism emerging. Academics, in particular, have used learning histories as dissertation chapters, or appendixes to the dissertation. Bradbury, Kline, Hashman, and Peers all make this move, using the learning history as a research tool for a larger project. Shah, who reports learning about the genre when he attended a seminar conducted by Bradbury in which she discussed her learning history, advances the genre even more. He notes that "I was attracted to the method by the notion of collaboratively making sense of collaborative action" but quite consciously notes his own adaptation of the genre, stating that while "the form of inquiry has been used in a number of different contexts…these have all taken place in one organization at a time. The learning history that I have practiced has sought to conduct the second-person inquiry across a network of four organizations in relationship with one another."[15] Shah was evidently unaware that Kruschwitz and Roth made similar adaptations to the genre in their own use of it to analyze the relationships among three organizations.

Kline and Hashman, the academics who used learning histories to study educational organizations seem to have done little to adapt the genre, other than making it a section of their dissertation or theses, and stayed close to the rhetorical purposes and form established at MIT. However the Institute for Transformative Leadership's (ITL) learning history for the Western States Association of Schools and Colleges (WASC), a regional accreditation agency, quite con-

sciously adapts the learning history, presenting it as a series of quotations extracted from 300 pages of interview transcripts. ITL appears to have made these adaptations in order to present the learning history in a form that more closely resembles the traditional analytical report. While the use of the quotations could be seen as an attempt to include the voices of the interview participants, the quotations are pulled from context, don't seem to include much evidence of dissent among the participants, and seem to be used primarily as evidence to build to a univocal conclusion in the form of a series of bulleted "Key Learnings" in each section. While it certainly represents a powerful example of the dynamic adaptation of a genre, the ITL text is a classic example of an emerging genre being subsumed by the powerful constraints of an established genre.

Situatedness. Genres don't exist in a vacuum, they are deeply embedded in the work of the organizations which created them. This embedding, which genre theorists call situatedness, is a powerful feature of the learning history.

As we have noted repeatedly, there is a great similarity in the learning histories managed and co-written by the MIT group. Yet even these learning histories show subtle differences in rhetorical tone as they are adopted within distinct organizational cultures. The Autoco learning history is very much a formal research report, modern in its presentation, and quite consciously attempts to connect with a modern business culture where "quality is job one." It foregrounds its attempts to merge the legacy quality movement with the new tradition of organizational learning. The Heartland Refinery learning history looks almost literary in its design, with chapters that tell the corporate story. Its learning history group was much less diverse than Autoco's, and included just one consultant and two members of the company's management team. Despite its inclusion of diverse voices from the organization in the actual learning history text, the tone of the introductory material and the text as a whole seemed to focus more on tradition and conventional history than does the Ford text. It has an old-fashioned tone. The Electro-Components learning history has a modern tone like the Autoco text, but seemed more corporate: it emphasized a series of bulleted outcomes (noticeable results) over the history itself, and seemed less interested in foregrounding academic concerns for validity and reliability than did the Ford text. In a recent e-mail communication with Kleiner, he told me that "We had some tensions in the projects we undertook, because the companies that funded the work never quite figured out how to make use of it. There was always a problem of mixed motives in my view."[16] The MIT researchers were focused on giving the companies a document which could be used in workshops to further even more organizational learning. But the companies wanted fixed findings of the kind found in more traditional report genres. Clearly the adaptations to the genre that occurred in the MIT group occurred due to the tensions of producing a text situated in a corporate culture.

One other text seemed heavily influenced by its culture. The tone of the UNDP text seems very distinct from the corporate learning histories and the other non-profit learning histories. The United Nations is a large organization with more than a half-century of experience producing research reports and other organizational texts. In spite of the fact that the text was edited and organized by the Society for Organizational Learning, it has a "UN feel" to it. Unlike the other texts, it also seemed to emphasize a focus on developing long-term, programmatic initiatives, rather than simply existing as a report on the results of a short-term project. This seems natural for an organization less focused on next year's profit statement, than on the long term.

Form and Content. While the formal features of the genre are an aspect of genre I treat in the next section, it is important to acknowledge the intricate relationship between the formal features of a genre and the knowledge it contains. For example, the traditional research analysis of an organizational problem is written in a single voice which produces a text which tends to communicate the idea that its analysis of problems and suggested solutions are part of a "closed system" where absolute certainty of analysis is

possible. The knowledge produced by the kind of language is, by its very nature, indicative of the hierarchical organizational contexts in which it is produced. Dialogue like that found in the learning history, on the other hand, tends to subvert the authoritative nature of the text. The form of the genre is essential to the production of its content. As we noted earlier, all but two of the histories used the dialogic format.

