21st Century Crises: A New Cosmology Urgently Needed

"Why do we continually seem to be a disaster behind?"[1]. This is the key question behind "Failures of Imagination" or "Failures of Initiative". The worrying news is that, crisis after crisis, we react as if programmed to do no more than call for "more of the same": more ready-made answers, more plans, more Command and Control. The good news is that some are beginning to understand that emerging issues and contexts of the 21st Century demand a decisive breakthrough in crisis culture and strategy. Just as Magellan did in his own 16th Century context[2], we also need a new cosmology. The time has come to take on the risk of sketching new maps, and give birth to new strategies, new tactics, new models of education and training.[3]

Here lies Crisis Management

Everyone agrees that Hurricane Katrina was a traumatic fiasco. But, beyond the specific event, we have to acknowledge a global warning. First, Katrina was just the kind of cataclysmic event that are becoming increasingly common: *"We must expect more catastrophes like Hurricane Katrina and possibly even worse."* (The White House report)[4] Second, we are strategically overwhelmed by these emerging issues: *"Our current system for homeland security does not provide the necessary framework to manage the challenges posed by 21st Century catastrophic threats.*[5] Third, we are culturally reluctant to make the drastic changes necessary to meet the challenge: *"Many government officials continue to stubbornly resist recognizing that fundamental changes in disaster management are needed."* (House of Representatives)[6]

Of course, at the level of tactics and assets, much can be done – and must be done – to strengthen our operational capabilities, to re-write texts and plans, to clarify some sensitive questions such as "push" or "pull" mechanisms (we can barely fathom the difficulties that the implementation of a European-wide "push" system would bring about), to train people at all levels. But the real challenge is that the theatre of operations must be entirely reappraised.

Our emergency culture is embedded in an outdated model. In the last century, crisis was defined as an acute problem that could be resolved and overcome through rapid response; we simply had to be ready to bring the necessary means to bear in order to return to normalcy; the problem was specific, isolated, and the context stable. Today, however, events can be much more disruptive; more importantly: they occur in contexts that have become fundamentally unstable, in continuous mutation.

---
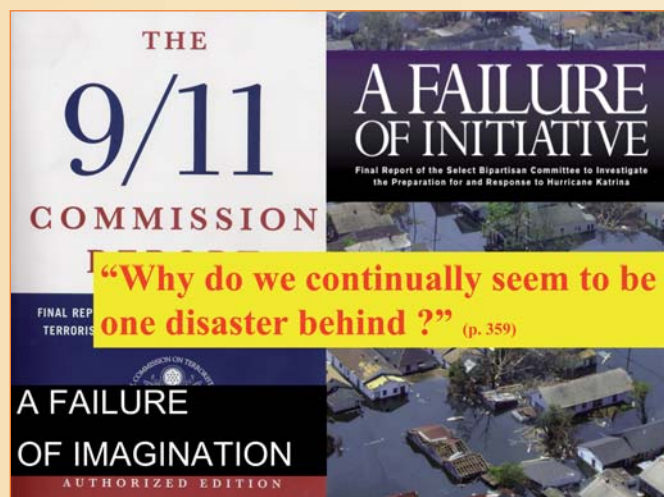
[1] *U.S. House of Representatives, A Failure of Initiative, Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, US Government Printing Office, 15 February 2006 (p. 359).*

[2] *Laurence Bergreen, Over the Edge of the World – Magellan's Terrifying Circumnavigation of the Globe, Harper Perennial, New York 2004, pp. 73; 10; 73, 201-202.*

[3] *Patrick Lagadec, 'Over the edge of the world', in: Crisis Response Journal, Volume 3, Issue 4, p. 48-49, September 2007.*

[4] *The White House, The Federal Response to Hurricane Katrina – Lessons Learned, 23 February 2006, p. 65.*

[5] *The White House, idem, p. 52.*

[6] *U.S. House of Representatives, p. xi.*

Connectivity is the leitmotiv of our strengths and weaknesses; speed, ignorance, hypercomplexity, "inconceivability", are the names of the game. *Any* event, not only "Category 5" disruptions, can trigger unthinkable domino effects.

A Whole New Ball Game

Crisis management now goes much beyond emergency response. We have to adapt accordingly.

