

The Bug or the Scalpel: An Exploration of Positive Organizational Change

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The Bug and the Scalpel: A Look at Organizational Change

I have been both victim and perpetrator of various organizational change efforts. My formal education as a change agent included a great deal on structural methods, interpersonal dynamics, and power politics as the crucial elements of change. The metaphor most often used was a medical one: the organization is sick or broken, and it's our job to perform some kind of surgery to fix it. As I recall, my dog didn't walk too nimbly after being fixed. And most of the people in the organizations I've worked with don't take too kindly to being fixed either.

The question is *how* to help people in organizations, and the organizations themselves, change as they must--not only to keep up with the culture and technology shifting around them, but to take charge and to take advantage of those changes. While the bulk of my work is with business entities, both for profit and nonprofit, organizations in this paper are also advocacy groups, teams and families.

One dimension of the medical metaphor is the surgical model, which certainly has not outgrown its usefulness. Tumors need to come out. Heart valves need to be repaired or replaced--same with worn out hips. Cleft palates must be repaired. In organizations, the incompetent and the dishonest must be excised. Worn out organizational structures must be rebuilt. Reorganization, and reengineering, acquisitions, mergers, and hostile takeovers are the kinds of structural changes that are akin to surgical interventions. Surgical change in organizations continues to be an essential tool—but it is not the only one.

Another useful tool for organizational diagnosis and intervention is the systems approach – extending the medical metaphor, a holistic health or “wellness” model. The organization using a wellness model recognizes that all parts of the organization are interconnected, and that tinkering with one *will* affect the others. In the same way we stay healthy by exercising daily and eating well, an organization can help maintain its health with good organizational hygiene – up-to-date policies and procedures, regular employee evaluations, appropriate corrective action and well-maintained channels of

communication. Organizations often maintain “wellness” by instituting systems for conflict resolution, team building, coaching, training and education.

But the model I want to think about with you this evening is a viral model of organizational change.

Viruses are very small, about a millionth of an inch long, or 1000 times smaller than bacteria. They are so small, in fact, that no one had ever seen them until the invention of the electron microscope. Bill Bryson, in *A Short History of Nearly Everything* describes them:

“A virus is a strange and unlovely entity – ‘a piece of nucleic acid surrounded by bad news’ in the memorable phrase of the Nobel laureate Peter Medawar.

“Smaller and simpler than bacteria, viruses aren’t themselves alive. In isolation they are inert and harmless. But introduce them into a suitable host and they burst into busyness – into life. About 5,000 types of viruses are known, and between them they afflict us with many hundreds of diseases, ranging from the flu and common cold to those that are most invidious to human well-being: smallpox, rabies, yellow fever, ebola, polio, and the immunodeficiency virus, the source of AIDS. ...Viruses prosper by hijacking the genetic material of a living cell and using it to produce more virus. ...”¹

How do viruses work? They all follow the same basic steps, what Bryson has described as “hijacking”.

1. A virus particle attaches to a host cell
2. The particle releases its genetic instructions into the host cell.
3. The injected genetic material recruits the host cell's enzymes.
4. The enzymes make parts for more new virus particles.

¹ Bryson, Bill, *A Short History of Nearly Everything*, 2003, Broadway Books, N.Y. p 316

5. The new parts are assembled into new virus particles, and
6. The new virus particles break free from the host cell, either in mass, destroying the host, or budding off leaving the host cell wall intact.

When the virus particles break free from the host, these new viruses attack other cells. A single virus can reproduce thousands of new viruses, allowing viral infections to spread rapidly throughout the organism...²

Creating change in an organization using a viral model means that a new idea – akin to a virus’ genetic material – penetrates an individual’s defenses – his or her lack of information, or skepticism or resistance – just as a virus penetrates a cell wall. The new idea becomes a part of the individual’s mental model –the equivalent of the cell’s DNA. And the individual then, either by precept or example, goes on to propagate the idea in the organization.

As you can see, the viral model is morally neutral – the idea in question can be beneficial or malign. And obviously, in an ethical organization, the “injection process” is overt.