Duality of Structure. While the form of a genre can regulate its content, and in some cases limit the options available to the writer, it is important to remember that such form also has a creative side. People don't simply use genres, they invent new ones and alter existing ones. Textual reproduction is not simply a mirroring of the structures – sometimes the structure is altered. The adaptation of the learning history genre described in the *dynamism* section above is indicative of the ways in which writers have changed the structure of the genre to meet emerging needs. Yet even an emerging genre has some stability. The two-column format for the reflective dialogue retained by ten of the twelve histories is the most noteworthy example of that stability.

Community Ownership. A discourse community is a system, which maintains and is maintained by texts with stated and unstated conventions as well as a history. The MIT pioneer's group was the first community which "owned" the Learning History, and the genre emerged as an almost proprietary research method for consulting work by MIT's Center for Organizational Learning and its successor, the Society for Organizational Learning (SOL). However the genre's growing use as an academic research tool is a sign that it is entering the larger academic community.

Genre Sets and Repertoires

Genre theorists have noted that discourse communities and agents within them rely on a repertoire of genres that develops as the community develops. Furthermore, genres in a repertoire have a tendency to interact with one another. Looking at curricular discourse communities for example, in the four learning histories we examined which were developed to fulfill Master's or Doctoral degree program requirements, there were interesting relationships between the learning histories and the thesis or dissertation.

Besides the learning history, SOL uses several other genres which it employs in its consulting work including EL Maps and After Action Reviews.[17] These genres may be employed separately or together, depending upon the nature of the consulting task.

Formal Features of the Genre

In examining the formal features of the genre, I am essentially engaging in an Aristotelian process of classification, by comparing the learning history to other genres of organizational writing, and contrasting the differences. Many of these differences are stark, but others are subtle. Table (1) lists these features and displays which of the learning history texts contain them.

One very noticeable aspect of the development of the genre which has occurred as control of the genre has moved away from members of the founders group and the corporate clients they served has been the incorporation of abstracts, executive summaries, and conclusions. As this genre, with its goals of fostering dialogue and reflective inquiry, has encountered and been folded into other genres (academic dissertations, organizational research reports) with differing rhetorical goals, features of these genres have been folded into the learning histories. In most cases, the goals of encouraging dialogue and reflection seem to be subsumed, or at least marginalized, by the monologic desire of authority to "summarize" or "wrap-up" the messy data which reflection produces. However, it must be noted that Bradbury and Shah rigorously attempted to keep the learning history process separate from the generation of the academic dissertation. In both cases, they clearly saw the learning history as both a research method, and a text to be used to spur further dialogue and reflection. Other organizations which created learning histories outside of the founders group either missed this aspect of using the text as a vehicle for further inquiry, or didn't think it was a significant enough feature of the genre to talk about it.

The other noticeable shift in formal features of the genre which has occurred as the genre has moved into educational and non-profit contexts has been the abandonment of the distinctive format, where historical context is provided by a full column introduction, and reflective analysis and dialogue are divided into separate columns. In the case of Peers, the reflective analysis is kept separate through the use of text boxes, and the dialogic nature of the text seems to be preserved. In the case of the Memorial Health Foundation, the genre seems to have been completely subsumed within a monologic narrative.

