

TAKING OFF THE HEAT: SENSEMAKING AND NARRATION IN POST CRISIS INQUIRY REPORTS

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ABSTRACT

The heatwave of summer 2003 caused several thousands of deaths in France. Most of the victims were old people in large towns. The health system proved unable to handle the event, though evidence was not clear at the time. When the scale of the event was more accurately assessed, several investigations took place that resulted in a series of official reports. In this paper a total of eight reports will be analyzed and compared. These reports are understood as narratives trying to make sense of a complex event. In such a context, sensemaking faces specific issues of public accountability. Reports are addressing these issues by attributing responsibilities with the overall purpose of justifying actions, defending legitimacy, reducing anxieties and restoring trust in social institutions and organizations. It appears that, on the same event, there is little room for different authors to construct different meanings of the same event, however complex and ambiguous. Using various tools for narrative analysis, we explore how reports make a narrative sense of these events by analyzing how reports: transforming the chronicle of events into stories centered on a plot of responsibility and blame; build on the semiotic tension of predictability and vigilance; provide a narrative closure of the crisis. We conclude by discussing the place and the impact of narrative logics in the reports through two themes: the balancing of facts, story and lessons as a core characteristic of inquiry reports; the paradoxical inattention to participants sensemaking processes in the official accounts of crises. Implications are drawn for executives in charge of organizations with a risk exposure.

Key words: crisis, narrative analysis, inquiry report, sensemaking.

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Taking off the heat:

sensemaking and narration in post crisis inquiry reports

In summer 2003, in France, a sudden and unexpected heatwave caused several thousands of deaths among the population (14800 is the admitted final evaluation). Most of the victims were old people in large towns and in retirement homes. The health system proved unable to detect the event in time and to handle it correctly (Lagadec, 2004; Thirion et al., 2005). Though widely and fiercely discussed at the time, the event did not develop as a major administrative or political crisis, for various reasons. Among them are holiday-time apathy, uncertainty about the numbers, and low visibility of the consequences because most victims were isolated people. Still, when the scale of the event was more accurately assessed, several investigations took place that resulted in official reports. One was conducted by a special inquiry committee. Others were issued by public agencies related to the health system. The Parliament and the Senate also conducted investigations and issued reports. Within a year, nine reports were published. Two of them were assessment of the consequences of the heat wave in terms of mortality rates. We analyzed the eight reports that tried to retrace and explain the unfolding of events and give a comprehensive account of the crisis.

Post crisis reports are frequently used as an information basis for studying various aspects of the processes involved by crises (e.g. Starbuck & Milliken, 1988; Snook, 2000; Weick & Sutcliffe, 2003). Here we take a different view: reports are the very object of our inquiry. In no way our focus on the reports themselves should be taken as a commitment to a « text » view of organizations, or as a straightforward critique of studies using reports as information sources for empirical investigation. Apart from the development of the narrative perspective on organizations, our interest is twofold:

- In a context of public accountability that is a growing concern for most organizations, whatever their line of business and their status, reports issued after a crisis convey important stakes. As a crisis raises threats about the future of the organization involved – about its economic balance, its range of activity, and sometimes its very survival – reports are one element in the process of dealing with these strategic issues. Obviously there are other elements, but in any case reports are part of the process. Understanding the logics of this specific kind of literature is an important issue for

those who produce them as well as for those who have the bad fortune to have their name quoted inside. Stakeholders may also benefit from this knowledge.

- For researchers, using reports as a source of information about crises or accidents implies obvious precautions. Though this is standard methodological attitude, researchers may find interest in a narrative view of these documents, in order to deconstruct the information carried by the reports, and to reconstruct it for their own purposes. Besides, researchers are also producers of reports or of documents of similar types. Our analyses may help them master their own writing process.

Literature on official reports is very thin in the field of strategic management and organization studies. Brown (2000) reviewed this literature and initiated a (still small) series of works intending to explore the topic of sensemaking, that is, how reports construct meanings about a specific event (Brown, 2000; 2004; 2005; Brown & Jones, 2000). Brown demonstrates that inquiry reports fulfil three functions: depoliticizing the disaster event and justifying actions taken, restoring trust and legitimacy of the involved social institutions, and reducing anxieties by elaborating fantasies of omnipotence and control (Brown, 2004: 45). In this perspective, inquiry reports are artifacts of authoritative sensemaking (Brown, 2004) that serve purposes of hegemony (Brown, 2005) by constructing a plausible narrative of the event (by meeting a criteria of verisimilitude rather than one of accuracy).

Our first purpose was to establish if the 2003 French heatwave reports appeared to fit with this view. But there was more. Brown studied cases when a single event had been analyzed by a single report. We were interested in confronting Brown's ideas with the supposedly multiple interpretations provided by various authors on the same event. We expected to find significant differences in the content of the reports, signalling differences in the sensemaking processes and in the narrative constructs. Our aim was then to account for these differences by analyzing the factors that could influence the sensemaking process of one specific author. For example, it was hypothesized that experts would diverge from members of political bodies in their interpretations. In order to map these differences, we intended to draw on some tools of narrative analysis. As it turned out, we found much less diversity in the reports than we expected. And our narrative tools, expected to map differences, yield the insight that narrative constraints were responsible for the convergence between the reports, or at least for some of it. We will argue that, far from being inconsistent with Brown's main thesis, this finding only reinforces it. Still, it sheds a different light on the processes of authoritative sensemaking.