We can see this model at work in a case study from Fast Company Magazine. Charles Fishman writes:

We looked for an example of a large, powerful company in the grips of change and found computer giant Siemens Nixdorf (SNI)... Enter Gerhard Schulmeyer, SNI's CEO, schooled in the United States where he ... learned first-hand the lessons of fast-paced change. Within months after taking over the leadership of the company, Schulmeyer launched Europe's most ambitious corporate overhaul, a cultural transformation to remake SNI ... Schulmeyer recruited Mark Maletz, a veteran change agent with experience at Xerox, American Airlines, and Citicorp, to invent a school for change, training a cadre of change agents who could, like a virus, infect the host company. But these were not to be recruits from the "soft

² Freudenrich, Craig, Ph.D. in *How Stuff Works*, <http://science.howstuffworks.com/virus-human1.htm>

side" -- human resource professionals looking for a new assignment. Instead, Schulmeyer drafted the young and the restless within SNI, hard-charging businesspeople from the field who cared about the company's future, who could be trained in the art of change and then injected back into the stiff, slow-moving, hierarchical SNI culture -- with the promise that they'd make a difference.

It's an approach that's worked for other large companies, some in Europe, such as Royal Dutch/Shell, some in the United States, such as General Electric and Ameritech. In SNI's case, [in only two years] the company ... moved from a DM2 billion loss on DM12 billion in revenue ... to a DM50 million profit on DM 14 billion in revenue ...³

My own first experience with what I now recognize as viral change occurred many years ago in my first year as a planner for the City of Fresno. Our department manager at the time believed that information was power, and the more he had that we didn't, the more powerful he was. It was nearing the end of the year and budgets were being developed. This was post-Proposition 13, and the City was still learning how to get along with the new restrictions imposed on the revenue stream. Cutbacks seemed likely, but in the depths of city hall, where we worked under hanging sewer pipes and in a fertile environment for rumors and grapevine growth, we were being told nothing. As a temporary employee, I felt particularly vulnerable, and had even less access than my more senior colleagues to vital information about my fate. So, I asked one of the planners three levels above me whether there was any truth to the rumor that the department planned to eliminate his entire class. The individual I asked had distinguished himself, in my view, as the go-to guy for the latest gossip. He took this new information and went. Shortly, all the planner IIIs were in impromptu meetings that had nothing to do with planning and everything to do with this new bit of information. Was it true? How *could* they? The result was an informal unplanned work stoppage. And somebody noticed.

³ Charles Fishman, Change: Few can do it. Few can sustain it. Few can survive it. From: Fast Company| April/May 1997, Page 64

The very next morning our manager called a special meeting of the entire department. After decrying the unfortunate rumor that someone had been circulating, he told us what we wanted to know, what we might anticipate, and what not. Success--a kernel of information, an individual to incubate it, and a mechanism to spread it--all that was necessary to bring things out in the open. Once a critical mass of concern developed, change happened QUICKLY.

The Immune Response:

Just as the human body fights a virus, organizations and their members often have developed sophisticated immune system responses to change itself in any form.

In the body, the immune system protects against viruses in three different ways:

First it creates a barrier that prevents viruses from entering the body.

If a virus does get into the body, the immune system then tries to detect and eliminate it before it can reproduce. Antibodies produced by white blood cells bind to the outer coat of a virus particle to stop its movement through cell walls.

If the virus is able to invade cells, reproduce and start causing problems, the immune system is in charge of eliminating it. Most cells in the body also produce interferon, a protein that helps cells resist the virus. Interferon also lets cells signal to one another. When a cell detects interferon from other cells, it produces proteins that help prevent viral replication within the cell.⁴

Edward Jenner, an English physician, was the first to develop a reliable way to use the body's own immune system to defend against viral infection. In the eighteenth century, virulent smallpox epidemics swept over Europe, sometimes virtually depopulating entire communities. Jenner noticed that dairy workers who had been infected with cowpox—

⁴ Brain, Marshall, in *How Stuff Works*, <http://science.howstuffworks.com/immune-system3.htm>

which manifested as mild sores on the hands and arms—appeared to be immune from infection when dreaded smallpox appeared in their villages. In the 1790s, he experimented with intentionally infecting individuals with cowpox and then testing their immunity to smallpox—even including his own children. His work led to widespread vaccinations and eventually to the virtual disappearance of smallpox.