Table 1: Formal Features of the Learning Histories

	Corporate			Corporate/Non-Profit		Educational			Non-Profit			
	Voyage Beyond	**Car Launch**	**Electro Com.p.s**	**Relational Praxis**	**Inventing Knowledge**	**Teaching Reflection**	**WASC**	**Schools as Learning Orgs**	**The Natural Step**	**Memorial Health**	**Comm. Of Practice**	**UNDP Civic Scenario**
Full-column narrative	X	X	X	X	X	Note 1	Note 1	X	X	X	X	X
Analysis column	X	X	X	X	X	Note 2	Note 3	X	X	No	Note 4	No
Dialogue Column	X	X	X	X	X	Note 5	Note 6	X	X	No	No	Note 7
Genre Description	X	X	X	X	X	X	X	X	X	No	No	No
Methods Section	Note 8	No	No	X	Note 9	X	X	X	X	No	X	Note 10
Timeline	X	X	No	No	X	No	No	No	X	X	No	X
"Key Players" Section	X	X	X	Note 11	X	No	No	No	No	No	X	X
Executive Summary/ Abstract	No	No	Note 12	X	X	X	X	X	X	No	X	X
Summary/ Conclusions	Note 13	No	No	X	Note 14	X	X	X	No	No	X	X
Other Features				Literature Review, Coding Tables, Three chapters of additional analysis	Sidebars for theory	Literature Review	Bulleted *Key Learnings* after each section	Literature Review	Literature Review, appendix with interview protocols and vitae	Looks like a standard history with some narrative material and quotes	Literature Review, Appendix includes the learning history text and interview protocols	Sidebars for "Toolbox Notes"

1 Narrative history, dialogue, and analysis are integrated into standard paragraph structure, rather than as stand-alone sections
2 Analysis follows the narratives
3 Narrative history, dialogue, and analysis are integrated into standard paragraph structure, rather than as stand-alone sections
4 Reflective analysis is in the form of text boxes which follow participant quotations.
5 Interview data is in italics, numbered as "narratives."
6 Narrative history, dialogue, and analysis are integrated into standard paragraph structure, rather than as stand-alone sections
7 In an interesting departure, comments from participants were included in a "right-hand column" of the overall report. The Learning Histories at the
end of the report integrated the dialogue into the full-column narrative. In both cases analysis was not separated from the historical context.
8 Description of interview Group
9 Brief sidebar in Appendix
10 A very brief methodology note in the learning histories indicated where and when interviews were conducted.
11 Interview list in Appendix
12 "Noticeable Results" Section
13 "Epilogue"
14 "Epilogue"

Most of the others in these groups fall somewhere between these two extremes.

Summary and Conclusions

Examining the emergence of the learning history genre has given this researcher a better understanding of how social networks and individual writers influence the production, revision, and reproduction of genres. I was particularly struck by the way in which the founder's group at MIT played a significant role in establishing and stabilizing the genre, while also encouraging or supporting writers outside of the group who used the genre for new purposes.

The learning histories which followed the following suggested practices seemed to achieve the genre goals of fostering dialogue and collective inquiry better than those that did not:

1. Carefully separate the historical context, the dialogic conversations, and the analytical writing of the learning history team.
2. Use participant validation to ensure the learning historians have not distorted the words or actions of participants. While participants and researchers will always differ on some details, this dissensus can be a valuable part of the learning history process.
3. After the document has been drafted, use it as an artifact to spur further dialogue and inquiry. Organizational seminars to discuss the findings of the learning history can be valuable.
4. Conduct the learning history using a team drawn from key constituencies within the organization. Ensure the team includes at least one experienced learning historian.

The learning history can be a complex methodology to use, particularly when professional learning historians are hired and hours of interviews must be transcribed and coded. However, graduate students using the methodology are finding ways to accomplish the task using minimal resources. The learning histories I have conducted within my own classroom, albeit a simplified form of the genre, use electronic communication such as e-mail and wikis where I ask participants speak through their own written words rather than through the oral interview process. And recently a graduate student of mine conducted a learning history of the writing program at my university using a combination of face-to-face and e-mail interviews.

As organizations need to find new ways to understand the tacit knowledge used by their constituents, and to understand why and how projects fail and/or succeed, the learning history may become a more frequent genre in organizational research and writing. One piece of evidence regarding its growth as a research genre is the fact the there will be a chapter on learning histories in the new edition of Sage's *Handbook of Action Research*. At a minimum, the genre should be considered by researchers who wish to better understand how organizations communicate.

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APPENDIX: THE LEARNING HISTORIES

Corporate

Houshower, Hans. *A Voyage Beyond the Horizon and Back: The Heartland Refinery's Continuous Improvement Story*

Roth, George and Art Kleiner. *Car Launch: The Human Side of Managing Change.*

Wyer, Joanne and George Roth. *The Learning Initiative at Electro Components.*

Corporate/Non-Profit

Shah, Rupesh. *Relational Praxis In Transition Towards Sustainability: Business-NGO Collaboration and Particapatory Action Research.*

Kruschwitz, Nina and George Roth. *Inventing Knowledge in the 21st Century: Producing Knowledge Through Collaboration.*