After describing our data and our methodology, we will first identify the basic story narrated by the various reports. We will then focus on the narrative constraints and resources that

contribute to this framing of the 2003 heatwave: how the chronicle of events is transformed into stories centered on a plot of responsibility and blame; how the semiotic tension of predictability and vigilance influences the sensemaking process in post-crisis analysis; and how resorting to narration helps closing the crisis episode and restore continuity. Still, inquiry reports are not fairy tales. We then discuss the place and the impact of narrative logics in the reports through two themes: how reports appears as the results of a careful balancing of facts, story and lessons; and how reports curiously neglect the role of narratives in human action and thus imperfectly deal with the challenges of depicting the crisis enactment process.

1. THE STORY OF THE 2003 HEATWAVE REPORTS

1.1. THE REPORTS AND THE METHODOLOGY

Nine reports were issued about the crisis (see table 1 below).

	<i>source</i>	<i>delay*</i>	<i>object**</i>	<i>domain</i>	<i>volume</i>
1	InVS	0	damages	health system	73p.
2	Mission Lalande	1	analyses / recommendations	health system	55p.
3	Assemblée Nationale : rapport Jacquat	1	damages / analyses / recommendations	health system	58p. + appendixes + hearings
4	IGAS (1)	4	analyses / recommendations	health: hospitals (bed closures)	52p. + appendixes
5	IGAS (2)	4	analyses / recommendations	health: private care	63p. + appendixes
6	IGAS (3)	5	damages / analyses / recommendations	health: retirement homes, social services	57p. + appendixes
7	Sénat	6	damages / analyses / recommendations	environment, agriculture, energy and health system	242p. + hearings
8	Assemblée Nationale : rapport d'Aubert	6	damages / analyses / recommendations	health system	234p. + hearings
9 ***	INSERM	14	damages	health system	76p.

Table 1: The inquiry reports about the heat wave

* publication date in months after the events in august 2003

** object of investigation: damages / analyses / recommendations

*** not covered within this study

These reports may be organized into three groups:

- *Reports that concentrate upon damages:* (1) and (9). Their primary objective is to evaluate the death toll of the crisis. Note that report (9), a purely and highly technical analysis of over-mortality attributed to the heatwave, is outside the scope of the study. Report (1), though primarily aiming at a quantitative evaluation of the impacts, has some content about the unfolding of the crisis, and was thus included in the database.

- *Extended reports:* (2), (3), (7), and (8). These reports analyze the crisis and formulate recommendations. Report 2 (Lalande Mission) was issued by an ad hoc team of health specialists mandated by the government. The other teams were constituted at the request of their own institutions. Investigators were members of the Parliament and of the Senate.
- *Reports focused on specific areas of health action:* (4), (5) and (6). These reports were issued upon request of the Ministry of Health by specialists of administrative auditing and inquiry in the domain of health care and health management.

We proceeded in three steps in order to analyze the inquiry reports about the heat wave crisis in France in summer 2003. First we read the reports and we looked for the way they were responding to one another and the way each framed the crisis in a narrative prospect. We based our reading on Boje's framework (Boje, 2001). We were especially sensitive to the following aspects that lead us to the following questions:

- The plot of the crisis story: Which are the events recounted by the reports? Which are discounted? Which is the first event recounted? Which is the last one?
- Tensions and dualities: What are the main difficulties the reports pinpoint in the crisis? What are the mistakes and errors they notice?
- Interaction between micro and macro stories: What are the main protagonists of the events recounted by the reports? Which protagonists are praised? Which ones are blamed? What is the favorite point of view used to frame the events?
- Attribution of causality: How is the chain of events explained? What are the good reasons used to move from one event to the other?

Our starting point was to take each report as a specific narrative and to analyze the differences between them. Differences were to be found in the answers to the various questions listed above. Possible explanations for the differences were expected to be found in authorship, informants, purposes, time distance from the events, among other factors. The basic idea was that different voices would tell different stories, and our concern was: different to what point? different on which points? and why?

The second step involved summarizing the key results of the first reading in a preliminary, seventy-page paper (Laroche, 2005). As we will establish below, the results were unexpected, because they showed much more convergence than divergence between the reports. With the preliminary paper as a basis of discussion and co-analysis, we used a number of tools, drawn

from semiotics and narratology, to account for the results. This third step of analysis led to the present article.

1.2. THE STORY REMAINS THE SAME

Content analysis conducted through Boje's framework revealed that the reports were telling the same story and that differences were minor as compared to similarities. In short, the heat wave in 2003 was the sad story of a failure of anticipation and alert within a structurally deficient healthcare system. Instead of multiple narratives we had a single narrative told seven times in seven different documents.

- First, the reports praise the behaviour of all the agents that were directly in charge of the patients (see exhibit A).
- Second, they put a special emphasis on the failure of the warning process, making it responsible for the magnitude of the crisis, while staying mute on the way the government handled the crisis (see exhibit B).
- Third, they put the emphasis on structural inertia and pre-existing deficiencies as explanations for the ineffective handling of the crisis (see exhibit C).

