

# RISK, TERRORISM AND SOCIETY: NEW ISSUES

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"Le feu tue, les idées périmées aussi"

*Foch*

"Nous vivons une période de cassure, comme il y en eut au cours de l'Histoire.

Peut-être l'Histoire n'est-elle, au fond, faite que de ruptures. [...]

Il ne s'agit pas de phénomènes marginaux ou de déviations.

C'est une recomposition d'ensemble [...] qui est en cours [...].

Dans une situation semblable, entre le vieux monde et celui de l'industrie naissante, le jeune Hegel écrit :

"Si la réalité est inconcevable, alors il faut forger des concepts inconcevables."

*Jean Duvignaud*

*(Le Monde, 18 janvier 1994, Débats, p.2)*

There is one imperative in the field of security: never be a war behind. *A fortiori*, for two wars. This urgent obligation is called for, obviously, with regard to terrorism.

As early as 1981, I warned: "In many cases, we come to wonder about the purposes of a military deterrent; to wonder whether there is not an astounding gap in our nation's defense, whether every day, industry does not create something that will wipe out the costly efforts of our general staffs in only a few hours<sup>2</sup>." Unfortunately, for many years, all of our thinking about the major risks associated with technology -which is much easier to "hijack" than an airliner- has met with steadfast denial, as if the system could not effectively deal with the security issues that arise from the very development of technology itself. In May 1989, speaking on the topic of "new risks" at a conference organized by a major international organization in Ottawa, the General who passed me the microphone had time to whisper under his breath: "don't scare them!". In June 2001, speaking at a meeting of a Defense Zone (*Zone de Défense*) in France about emerging crises, a highly-placed official stopped me during the discussion, saying loud and clear: "One should not be pessimistic, things are under control", before telling me privately during the cocktail a few minutes

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<sup>2</sup> Patrick Lagadec: *La Civilisation du risque, Catastrophes technologiques et responsabilité sociale*, Seuil, Collection "Science Ouverte", Paris, 1981, p. 80. (Raymond Delaby Prize, 1982, Civil Protection Prize, 1982). Spanish edition, Ed. Mapfre, 1984, and in German, Greno, Nördlingen, 1987.

afterwards: "You are right, but we can't allow that to be said in front of Prefects (*Préfets*)!"

The problem is that terrorists do not necessarily suffer from this pathological blindness and denial.

Clearly stated, the question is: what new issues must we consider, for the defense of our countries, once terrorism radically disrupts the framework of security and stability in our societies?

I will briefly consider three approaches to this problem: the new frontiers as concerns vulnerability, the new challenges in terms of response, the new questions in terms of governance. For that is yet another pathological reaction that we must not be too late in discovering: the fact that we have sought refuge in autism for too long does not mean that we must seek refuge in flight when we are finally put to the test. Those who, in the past, refused to question anything on the ground that one had to "maintain a positive outlook", would certainly be ill-advised to abandon ship just when black storm clouds are gathering on the horizon. We must move from garden-variety optimism to staunch determination when we are finally put to the test.

I am not a specialist on terrorism. I will generally suggest some guidelines for the governance of society at a time when new destabilizing influences are emerging. The question of terrorism is an additional issue. It remains to be seen - and this is a question that I will leave unanswered - just how my general comments will cause us to change our approach to terrorism and, in turn, how the new realities of terrorism necessarily shape our general understanding of the situation - both in terms of knowledge, but also, obviously, in terms of the action we take.

## THE CONTEXT: A WHOLE NEW BALL GAME

Three fields of operations must be considered.

### *Risks related to facilities*

These are industrial risks of all kinds. None of this is really new. Burning oil tanks, gas explosions, attacks on nuclear facilities and storage areas have been reported since 1981. What is new is the increasingly large size of the facilities, the fact that the products being stored are sometimes even more hazardous than in the past, and the population density of the surrounding urban areas, as we saw in Toulouse with the AZF plant explosion on September 21, 2001, in Mexico City with the explosion of the petroleum storage facility in 1984, and of course in Bhopal that same year.