Educational Institution

Hashman, Molly Anne.*Teaching Reflection as Insight into Consideration for Gifted Education Programming.*

Institute for Transformative Leadership. *A Learning History of the Intentional Evolution of WASC.*

Kline, Keith. *Schools as Learning Organizations: A Learning History of a Changing School.*

Non-Profit Organization

Bradbury, Hilary. *Learning with The Natural Step: Cooperative Ecological Inquiry through Cases, Theory and Practice for Sustainable Development.*

Memorial Health Foundation. *Memorial Health Foundation: Learning History.* Peers, Lawrence Palmieri. *A Descriptive Study of a Cross-Organizational Learning Community of Practice.*

Pruitt, Bettye H. ed. *The UNDP Civic Scenario/Civic Dialogue Workshop: Antigua, Guatemala, November 8-10, 2000*.

Commentary

By George Roth

George Roth

The Society for Organizational Learning, and the MIT Center for Organizational Learning from which it grew, has always been a pragmatic place. It was founded on the concept and ideals of furthering individual and collective learning, the research and practice developed to help people and organizations adapt, or learn, in light of changing conditions or circumstances. The methods and approaches developed for learning are not sacrosanct, but meant to be tested and modified. There is an innate interest in variation, trying alternative approaches, and reflecting upon whether learning and performance improved. These, after all, are the hallmarks of learning processes.

It was under these broader values that the "learning history" approach was developed and, as Professor Stevens Amidon finds in his investigation of a dozen learning histories, continues to evolve. The thoughtful and rigorous approach that Stevens applies to a dozen learning history texts using genre theory provides interesting insights into both the practices of conducting learning histories and the texts which those practices produce. It is, however, difficult to say what we can learn about organizations and learning from the variations in learning histories in general, and the adaptation of the genre for different purposes, in particular.

The development of the learning history was very much envisioned as the creation of a new genre, so Stevens' analysis of learning histories and their evolution as a genre is entirely relevant and appropriate. At the time the Center for Organizational learning sponsored these efforts, MIT colleague John Van Maanen (1988) had written *Tales of the Field*, a book looking at ethnographic writing, and the emergence of a new text which integrated an ethnographer with his subjects, or natives, in "jointly told tales." MIT colleagues Wanda Orlikowski and Joanne Yates (1992) were writing about and developing genre theory in examining the influence of media in organizational communication. A partner at a Boston consulting firm had suggested an evocative idea around "use," and that the learning history, as a genre, could "conjure up a use" in group learning through text discussion, analogous to the idea of a tabloid newspapers conjuring a use for people riding on city buses or trains.

We carefully chose how to position ourselves in the descriptive writing on learning and change. As writers we were not to be in a position that held greater authority than the organizational members we worked with to capture and write about their learning journeys. As authors we, and others, did take positions on the descriptive learning history texts by writing commentaries which provided reflection and analysis of the learning histories. For example, commentaries were included in *Car Launch: Managing the Human Side of Change* by Peter Senge, Rosabeth Moss Kanter, and George Roth and in *Oil Change: Perspectives on Corporate Transformation* by Edgar Schein, Karl Weick, and Charles Handy. The contract with Oxford University Press for a "learning history library" called for an initial four books, each with three commentaries. The commentaries were not meant to be a definitive analysis, but just another perspective on learning and change from people with extensive experience and known for management theories, which would encourage readers in their own analysis, discussion, and creation of new, locally relevant insights.

Although Stevens' insights into changes in learning history genre are thoughtful and well reasoned, readers should be cautious in drawing conclusions from a small sample. The dozen learning histories are a sample that is drawn from different authors, many of whom don't know each other, and therefore had different purposes, processes, and contexts for their work. As an academic research group our intention was to share what we learned in creating and writing learning histories, either publishing what we had done or making it available on SoL or MIT's web sites. The shift in organization from MIT, a university research center, to SoL, a non-profit organization, diminished the momentum behind learning histories, particularly in terms of time and available resources for conducting, writing, and publishing learning histories. The learning histories that had been started as part of MIT research projects were often completed as labors of love by those involved. The production of working papers, writing of articles, and publishing of books

became a secondary endeavor to the demands of the other positions for the academics, writers, and consultants who had been part of the pioneer's group.