It is worth noting that this process has a temporal dimension. The so-called Lalande report (2) probably acts as an anchor because it was the first to be published and also because its tone is much harsher than it is usual. Though stating the basic story that we identified as a common feature of all reports, it formulates sharp criticisms towards some of the actors of the health system (hospital managers and privately-operating physicians, namely). The subsequent reports are going to take most of the sting out of these criticisms (and more specifically the reports (4) and (5), focusing specifically on the groups that report (1) was not sparing).

To account for the convergence of the report, various explanations of convergence might be found in the following hypotheses:

- H1: The search for accuracy, not plausibility, was the main driver of the investigations.
- H2: Coordination occurred so that the reports fulfil the functions they must serve.
- H3: Shared cognitive frames influenced the investigators, leading them to the same conclusions.

Should we see in this convergence a “triumph of reality” (H1)? After all, the reports focused on the same object. If, as stated by the investigators, accuracy and neutrality was their aim in the description of the crisis, it should be expected that they end up with the same account.

Should we conclude that convergence of the reports reflects an objective, factual reality? We don't think so. First of all, this would contradict previous research on sensemaking in general (e.g. Weick, 1995) as well as research on authoritative sensemaking in inquiry reports (Brown, 2004). We found no evidence of high factual accuracy. The reports exhibit many inaccuracies, contradictions or lack of data. The reports converge more in the selection of facts they highlight or downplay than in the list of facts in itself (Laroche, 2005). This casts a serious doubt on the idea that the search for facts put a tight constraint on the sensemaking process. We found a single narrative but this narrative is constructed in a specific way, and other narratives could have been constructed without showing less respect to the facts and testimonies that were gathered during the inquiries.

An alternative explanation is, in the line of Brown (2000) and Brown & Jones (2000), that all seven reports converge because they all serve the same purpose: depoliticizing and justifying actions, restoring trust and legitimacy, and reducing anxieties (H2). The 2003 heatwave reports appear to fit with this view. Content analysis revealed several discursive strategies that serve the above functions:

- Praising firemen, nurses and physicians rather than analyzing government action contributes to the depoliticizing function.
- Shifting criticisms from identified category of actors (privately operating physicians, hospital executives) to bureaucracy in general prevents social institutions from losing face.
- The reports strongly emphasize the recommendation parts. The proportion of recommendations in the text (hearings and exhibits excluded) ranges from 3% (2), 10% (5), 16% (6), 21% (8), 26% (3), 28% (4), to 36% (7). These are underestimated figures because they are based on the content tables, while many recommendations are slipped into the chapters devoted to analysis. Inflated lists of recommendations reduce anxiety by suggesting that the conditions for the same crisis are never to happen again¹, while restoring the legitimacy of the political institutions by demonstrating that they measured up the problem and took immediate and appropriate action.

Still, the process by which seven different reports converge in their narrative content and structure remains to be explained. One could theoretically conceive of different stories serving

¹ The Senate report (7) is in some measure an exception to this last point. All the other reports consider the heat wave crisis as an health crisis whereas the Senate Report sees it as a first impact of global warming. It aims at analyzing the consequences of the heat wave on several aspects of economy, and ecology. This report takes into consideration what happened with the nuclear power plant and the risk of shortage in energy supply, underlining that the crisis had been prevented by a narrow margin. This report takes an original point of view by framing the crisis as a first of a more global phenomenon to come, thus limiting the anxiety reducing function.

the same purpose, each in its own way. Of course, it is likely that discrepancies between the stories would appear as contradictions and would weaken, if not ruin, their credibility. Given the legitimating purpose, there is an incentive in strengthening the power of the stories by having them converge not only in their implicit or explicit implications, but also in the plot itself. But accepting this as a cause for the convergence would lead to assume the existence of some kind of covert, centralized and coordinating authority. This is most unlikely, given that the seven reports were issued by seven different teams in four different kinds of institutions (ad hoc committee, administrative auditing services, Parliament and Senate).

Other mechanisms may have influenced the process in the direction of convergence. The hearings conducted by the various inquiring bodies showed a strong overlap in the selection of the information sources. The same population of experts and witnesses were repeatedly called for testimony. Moreover, the professional culture of the more prestigious categories of the French health system is likely to have infused the way the investigations were conducted and the writing of the reports, because members of these categories had a prominent role in the investigating bodies. This is particularly noticeable in the membership of the Parliament and Senate committees, where physicians could be found in unusually high proportions. Thus, it is likely that shared assumptions and common worldviews rooted in the professional culture of health specialists had an influence on the way the investigations were carried, on data interpretation, and on the overall sensemaking process (H3).

This socio-cognitive account for the narrative convergence of the report is not to be denied. Then again, the influence of shared cognitive frames has some limits. For example, health specialists were only a strong minority in the Parliament and Senate Commissions (reports 3, 7 and 8). Health professionals do not form a united community: they are divided in groups with competing interests and ideologies. Trained investigators working in small groups (reports 1, 4, 5, and 6) are unlikely to develop the same sensemaking processes than members of the Parliament and of the Senate.