### *Risks related to networks*

Suddenly, on January 5, 1998, the lights went out all over Montreal. A series of ice storms had knocked out much of the power grid in southern Quebec. The domino effect kicked in: water pumping stations broke down, refineries went offline, mass transit systems were largely paralyzed, telecommunications networks began to shut down, the risk of fire suddenly increased (people kept warm with whatever was at hand, used candles for light, and of course there

was no more water). Seven hundred municipalities were without power, smack in the middle of the Canadian winter. In France, the great storms of December 1999 also illustrated the risk of a domino effect knocking out vital networks that are increasingly interlinked, today, and vulnerable.

We are dealing here with a phenomenon of high-speed transmission over wide areas. Because mass transportation is now global in scale, a local public health problem can spread to several continents in a matter of hours; a local disruption can become a global problem in only a few minutes via the Internet. And the whole thing is instantaneously broadcast and rebroadcast by the media, sometimes even before the problem arises, or where there is not really a problem at all.

Problem: today, our complex societies are a tangled skein of hubs, concentrating enormous powers of instantaneous communication. The result is security problems that are extremely difficult to resolve, problems that are created by heretofore unknown resonance, complexity and threshold effects. There is a phrase that expresses this second issue in a nutshell: *from mass destruction to mass disruption*.

### *Shattered environments*

Climate change, a geometric increase in the complexity of our socio-technical units, a sharp jump in speed, worldwide media exposure, the return of war in previously unknown forms, and accelerated geo-strategic repositioning build a context that is more and more unstable, exposed to severe and destabilizing turbulences, and ready to transform any local disruption into a firestorm that is beyond regional control.

The question of "critical infrastructures" was first raised in 1997. Since then, it has been an integral part of the post-Cold War geo-strategic debate. The pioneering work of a commission established by President Clinton in 1998, inviting a new approach to these problems, should be noted: "The rapid proliferation and integration of telecommunications and computer systems have connected infrastructures to one another in a complex, interdependent network. This interlinkage has created a new dimension of vulnerability, which, when combined with an emerging constellation of threats, poses an unprecedented national risk. [...] We must learn to negotiate a new geography, where borders are irrelevant and distances meaningless, where an enemy may be able to harm the vital systems we depend on without confronting our military power. National defense is no longer the exclusive preserve of government, and economic security is no longer just about business<sup>3</sup>."

Five years later, particularly after anthrax, we have discovered the reach of this observation. The risk is no longer limited to an attack on vital networks, with the domino effect that may follow. The threat is the use of networks as a penetrating weapon: after the concept of "deep defense", we now have the threat of "deep attack", with this new weapon of "mass disruption". The question must be considered on many fronts, including the media front, we were witness

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<sup>3</sup> *President's Commission on Critical Infrastructure Protection*, Critical Foundations, Protecting America's Infrastructures, Washington D.C., 1998 (p. ix).

to an extreme example of this on September 11, 2001, when the large worldwide media networks acted as echo chambers of unprecedented power ("the weapon is the medium", as Marshall McLuhan could have written after 9-11).

## THE RESPONSE: DELAYS AND BARRIERS

At least three types of challenges must be considered.

### *An intellectual challenge*

We have sophisticated tools at our disposal for gathering information and planning action in stable and homogeneous worlds; we are quickly stripped bare in a world marked by discontinuity, precisely the one we will be confronted with on many fronts from now on. Quite often, our referential world appears to be the same one so dear to the naturalists, such as the 18<sup>th</sup> century writer Buffon (1749): "Causes whose effects are rare, violent and sudden must not affect us, they are not part of the ordinary process of Nature; but effects that occur each day, movements that follow one another and are continually renewed, constant and endlessly-repeated transactions, these are our causes, and our reasons<sup>4</sup>."

In the 1970s, Edgar Morin tried to develop a "crisis science". He explained the initial obstacle: "There is no science of the singular, there is no science of the event. That is one of the most solid cornerstones of the theoretical vernacular that remains dominant. The event has been dismissed to the extent that it has been identified with singularity, contingency, accident, insurmountability and real world experience. It has been dismissed not only from physics, chemistry and related disciplines, but also from sociology, which tends to define itself by reference to laws, models, structures and systems".