Looking back, I wonder whether differences in sponsorship and organizational affiliation might cause changes in writing style and stance. The effort to get learning histories out was successful, as Stevens easily found a dozen learning histories for analysis. From my vantage point, I've had inquiries that would suggest that well over fifty learning histories have been written for organizations, many of which have been done as part of academic work, e.g. dissertations or theses. What has often been a challenge is that the methodology is not as well accepted by student's advisors. Case studies, oral histories, or ethnographic accounts require students to justify to their advisor their method, the text, and their findings (which is why students often make the learning history an appendix). I am, however, unaware of English majors who have used and developed the genre as part of their academic research. I am grateful for Professor Amidon's writings opening up this new vista, and look forward to reading more in the future as to what insights and progress this research will bring.

In looking at differences among learning histories, it would seem that the stated goals of creating a text which represents the experiences of an organization and its people in significant learning and change experiences would have variations in its characteristics because those organizations, and the audiences interested in that learning and change, would differ. While the learning history pioneer's group tried to standardize a process and form to coordinate our efforts and learn from one another, writing about the practice was never intended to constrain innovation or alternatives. The term "learning history" was *not* an invention of Art Kleiner and I, as was stated in the article, but rather a term that gained acceptance after trying numerous alternatives from the pioneers' group (see the acknowledgements in the *Field Manual for a Learning Historian*, available from SoL, for the list of forty-one people involved). Perhaps what makes the learning history a compelling genre is that it is mutable, which itself is a consequence of its development not only by management researchers but by including people with journalism, action research, consulting, history, anthropology, psychology, sociology and education backgrounds and training. The community that created learning histories by learning and working together proposed a learning history process and forms that is intended to vary, and thereby serve learning purposes into the foreseeable future.

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ELIAS 2.0

C. Otto Scharmer and Dayna Cunningham

RESEARCH UPDATE

C. Otto Scharmer

The Presencing Institute, the Society for Organizational Learning, the MIT Leadership Center, and the MIT Center for Reflective Com-munity Practice are launching the second year of their program "Emerging Leaders Innovate Across Sectors" (ELIAS). ELIAS intends to contribute to the evolution of sustainable global market systems that build human, social and natural capital as well as financial and industrial capital.

Concrete outcomes of this 12-month leadership journey are:

- Prototypes for cross-sector innovation that address the shared challenges of creating value for the triple bottom line – the economy, society, and the environment – with the ultimate goal of advancing global sustainability.
- A steadily growing network of leaders in the public, private, and civic sectors that will enhance and accelerate the benefits to individual members.
- A growing capacity among participating organizations to develop sustainable solutions across the three sectors.
- Useful information and ideas for innovative solutions to individual members' challenges.
- An enhanced capacity among leaders to respond to the challenges of globalization and sustainable development by pioneering practical innovations.

ELIAS is a global cross-sector network of high-potential leaders and their institutions working collectively to generate new ideas, prototypes, and ventures.

Co-founders of ELIAS include, BASF, BP, Nissan, Oxfam Great Britain, the UN Global Compact, Unilever, the World Bank Institute, and the World Wildlife Fund.

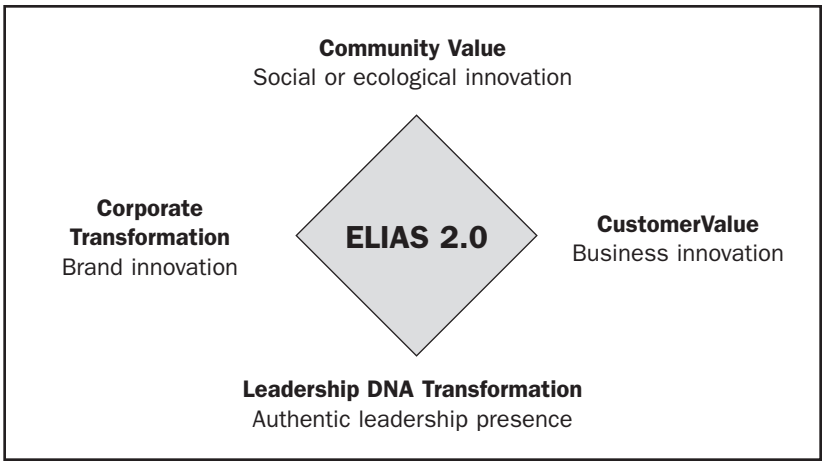
Why ELIAS?