In short, in our attempt to explain the convergence of the reports, we rule out hypothesis H1 because it is not supported by any evidence and it is inconsistent with previous research on sensemaking, including authoritative sensemaking. We also rule out hypothesis H2 because of the costs of coordination and because of lack of evidence. Hypothesis H3 certainly accounts for some of the convergence, though we are inclined to see the influence of socio-cognitive schemes limited in scope – more precisely, limited to specific topics analyzed below like the controversial role (or absence of role) of privately operating physicians or the ignorance of patient behavior in the face of emergency.

Thus, we have to add another, more convincing – though not necessarily competing with H3 – view of convergence. We argue that one powerful source of convergence between the reports is that the task of accounting for such a crisis in a public, written document drives toward a single narrative structure because of the logics of narrative resources and constraints. More precisely, reports entering in the task of re-legitimizing institutions and restoring trust after a crisis are forced to combine demonstration and narration. They must achieve a balance between a seemingly objective, legitimate, but dull and non articulated, demonstration that provides facts and analysis but no overall picture, on the one hand, and a more readable, but illegitimate, narration that builds on plausibility and pre-structured plots and creates overall consistency, on the other hand.

How sensemaking is drawn by narrative logic into a narrow way is what constitutes the following section.

2. NARRATIVE CONSTRAINTS AND RESOURCES FOR SENSEMAKING IN REPORTS ABOUT THE 2003 HEATWAVE

Rather than a wholly integrated, theory-driven analysis of the crisis official inquiries, we offer a series of case-based remarks, drawing on multiple theoretical frames, in order to support our ideas. First, reports tend to surreptitiously transform the chronicle of events into a story centered on a plot of responsibility and blame. Second, as semiotics reveal, blame is distributed according to assessments of predictability and vigilance. Third, narrative resources allow reports to articulate the need to close the crisis and the obligation to “draw lessons” and “take steps” so that “this would never happen again”. In other words, narrative resources are a way (*the way?*) to put an end to the crisis and resume continuity.

2.1. BUILDING A PLOT OUT OF A CHRONICLE: WHO’S TO BLAME ?

Issuing a chronicle of the events is a commonly used way for describing a crisis. In the case of the 2003 French heatwave, the Lalande report (2) established a seven-page chronology that basically remained unchallenged by subsequent reports (see Exhibit D).

A chronicle conveys a feeling of impartiality for two main reasons. First it gives the impression to only “stick to the facts”. Second, a chronicle seems to be voiceless, or at least the voice of the narrator remains in the background. Nevertheless a chronicle needs a storyline in order to make sense. For example the chronicle presented in the Lalande Report (2) only focuses on the events linked to the sanitary impact of the heat wave. At the beginning of the crisis, the media were much more focused on the consequences of the heat wave regarding

ozone pollution, forest fires and the risk concerning the nuclear power plants because of the low level of the rivers. This competition for the attention of the officials is not presented in the report. Moreover, some events, though related to the health problem, are nevertheless omitted from the chronicle: no information is given on the content of the interview of the Minister of Health on television and there is no mention of the resignation of the head of the Division Générale de la Santé, a very high-ranking official in the health system.

A chronicle smoothen the events by sorting the wheat from the chaff and presenting only the events that contribute to the storyline. Therefore a chronicle conveys a false feeling of order and clarity that actors caught in the noise of the crisis may have not known. Furthermore, in the Lalande report (2) the comment “information unknown at that time” (Exhibit D) is mentioned several times. This comment is very close to a literary device in two aspects. First, this comment makes the voice of the authors of the report visible which is usually not the case in an official report. The text is usually written without giving direct signs of the presence of the narrator. Second it introduces a dramatic irony effect (Currie, 1998). In literary theory, dramatic irony refers to the difference of knowledge between characters, storyteller and audience. In our example, the narrator knows more than the protagonists of the story: the narrator gives information that characters of the story did not have when they were dealing with the situation. This literary device reinforces a feeling of gap between what the protagonists of the crisis did and the way the information was dealt with. It puts the emphasis on the failure in the process of warning during this crisis: since it was *possible* to know, why did the protagonists *not* know. Therefore official reports about crises are facing a paradox: on the one hand they must avoid relying on “a posteriori rationalization” since they are built after the occurrence of the crisis. On the other hand they are making sense retrospectively since they know the end of the crisis, and this is thanks to this storyteller’s position they can separate the wheat from the chaff, tell what was important and what was not, analyze and make recommendations.

A narrative conveys continuity and coherence thanks to its plot. Plot gives narrative an overall coherence, integrating events into a cohesive whole (Polkinghorne, 1988; Czarniawska, 1998). Furthermore a plot is a means of conveying sense to the action of the main protagonists of the story. The interaction between characters and plots may be analyzed through the “actant model” developed by Greimas (1966), following the work of Propp (1927). Originally devoted to literary analysis, this model describes the basic structure of any story. It distinguishes six “actants”. An “actant” is a narrative function in the story. It can be occupied by one or more entity. These entities can be either human (a manager) or non human

(technical progress). One entity can occupy several “actantial places” at the same time. The “sender” is the actant which makes the story happen. He tries to get a result for the sake of the “receiver”. The “subject” is the main character, from whose perspective the narrative takes place. The subject has gone in quest of an “object” i.e. the goal he is trying to achieve. The “helper” is the actant that tries to facilitate the subject’s quest. The “opponent” tries to prevent the subject from succeeding.