At the end of the 1980s, at the time of the first systematic studies on the subject, Uriel Rosenthal, one of the pioneers of European crisis studies, went even further: "Scientists feel ill at ease with these phenomena that seem beyond the pale of the neatly crafted theories they have developed based on normal circumstances and events. Crises seem to be in absolute opposition to the very basis of modern social science<sup>5</sup>."

### *An existential challenge*

All those who have found themselves at the center of this storm of risks and crises emphasize above all else the astounding difficulty of *living through* the crisis. A digression into psychology is essential, and with A. Bolzinger requires only a few key terms<sup>6</sup>:

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<sup>4</sup> In: *Théorie de la Terre* (1749), cited by Jean Delumeau and Yves Lequin: *Les Malheurs des temps, Histoire des fléaux et des calamités en France; Mentalités : vécu et représentations*, Paris, Larousse, 1987, p. 397.

<sup>5</sup> Uriel Rosenthal, Michael T. Charles, Paul 't Hart (Ed.): *Coping with crises. The Management of Disasters, Riots and Terrorism*, Charles C. Thomas, Publisher, Springfield, Illinois, 1989, p. 5.

<sup>6</sup> A. Bolzinger: "Le Concept clinique de crise", *Bulletin de Psychologie*, vol. XXXV, n° 355, pp. 475-480. 1982. p. 478. (Traduction Aspen Traduction).

*"Suddenness*: the crisis is experienced as a lightning strike that seems to burst into the subject's life, even when in reality it is gradual and develops over a few days.

*Irrepressibility*: the crisis eats its way into the subject's most private sphere, with an urgent and inevitable immediacy that allows neither respite nor rest.

*Incomprehensibility*: the crisis is perceived as a strange confluence of circumstances; even if the subject in crisis buys into the situation completely, he nevertheless retains a basic sense of surprise and mysterious disruption.

*Artificiality*: for the subject, the crisis is like a suddenly separate episode in the usual course of his life, a moment of climax experienced as an *objective reality* but separate from *objective reality*".

Such an earthquake frequently leads to paralysis, blindness and blunders, as exemplified by the Bay of Pigs fiasco (Cuba, 1961), an archetypal, oft-repeated case study.

Let us reread these poignant lines of Robert Kennedy, seated in front of his brother, at the height of the Cuban missile crisis, when the world was on the very brink of tipping over into the void:

"I think that these minutes were the time of gravest concern for the President. Was the world on the brink of a holocaust? Was it out of error? A mistake? [...] We stared at each other across the table. For a fleeting seconds [...] he was no longer the President. Inexplicably, I thought when he was ill and almost died; when he lost his child; when he learned that our oldest brother had been killed; of personal times of strain and hurt<sup>7</sup>."

### *A management challenge*

New York, July 2001: the city's mayor participates, in person, in a crisis drill. A tough, bio-chemical scenario. Rudolph Giuliani is not satisfied with merely *beginning* and *ending* the simulation. He stays on for two days, playing his role to the hilt, the role that would in fact be his in real life. A decision is made at the end of the two days: there will be a second exercise. A date is set: September 12, 2001.

Questions: In the large cities of Europe during the past two years, how many of his colleagues have agreed to personally participate in even one crisis drill? And, if they were present, what surprises were there in the simulation? What lessons were learned from the experience? Can the same questions be asked for the leaders of large businesses? For high government officials and cabinet officers' staff? For Europe? For major international organizations?

This reluctance translates directly into operational consequences: no initial training, no preparation of supervisory groups, no simulations on the necessary scale (or entirely conventional simulations, directed toward logistical training and rarely toward decision-making), very few lessons learned, and no attempt to explore the unexpected.

And still more: at the heart of this reluctance, a strong feeling of the illegitimacy of any request for preparation in these areas. In fact responsible

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<sup>7</sup> Robert Kennedy, *Thirteen days, A memoir of the Cuban missile crisis*, Norton, 1971, p. 47-48

officials are trained, recruited and hired based on their ability to operate a well-oiled machine. Hence, their very identity is put in question when they are forced to perform on a battlefield made up of surprises, no familiar points of reference, and the need to communicate widely with a large number of other actors.