Leaders in institutions around the world face unprecedented economic, social, ecological, and political chal-lenges across local and global levels. These challenges will only multiply in the next decades; leaders must confront them. In doing so, they can create innovative opportunities by reinventing business models and identities, transforming social change protocols, and working more collaboratively with governments.

Community Value will become the guiding term as successful com-panies of this century purposefully connect to communities, NGOs, and governments to co-create more transparent and generative economic, social, and ecological processes/relationships. The productive result will be healthy and sound business, social, and environmental relationships.

Future sources of value will stem from leveraging these four areas of innovation. But for that to happen, leaders and institutions must reach out to other stakeholders to create new patterns that weave together business, government and civil society.

To meet major global challenges, cross-sector engagement demands new skills, networks and practice fields. ELIAS provides both the stimulating context or practice field and active methodologies.



Approach

Using a methodology called "presencing" to achieve profound innovations, ELIAS provides participants with a core set of practical skills:

- Immersion in cross-sector peer-shadowing experiences, and "deep-dive learning journeys" in different regions offer a fresh view into another aspect of the global economy and some of its core issues.
- Deep listening and dialogue tools help participants operate more powerfully and effectively as part of rapidly changing systems of value creation.
- Deep reflection practices help participants convert experiential input into improved leadership practices and more authentic leadership presence.
- Hands-on prototyping allows participants to create experimental microcosms in order to explore the future by doing.
- Participants experience inno-vation processes from concept creation to fast-cycle experimentation; teams build, test, refine, and improve prototype ideas through multiple iterations in various contexts with multiple feedback loops.
- Participants learn how to leverage their institutional and per-sonal networks in order to move their systems toward more effective ways of operating.
- Regular interaction among participants and institutional stake-holders helps embed innovation within participating institutions.

How does it work?

Beginning in 2008, ELIAS will operate on four levels:

1. The Global ELIAS Platform

Emerging highest-potential leaders nominated by the CEOs of their institutions to participate in a global innovation program will receive intensive training in core presencing skills, participate in deep dives, and learn to develop and guide prototyping experiences. A proposed curriculum can be obtained on the presencing website.

2. An Evolving Network of Regional ELIAS Platforms

Country-level and regional programs will continue to be organized by ELIAS participants. Cur-rently, these are being planned for Indonesia, Southern Africa, Europe, and China, with a possible fifth country-level program in Brazil. In each of these places, ELIAS alumni have committed to being core leaders and faculty in country-level and regional ELIAS efforts. These efforts will also create opportunities for high-potential leaders from ELIAS member institutions to join ELIAS programs at any level.

- **Indonesia and Southern Africa:** Each ELIAS microcosm will take on a key challenge facing each country (e.g., flooding in Jakarta; social protection for children orphaned by AIDS

in Namibia). It will also bring together young and future leaders from global ELIAS companies/institutions. Jointly these teams will put their skills and strategic networks into the service of solving pressing problems in the local community.

- **Europe:** The Summer School project led by ELIAS alums from BASF, InWEnt, UNICEF, and WWF is currently experimenting by using cross-institutional ELIAS platforms and younger leaders to address leadership challenges related to water issues in Africa and China.
- **China:** The Learning Lab is focused on the critical issue of sustainable mobility, with obvious implications for the country and region, but also the global community.

3. In-House Platform

Participating ELIAS institutions are pursuing innovations that integrate social innovation, business innovation, institutional (or brand) identity transformation, and "leadership DNA" transformation (con-necting to your authentic Self). This ELIAS effort is undertaken by participants in order to advance core innovation principles in their own fields of practice. The goal is to harness institutional energy and maintain the push toward transformation in participants' everyday efforts. This can be accomplished amongst others by taking on board an innovative project or through short workshops focused on the core principles. While ELIAS fellows, as faculty members, continue to enhance their learning as they teach presencing practices, the impact of the course is spread to other members of the organization and the capacity of the organization to make effective use of this knowledge and skills, enhanced. For in-house workshops and projects, ELIAS fellows can draw on the ELIAS alumni network.

4. ELIAS Alumni

The global network of ELIAS fellows continues to build and im-plement prototypes, as well as to create space for innovation within their institutions, communities, and the world based on their enhanced capacity for sensing the needs and aspirations of their communities. These leaders serve as coaches, and co-creators of an evolving inno-vation ecology that serves our economic, social, and ecological well-being.

For further information, please contact the authors.

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