What is the plot put forward by the official reports? They all seem to agree on the following overarching plot: the heat wave in 2003 produced disastrous damages because of a failure of anticipation and alert that let a structurally deficient healthcare system be overflowed by patients. In this context, the healthcare system is the main subject. Hospital staffs are the heroes that did their best to care about the people that were suffering from the heat wave despite an unfavorable context: they are the helpers. Villains are first the structural deficiencies of the healthcare system and second the poor administrative warning system. The object is the well-being of the patients. The receiver may be understood as the society as a whole. The sender is the government since most reports call on governmental decision to prevent a similar crisis to happen again. This overarching plot is shared by all the official reports.

As Czarniawska (1997: 18) has it: “Plot is the basic means by which specific events, otherwise represented as lists or chronicles, are brought into one meaningful whole. (...) some kind of causality may be inferred, but it is crucial to see that narrative, unlike science, leaves open the nature of the connection”. Moving from a mere chronicle to a plot involves infusing events with causality. In a crisis, events are not actors free. On the contrary they are made up of actors’ interpretations and actions. Therefore, plotting the events of a crisis means also creating connections among events and actors actions. Since a crisis leads to losses and damages, this “plotting” process is tightly linked with the attribution of causality to these losses and damages. Attribution of causality of losses and damages to agents (rather than to factors) leads to attribution of blame. One crucial question is then: to what agent will the blame be attributed? Note that we are not implying that the plot clearly attributes blame in the end, in the manner of a court of justice delivering a sentence. We are proposing that building a plot around events involving losses and damages is likely to deal with this question.

In the world of contemporary developed countries, blame may be attributed to various kinds of agents. For the sake of simplicity, we will draw a simple line between “individuals” (possibly including groups) and “systems” (big organizations and connected, institutionalized networks of organizations). The heatwave reports exhibit some differences in the emphasis

they put on actors' responsibility and system's responsibility. For example the Lalande report (2) suspected private physicians to have massively deserted their patients left for summer vacation, hence contributing to the overloading of hospitals emergency services with patients that only needed basic medical care. It is a striking observation that the numerous private physicians that are supposed to provide day to day medical care played almost no role in the crisis, most of them being even unaware of the event. Nevertheless the dominant tone is to blame the system for its inefficiency to anticipate, measure and cope with the crisis. To go on with the above example, both the IGAS report (5) and the Senate (7) and Parliament (8) reports took many efforts to examine whether the "absence" of physicians was a matter of unethical or at little careless individual behavior or a consequence of structural features of an obsolete duty system. Their conclusion on that point is very much in favor of the latter idea. (see exhibit E)

Balancing the blame between actors' effect and system effect lies at the heart of official reports about crises (figure 2). We suggest that in finding a balance between putting the blame on the system and on the actors, there may be four main plots:

- the "fate" plot is the story of a crisis that was not easily foreseeable but that was dealt with correctly (e.g. the windstorm in France in December 1999);²
- the "human factor" plot is the story of a crisis that could have been either better prepared or that was poorly dealt with because of human mistakes (e.g. a rush hour train ran into the back of another at Paris's Gare de Lyon killing 59 in 1988);
- the "system collapse" plot is a story of a crisis poorly managed both because of human and system failure (e.g. Chernobyl disaster);
- the "bureaucratic hydra" plot refers to the story of a crisis poorly managed because of system inertia despite strong mobilization of the actors involved. This is basically the case of the heat wave crisis in France as seen through the official reports.

² According to a poll made by a French Institute on August, 26th, most French people consider that the heat wave results from the "fate" plot.

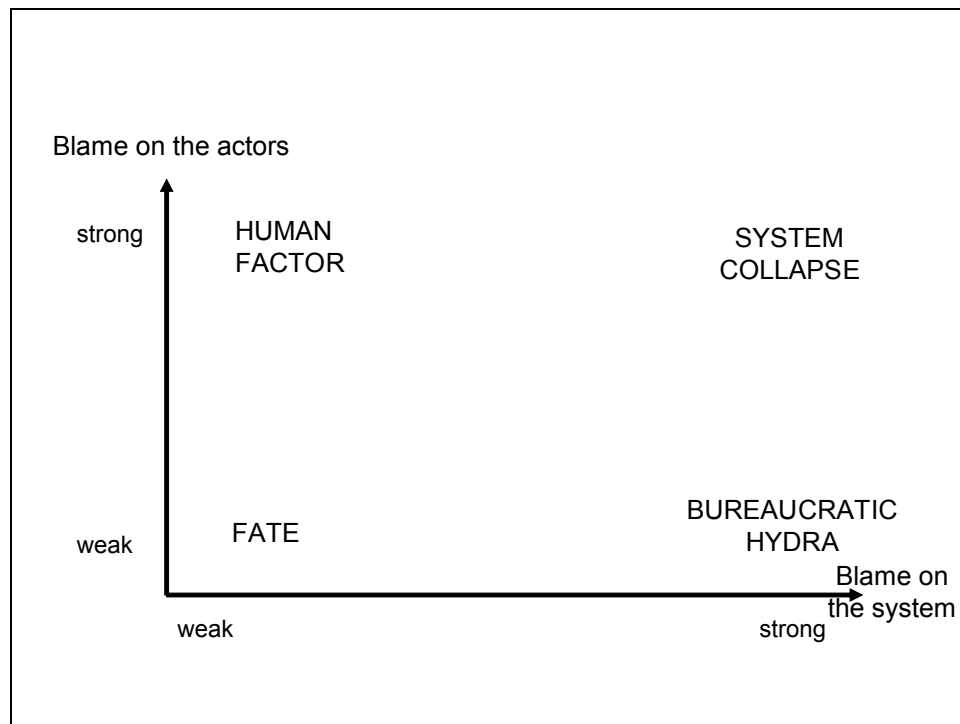


Figure 2: Balancing the blame between system and actors in crisis inquiry reports