Ralph D. Stacey, a British professor of management, makes the link between the intellectual universe, management training and government paralysis in the non-traditional world: "At least 90% of textbooks on strategic management are devoted to that part of the management task which is relatively easy: the running of the organizational machine in as surprise-free a way as possible. On the contrary, the real management task is that of handling the exceptions, coping with and even using unpredictability, clashing counter-cultures. The task has to do with *instability, irregularity, difference and disorder*."

Experience teaches, however, that these problems can be overcome.

### GOVERNANCE: FRONTIERS THAT MUST BE OVERCOME

After many an attack, particularly since Chernobyl, the mad cow disease scare, the economic, health and humanitarian collapse of entire continents, the September 11, 2001 attacks and anthrax soon afterward, the challenge we face today is threefold:

- a certain amount of confusion among experts, who are faced with deepening zones of ignorance, unprecedented entanglements of vulnerability, and situations of heightened instability;
- a growing mistrust on the part of the various constituencies involved;
- an increasing threat of the uncoupling of civil leadership and civil society.

Our responsibility is threefold:

To understand these challenges, to identify the dead-ends that we must avoid when we respond, and to forge appropriate approaches and solutions.

There is one additional imperative: not to approach current and swiftly changing realities with our gaze firmly fixed on the rear-view mirror. We who were proud of our tools, prepared for our perfectly planned little gardens, find ourselves confronted with invading jungles, unknown and threatening. Here we stand, increasingly overwhelmed by the unknown, the unthinkable and the inconceivable.

We must recognize the basic problem: we live in a culture that was able, most of the time, to push the unconventional back beyond its borders. Now, from all sides, the *barbarous* realities that had been contained on the borders of our empire of reason, are now suddenly and brutally bursting into the heartland.

We need *sudden, creative change creative ruptures* on many fronts.

#### *A sudden change in intellectual endeavors*

Everything that we had set down in proven theories and lean, robust, modulated series of statistics, has become non essential. Today, what was once "beyond the pale" is now at the heart of things and must be considered as

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<sup>8</sup> R. Stacey, *Strategic Management and Organizational Dynamics*. London, Pitman, 1996, p. XIX-XX.

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such: discontinuity, irreversibility, extremism, crystallization, resonance, in and across all disciplines.

### *Intense involvement at the highest levels*

When confronted with such weighty matters that concern identity, survival and visions for the future, nothing can be done without intense, personal, direct involvement by the key players in the organizations concerned. We have seen Rudolph Giuliani, Mayor of New York, at work. Those who occupy the highest offices are expected to be on the front lines, where the stakes are high, mobilizing people. A strong message must be given to those involved, that nothing less is expected of them.

### *Think tanks, step back ability*

Plunged into a world of violent turbulence, organizations must be led, mobilized and empowered in new terms. No longer is it enough for them to acquire a specific, rigid technical arsenal to respond to an unusual situation. Advance planning and a high level of responsiveness to faint signals, at the highest level, are essential in order to anticipate sudden change, control drift and build the necessary networks of actors. Because of the surprises, the complexity and the aberrations of events, organizations must develop a new monitoring function. Leaders must be able to rely upon people accustomed to operating in a crisis, who are able to step back and assess whenever a sensitive situation arises. This capability is particularly necessary in order to counteract the most seriously pathological reactions to the new forms of crisis: an inability to think: "In a crisis, you don't have time to think", as it is too often said; a tendency to develop a "bunker mentality", each person holing up in his own little corner; a purely technical approach to problems, without examining the underlying positions. Today, more than ever before, great crises will lead to disaster as a result of insufficient thought and strategic leadership ability. The case of Spain and the *Prestige* should serve as a final warning here, for Europe as well. During a recent international simulation, we were able to see the degree to which the lack of strategic ability in these areas was determinative. The European capability was exhausted in only two hours. In fact, an expression was coined to express what we observed: *crises as institution killers*.