Not until the invention of the electron microscope could we learn why his system worked: cowpox and smallpox are structurally similar viruses, such that an antibody structured to bind to one will also bind to the other, preventing its movement through cell walls. Jenner’s exposing people to the cowpox virus prepared their immune systems to bind up and immobilize smallpox virus. After Jenner, others applied his concept, using weakened viruses or viruses similar to the dangerous ones to vaccinate people and give them acquired immunity to stronger viruses that might attack the body.⁵

Organizations, too, have often been “vaccinated” against change initiatives. Although most of us acknowledge the need to change, and readily welcome it when it’s happening to someone else, sometimes past experiences with change efforts create resistance to new measures. Often, after exposure to a change initiative, members of an organization, the workforce, the volunteers, the family members, create barriers to the entry of new information, or attitudinal antibodies to negate it, or postural interferon to resist the process. It is common to hear any new change effort categorized as yet another “flavor of the month” approach to making employees’ jobs more difficult, complicated or ridiculous. This acquired immunity takes on a number of identities: “We’ve already done this.” “It didn’t work then and it won’t work now.” “Why don’t you just let me do my job?” “Uh-oh, the boss went to a seminar; we won’t get anything done until that wears off.”

In order to get around immune system defenses, viruses mutate so that the antibody cells can no longer recognize, intercept and fight them. How can a change agent get around the established defenses in an organization? Storytelling offers one opportunity. Stories,

⁵ Radetsky, Peter, *The Invisible Invaders*, Little, Brown & Co. 1991, Pp. 25 - 35

even from total strangers have a credibility that recognized authorities sometimes lack. Why? Perhaps because the person we don't know and may never see again has less reason to manipulate us than someone who definitely wants something out of us.

Stories also engage us on an emotional level. John Kotter, Harvard Business School professor who has done extensive studies of organizations in difficult transition notes that we are far more receptive to change when the process involves us. "Behavior change," says Kotter, "happens mostly by speaking to people's feelings. This is true in even in organizations that are very focused on analysis and quantitative measures...In highly successful change efforts, people find ways to help others see the problems or solutions in ways that influence emotions, not just thought."⁶

Another technique for sidestepping defenses is to use questions instead of declarations to introduce new information.

I had contracted to train administrators of a valley school district in a process of appreciative inquiry – a powerful tool for organizational transformation. The first session involved a select group of principals, vice principals and assistants – people with the power and connections to make things happen. I got to the meeting site early to set up, and overheard some participants talking about their assignment, using most of the complaints noted above. They resented being in class during their summer break when the "unselect" were off vacationing or making extra money in their summer jobs. Clearly my mini-lecture, my story, about this process was not going to work. They would listen, but they would not hear. Their change antibodies were in full deployment. Even my status as a stranger was no help—the superintendent had hired me. Since my initial plan did not look viable, I had to mutate. Instead of telling the story, I decided to ask questions. I needed questions that would generate interest and enough energy to enlist them - the administrators - in spreading the story of this process we were going to use. These eminent educators spent most of their time administrating, not educating. Most of the contact they did have with students was negative, dealing with the problem kids. The

⁶ Kotter, John, quoted by Alan Deutschman in "Making Change," Fast Company, May 2005.

questions I used were, “Why did you get into education in the first place? What was a time when you really got through to a student and later found out about it?” These questions spoke to their most important values, and were also examples of the kind of appreciative inquiry that might be used in the project we were developing. The principals, vice-principals and learning coordinators paired up and began talking, not about how they resented this assignment as before, but about what education really meant to them, why they had gotten involved in the first place, and about the wonderful stories of their successes. The energy level went from low and resentful to high and enthusiastic in 15 minutes. When we reconvened our session, they were eager to learn about a strategy for generating this kind of energy throughout the district.