The actantial analysis carried above did not identify the victims in the distribution of roles. They might be expected as “receivers”, but the “receiver” appears more to be the society as a whole. The victims are objects handled by the heroes for the benefit of the whole society. Strikingly, patients are not considered as active protagonist in the plot that reports developed. Hearings, interviews and collected testimonies were restricted to members of the health system or administrative officials, with very few exceptions. Survivors and families were kept out of the inquiries. No sociologist or psychologist was asked to study and report about the crisis from the side of the victims. No serious attempt was made to develop an understanding of the behaviours of patients suffering from the heat, though their behaviours might have been a key factor in the crisis because incoming patients blocked emergency services in hospitals while downtown physicians were unaware of the crisis until it was over. Contradictory and ad hoc hypotheses were issued by members of the health system and called for when needed in various parts of the reports. If patients ever came close to obtain an actantial position, it would have been as opponent, because of their inadequate tendency to run to the hospital in any case of emergency rather than to call for a local doctor that does not answer to the phone. In short, the report storytellers appear to dismiss patients as actors in the plot and thus reduced them to mere objects (see exhibit F).

This is not to say that the sufferings of the victims were denied in any way. Victims were only denied autonomy in behaviour and consequently they were deprived of any kind of voice in the building of the story of the crisis. The dominant voices of health professionals discarded them as incompetent because of seemingly irrational or inadequate behaviours, whereas inadequate or even illegal behaviours of physicians were rationalized as consequences of a worn-out, out of balance health system.

2.2. THEY HAD IT COMING: THE SEMIOTICS OF PREDICTABILITY

All the reports share a common view concerning the warning process during the crisis: if the consequences were so tragic, it is because on the one hand there had been no anticipation about the possibility of a crisis due to a heat wave and on the other hand, it is because the warning process had been especially wanting. Thus, the reports seek to show to what extent the crisis was foreseeable and why it was not detected in time.

Regarding the foreseeable nature of the crisis, several reports state that the “epidemiological knowledge” was “available” at the time the crisis occurred (Besancenot, 2002). They mention works done in France about the heat wave in Marseille in 1983 (Thirion et al., 1992), in Europe in Athens in 1987 (Besancenot, 1995), and the heat wave in Chicago in 1995 (Semenza et al., 1999; Klinenberg, 2002)³. Therefore, the gap in knowledge seemed easy to fill in: the poor preparation was due to a lack of interest or perspicacity. As Lagadec (1991) mentions, a key feature of crises is that external observers are going to be extremely sensible to anything that may look like a possible negligence. From a narrative standpoint, this means that the story of a crisis is going to make intertextual links to any source that may show that the crisis could have been obviated or coped with more successfully.

Thus the reports seem to take for granted that as long as knowledge is available, this knowledge has to be used. The reports implicitly assume that the normal state of affair is to exploit completely any available knowledge. Any variation from this situation calls for explanation and justifications. This reflection is interesting from a narrative standpoint. Narrative scholars (Bruner, 1986, 1990; Ryan, 1991) claim that narratives build possible worlds or “storyworlds.” A normal reader can guess what would happen if superman was unable of flying (Black and Bower, 1980). As Herman (2002, p.6) states “fundamentally, then, narrative comprehension is a process of (re)constructing storyworlds on the basis of

³ Ironically, there were precedents of some magnitude (several thousands of deaths) in France itself, in 1976 and 1983. They remained unnoticed at the time, except from specialists. They did not come to the knowledge of the investigators of the 2003 heatwave and were only revealed by the arduous, systematic quantitative analysis of report (9).

textual cues and the inferences that they make possible.” The implicit story world that the reports posit is a state of affair where first the possibility of massive deaths due to a heat wave should have been envisioned and second a proper warning process should have been put in place. Thus there is a double tension within the reports between on the one hand reacting in time versus too late and on the other hand knowing (i.e. having taken full advantage of available knowledge) and not knowing. We can use the “semiotic square” (Greimas 1966) in order to show the deep structure of the reports regarding the prevention and warning process (figure 3). The semiotic square enables to show the dualities that make the structure of a narrative. Hence it provides a map of the storyworlds that the reports are proposing.