### *Bold initiatives*

Example: In February 2001, a major snowstorm on the Aix-Nice motorway trapped 4,000 people on the road for nearly 36 hours. Weather conditions were unprecedented: 80 centimeters of snow in a few hours. Instead of claiming *force majeure*, the Chairman of the corporation concerned (Escota), called a public debriefing. Through the press, all interested parties were invited to share their experiences at a public meeting three months later. Moreover, this collective effort was supplemented at the meeting by joint consideration of what each participant could contribute to the safety of such a large network (which, for example, would require that trucks be held back at the Spanish and Italian

borders if it were necessary to cut off traffic in Provence). The result was particularly interesting, as much for a better understanding of the incident and the problems to be confronted as for preparation for the future. In a word, the meeting afforded an opportunity to become better aware of the networks at work, and especially to create new networks among the various players, the turnpike authority, government authorities, local officials, service stations, the weather service, truckers and motorists. We must follow the lead of such initiatives on all fronts, beginning with those that are most at risk.

### *Civil society back in the loop*

In the same spirit, we must get past the notion that in delicate situations, everything is immediately put in the hands of some government agency, under a single command, using a sort of military reasoning that believes that civil society can only "panic and give way to looting". The example of the 1998 Quebec ice storms is quite instructive in this regard. The debriefing (largely open and extremely detailed) strongly emphasized the need to determine the response in close cooperation with the citizens themselves. For example, it was said that for such complex network failures the citizen had to be prepared to go it alone in confronting the situation at his level, while awaiting as long as it took for service to be restored, and in which priority would have to be given to the structural restoration of the networks.

Any other strategy can only lead to overall impotence and horrendous mistrust. This is not a militant view advocating some dangerous oversimplification. The shocks that will accompany the new world of risk will require modes of functioning which can no longer rely on our vision of a State that provides solutions to passive groups of people.

This also assumes other ways of looking at science. We must extricate ourselves from positivist thinking, by considering these words of a former British Chief Scientific Adviser, Sir Robert May, at a recent European conference on science and governance: "On many great questions, of safety and ethics at the same time, science alone rarely provides unchallengeable answers. As Brecht wrote in his play *The Life of Galileo*: *The chief aim of science is not to open a door to infinite wisdom but to set a limit to infinite error*". We must reexamine our conception of information and democracy at a time of uncertainty, and even ignorance. The same Sir Robert May, in a deposition before the investigative committee on the bovine spongiform encephalopathy (BSE) crisis in Great Britain, again pointed out positive approaches: "One may sometimes be tempted to hold back information to make it possible to conduct an internal discussion and to arrive at a consensus in such a way as to be able to communicate a simple message to the outside world. My opinion is quite firm: this temptation must be resisted, and it is precisely the disorderly process by which scientific understanding is built that must be opened to the outside world".

Here, we touch upon our most fundamental concepts of governance. At a large staff meeting of a large French ministry, held a few years ago after several serious weather-related events, one of the national administrators argued for a new conception of the role of the State by citing a quotation: "*To profess to solve all problems and to answer all questions would be impudent boasting, and*



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*would argue such extravagant self-conceit as at once to forfeit all confidence*<sup>9</sup>. The meeting made known how much it agreed with this statement. A high official expressed his indignation, to emphasize the extent to which, on the contrary, the State had all the resources needed to perform its noble tasks. This issue lies at the core of our discussions on risk: is this an opportunity to raise questions and to take responsibility? Or, on the contrary, a danger that requires reaffirmation of the principle that "everything is under control", without, however, there being anything "reassuring" about it?

### *Training*

The 2002 conference of the *Grandes Ecoles* (France) on the theme "Systems and Risk", has just shown that most deans were extremely interested by these new fields of study fields which for the most part still need to be organized and developed.

## CONCLUSION THE RISK OF TERRORISM, BETWEEN DETERMINATION AND FRAGMENTATION

I have deliberately avoided dealing directly with the central issue: to what extent does terrorism disrupt the field of operations that I have described? Is terrorism one more reason to move in the direction recommended here: a society which takes care of the multiple aspects of the new challenge confronting it? Is it a question that would force us to reexamine all constructs that give key roles to democracy and law? We cannot afford to be mistaken about these cornerstones of our society. At the very least, this requires careful thought and debate. But we must take care: we will not necessarily have the time needed to conduct this crucial analysis. To be sure, we must refuse to act precipitously. But we must also recognize reality's imperatives. As Camus has his hero say in *La Peste*: "It is not a question of vocabulary, it is a question of time".

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<sup>9</sup> Emmanuel Kant, *Critique de la raison pure*, translation by Aspen Traduction