Dwight Eisenhower, trying to help his staff understand leadership, once threw a piece of string on the table and said, “Pull the string, and it will follow wherever you wish. Push it, and it will go nowhere at all.” In developing ways to introduce and lead change in organizations and to overcome members’ immune responses, questions are like pulling, commands and directives like pushing. A well-worded question can contain the information we need to introduce into the system, but since it doesn’t assert that information it can often slip past defenses put up to reject it, just as a mutated virus slips past the antibodies designed to block it.

Virus particles use various channels to invade an organism. Atomized in sneezes or carried in various fluids they find their way to receptive cells. What channels could be used for injecting information into an organization? In my planning experience, a simple question to the right person did the trick. It took advantage of an existing distribution system: the grapevine or rumor mill. The question, turned into a fact by the carrier, suddenly had credibility. It was repeated, spread like wild fire, and brought the system to a halt. Now we have the seductive option of e-mail - allowing information to travel at the speed of light, broadcast geometrically by the carriers’ e-mail distribution groups. But as a channel for conveying effective change information, it has problems. Written communication lacks the richness of a face-to-face encounter, which provides for instant feedback and the opportunity to mutate the message as needed in response to defenses

offered. However, once the connection is established, electronic media – e-mails and text messaging – can be used to mobilize forces rapidly, even as virus particles, once inside the cell, reproduce themselves with amazing alacrity.

Virus particles are constructed so that they hook up to the right cells, the ones that will help them reproduce and spread. Identifying credible individuals in an organization to carry the message is a critical step in a viral change effort. At SNI they were the “young and the restless ... hard-charging businesspeople from the field who cared about the company's future.” In the planning department it was the go-to guy for the latest rumor.

In *The Tipping Point*, Malcolm Gladwell talks about change epidemics. He uses the example of Paul Revere and his famous midnight ride to illustrate the way information spreads person-to-person. Another patriot, William Dawes, also rode that night to warn the colonists of the British approach, but his ride was neither as well known, nor as successful as Revere's. Paul Revere was able to get more people to Lexington to confront the British there because he *knew* people all along the route, people who would trust his information and in turn galvanize their neighbors into a fighting force. He was a connector. Dawes did not have the same kind of connection with the people on his route. The individuals to target in a viral model change are the ones who have credibility and who are most connected to a large and wide base in the organization.

Scientists are developing ways to use the very viruses that make us sick to help in the healing process. Now we are actually reengineering viruses, ripping their RNA apart and inserting new information, new tools the body can use to repair damage. The modified viruses then become the perfect carriers, seeking out the cells that need repair. Using a viral approach to change requires that we rethink the content of our messages, and package them so that they can take advantage of the organizations' existing systems – formal and informal - of communication and information exchange.

Viruses carry information about how to create more viruses. But they can only reproduce when they occupy a living cell. Information itself is powerless without someone who can and will use it. A change initiative is only an idea until people adopt and embrace it. The

way the idea is framed will determine if it will capture the attention of individuals in the organization and generate enough energy to spread. Some ways to frame the information include using “war stories,” talking about living legends – and dead ones, and connecting in some way to a message or value that is already familiar to the people in the organization. As we saw with the school administrators, information that honestly connected with their deeply held passion for education became information that they could and would use.

CONCLUSION

The title of this paper, “The Bug and the Scalpel,” suggests a metaphor: a medical one. The advantage of using metaphors is the way they enable us to understand ambiguous, uncertain concepts with some level of predictability. This predictability is borrowed, to be sure, from another dimension – in this case medicine. The danger of metaphors is that the very act of placing a framework or lens over any organization’s unruly dynamics often filters out critical information. The magic of metaphors is that they work – they often provide insight and direction where the concrete facts offer only confusion and inertia.

CHANGE is the one constant as we attempt to boldly go where no one has gone before. It requires that we bring along the best of the past, but pay attention to the challenge of the unexpected. An organic model for creating change in organizations gives us the advantage of recognizing the value that individuals play in the functioning of organizations. Each cell in an organism can be the entrance point for a complete viral infection. Similarly, each individual in an organization has the potential to launch significant change.

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