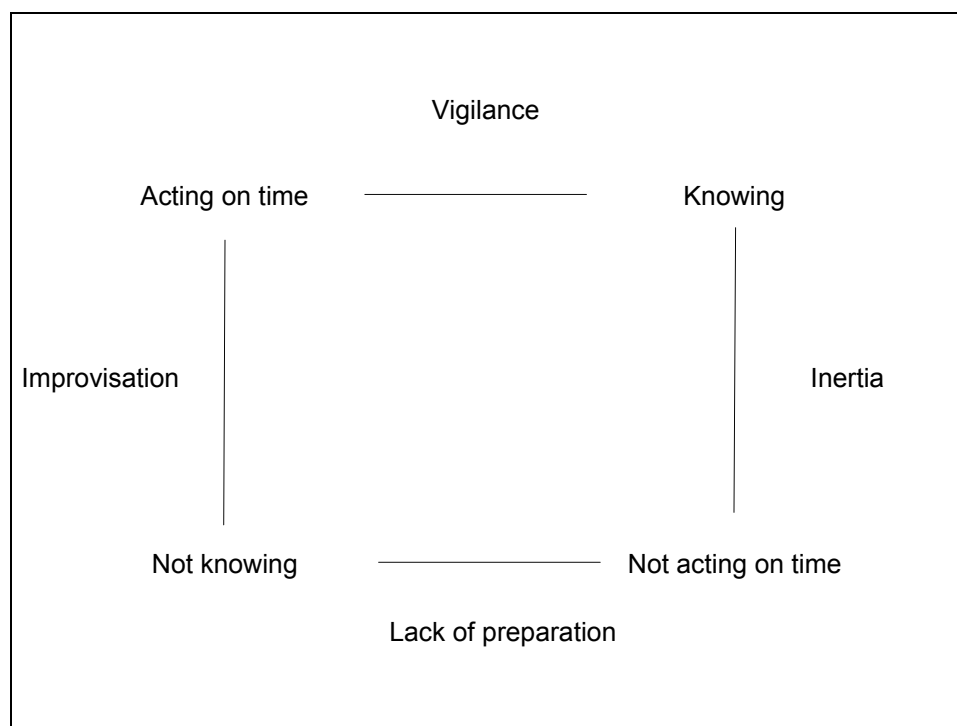


Figure 3: Semiotic square representing the tension between knowing and acting on time

Knowing and acting on time is the normal state of affair the reports posit as what should be. In this situation crises are expected and coped with successfully. This is a framework of vigilance. What the reports do pinpoint is the opposite, i.e. not knowing (available knowledge was not taken advantage of) and not acting on time (the warning process was too slow). This situation refers to a lack of preparation.

Acting on time without knowing leads to improvisation. Under condition of ignorance, this is a legitimate way of handling a crisis. But under condition of available knowledge, it is only second best.

Knowing without acting on time refers to inertia. Identifying inertia calls for explanations about its causes, because of suspicion of a deliberate lack of action. Such was one of the main issues at stake in the trials about AIDS contaminated blood transfusion in France. French former Prime Minister Laurent Fabius was suspected of having deliberately slowed down public action to protect patients receiving blood (mainly haemophiliacs) in order to gain enough time for a French drug company to develop a successful blood test, though an american company was already able to provide one. Inertia caused by stalling is very close to conspiracy and sabotage. If no sign of conspiracy is found, then unintentional factors are called for explaining inertia. Bureaucratic slowness or legal mazes are among the favourites. This semiotic square may be used also to depict the narrative progression within the reports. First they pinpoint the improvisation that was the main trigger of the crisis: Dr Pelloux calls for action in the newspaper and on the TV, and the TV channels begin to show shocking images of hospitals corridors overflowed by sick people, some of them dying. Then the reports analyze the lack of preparation as the reason for improvisation in order to finally promote a situation of vigilance toward heat waves. We thus have the following narrative movement:

reports of improvisation => analysis of lack of preparation => propositions for improved vigilance.

We may find other dynamics, such as, for example, vigilance = > inertia => improvisation (it would refer in this case to a plot of failure in mobilization). This means that the trajectory of the narrative within the semiotic square is itself a result of the report, a form of sensemaking.

2.3. RESTORING CONTINUITY BY ISOLATING DISCONTINUITY: THE NARRATIVE CLOSURE OF CRISES

Etymologically, the term crisis stems from the ancient Greek word “krisis” that means “turning point in a disease”. Since crisis refers to a turning point, it demands decision and action in order to influence in a positive ways the coming events. As a turning point, a crisis is always going to give birth to perturbations in the normal state of affairs: a long tradition of crisis analysis has to do with the issue of “business continuity” (Cerullo & Cerullo, 2004). A crisis is threatening continuity. Therefore a narrative framework is especially well suited to the representation of a crisis since as Bruner puts it (1990:11-13) a narrative is always based on an interplay between “canonicity and breach”. A narrative framework is especially well-suited to explain how status quo is disrupted and a new state of equilibrium is reached.

A crisis may be a moment of collapse of sensemaking (Weick, 1993). The very existence of a crisis means that either the feared events had not been anticipated at all or that they had been poorly anticipated. Whatever the context, both conditions mean that common anticipations have been caught out since there is a kind of surprise. Being able to put events within a story frame is a way to make sense of them. As Polkinghorne recalls “Narrative ordering makes individual events comprehensible by identifying the whole to which they contribute” (1988:18). The plot of the story enables this connection (Ricoeur, 1984). Thus a crisis calls for a narrative effort in order to comprehend (i.e. etymologically speaking “cum prehendere”, to take together) what has happened. As Frank underlines in his work about cancer and storytelling, “To turn chaos into a verbal story is to have some reflective grasp of it” (Frank, 1995:98).