Intelligence

We used to have a static approach, with pre-designed categories of disasters, pre-planned answers, pre-defined organizations, and strict chains of command. Today, we must develop a new intelligence model for chaotic environments, when nothing is stable, where a minor loss of balance can lead to the collapse of our posture, and any action triggers multiple reactions[7]. We used to have fixed doctrines in order to guarantee the proper implementation of fixed answers. Now we must develop *Rapid Reflection Forces*[8],[9] to develop new tools of understanding and to invent uncharted pathways through all *terrae incognitae*.

Organization

Our plans were neatly laid out in a "Russian Dolls" concept – adding up separate stratas at the Local, State, National, and International levels. We must create more complex dynamics, moving away from sequential logic – biology supplants mechanics.

Leadership

We used to rely on officers who relied on a set corpus of best practices. Now, "*at all levels of government, we must build a leadership corps that (...) must be populated by leaders who are prepared to exhibit innovation and take the initiative during extremely trying circumstances*".[10]

Networks

We used to require a clear definition of who was in command, and comprehensive mapping of the stakeholders who should be coordinated. Today we must adapt to increasingly complex networking processes, and realize that preparation, action and reaction involve a kaleidoscope of players. It is not enough to speak of "partnerships". What is needed is a "global new deal", which will fundamentally redefine the roles of each player and most especially the repartition of tasks among public authorities and critical networks operators.

Empowerment

Our leaders used to obsess about the risk of "populations panicking", even though historical evidence shows that populations will most often be resourceful and composed. Now, "Empowerment" must be an omnipresent building block in the systems we build. Which means that we must accept to rely on trust, beyond the usual Command and Control principle.

Communications

Communication is the cornerstone of the whole process: to link people, to adjust to a very rapid mutating environment. Technical sophistication should not obscure the fact that even basic communication can be at risk: "*Katrina interoperability problems were masked to some degree by the larger more serious breakdown of operability resulting from the destruction of facilities or power outages*"[11]. However, the most pressing challenge in terms of information sharing is, again, cultural. Satellite phones and blackberries are little help if turf wars make their users reluctant

---

[7] *Mike Granatt's re-interpretation of Newton's principle. Personal communication.*

[8] *Pierre Béroux, Xavier Guilhou, Patrick Lagadec, 'Implementing Rapid Reflection Forces', in: Crisis Response, vol. 3, issue 2, pp. 36-37.*

[9] *Pierre Beroux, Xavier Guilhou, Patrick Lagadec, 'Rapid Reflection Forces put to the reality test', in: Crisis Response Journal, forthcoming, vol 4, issue 2, March 2008.*

[10] *The White House, idem, p. 72.*

[11] *U.S. House of Representatives, idem, p. 165.*

New York, NY, September 21, 2001 – Smoke still billows from the remains of the World Trade Center. The clean up operation is expected to take months.

to communicate. There is more to the problem than the mantra "You should not be exchanging business cards when a crisis hits": even if stakeholders are indeed familiar with one another, the question remains whether they are culturally willing and able to communicate instantly with others, know or unknown, in fast-changing contexts, and without perfect information or clear chains of command.

Recover

In the more stable world of the last century, emergency response was the focus; restoration of normalcy was presumed to be somewhat automatic, and aimed at specific damaged assets. But in today's unstable and complex world, the issue is no longer to "restore" walls, bridges and roads – after the heroics of search and rescue. It becomes essential to build into the system, years in advance – and not *the day after* –, the conditions that will help a complex societal texture to find new sustainable dynamics in a fast-moving environment.

Education and training

We used to train people to apply a known set of rules. We now have to educate them to face the unknown, and be creative, even if the process is untidy. As specified in the White House report: "*When training, Federal officials should not shy away from exercising worst-case scenarios that "break" our homeland security system.*"[12]

Static stance is lethal in a rapidly evolving world, where speed and connectivity are vital to safety and sustainability. It is crucial to think and act differently. The issue of systemic crises has to be put high on Head of states agendas. Let's not wait for the next event to be the wake-up call for strategic initiatives.

Patrick Lagadec,
Director Research, Ecole Polytechnique (Paris)
www.patricklagadec.net

[12] *The White House, idem, p. 73.*