Comprehending also implies a form of containment or delimitation. Researching causes, for example, is an endless task (Snook, 2000). How to put an end to it depends on “(...) who is conducting the research and why. Technicians stop when they find something broken that they can fix. Trainers stop when they find a weak skill that they can train. Lawyers stop when they find a responsible individual that they can prosecute. Political leaders stop when their constituents stop. Scientists stop when they learn something new.” (Snook, 2000: 219). Now inquiry reports, especially the extended ones like (2), (3), (7) and (8), are not supposed to adopt such narrow, pragmatic approaches. They have no incorporated criteria for stopping the investigation. So they are in danger of arbitrariness. That is why they find the means to put an end to their account of the crisis by resorting to a convention that is a narrative structure:

“The convention is to differentiate between a state of normalcy preceding the occurrence of crisis, the crisis period itself, and the “aftermath.” Prescriptive models of crisis management strongly emphasize the need for effective prevention and preparedness, and outline in great detail the extraordinary challenges of organizing an effective crisis response. These models associate the aftermath with the management of reconstruction and recovery, and with the gradual return to life, and governance, as usual. This implies that crises “begin” and “end,” in clearly identifiable ways” (Boin & 't Hart, 2001). For example, Mitroff (1988) proposed five stages (signal detection, preparation/prevention, containment/damage litigations, recovery, learning). Of course, identifying the phases within a crisis is a matter of interpretation.

Moreover, justifying actions, restoring legitimacy, reducing anxieties and restoring trust is highly simplified if the crisis appears as a past, closed, exceptional event. On the other hand, reports are expected to draw lessons from crisis, in order to avoid similar events, at least. Analysis inevitably shows that the crisis arose from unnoticed small events and underlying

processes that were embedded in the ordinary course of action. There is a paradoxical movement here. On the reality side, a crisis is an erupting phenomenon that “happens”, imposes itself upon all other events, and disappears; but when it is analyzed it appears as an embedded phenomenon, “an accident waiting to happen”, “rooted in history”. In short, the discontinuity proves to be a continuity to some point, which is deeply worrying. For example, when should one start and end the chronicle of a crisis? The narrative form provides closure, or more precisely, it makes closure appear natural (White, 1987) and thus, waves away questions about why one has to believe that the crisis started at this point and stopped at that one. Then again, this closure is only a means of restoring continuity by isolating discontinuity. Thus, paradoxically, narration serves the purposes that demonstration or analysis proves unable to fulfill. The chronicle may go on.

3. IS THAT THE WHOLE STORY? LIMITS AND PARADOXES OF NARRATIVE LOGICS IN OFFICIAL REPORTS

The above analysis pictures how the logics of narratives shape sensemaking in official post crisis reports. Still, though pervading, these logics are countered by other constraints, and purposes. Why, where and to what point narratives influence the authors of reports is an open question. We attempt to contribute to this questioning through two remarks, inspired by the heatwave reports.

First, narration provides meaning but meaning is not all. Reports should not look like fairy-tales. They have to provide evidence on facts and need to extract lessons from what happened. As a literary genre, post crisis official reports appear as hybrids.

Second, and subsequently, though reports resort to narrative resources to build their accounts, they fail to identify these resources in the handling of the crisis itself. They rely on non-narrative representation of crisis processes and fail to properly analyze the crisis enactment process. The consequence of this is that learning from reports is seriously limited.

3.1. CRISIS NARRATION AS A BALANCE BETWEEN THREE DEMANDS

As Weick has it: “In short, what is necessary in sensemaking is a good story” (1995: 61). By reviewing the inquiry reports devoted to the analysis of the crisis, we have tried to show in this paper the way narrative frames are used to make sense of the crisis. Since a crisis like this mixes technical and social dimensions, it is not possible to analyze it through a pure paradigmatic lens in the sense of Bruner (1986). Narrating a crisis in an official report means finding a balance between three competing demands for sense making. First, the report has to

be facts oriented, i.e. it has to refer to an external reality that may be summoned to contradict the analysis. But only sticking to facts does not provide intelligibility. As Adam (1996, translation ours) puts it: “Even when all the facts are established, it remains the issue of their understanding in an act of judgment that succeeds in holding them together instead of seeing them in a series.” Second, as it is simply impossible to recount all the facts and events that are involved in the unfolding of the crisis, a report has to make choice about the facts and events it is going to select. Therefore, a report has also to be “sense oriented,” that is to say, it has to provide an intelligibility of the chain of events. This means exhibiting a plot that encompasses all the relevant events. Our analysis has underlined that in a crisis inquiry report, there are some ready-made plots that are going to interfere with the analysis such as blame distribution and semiotics of predictability. Third, an inquiry report aims at providing insights in order for the same crisis not to happen again: it has therefore to be “lessons oriented” in order to foster preparation and to be part of the renewal discourse associated with crisis recovery (Seeger et al., 2005).

Official crisis narration lies at the nexus of three demands: a demand for facts, a demand for plot and a demand for lessons. These demands are linked with the functions identified by Brown (2000). Being “fact oriented” contributes to the depoliticization function: facts seem “to speak for themselves” and this enables to keep controversy away. The “plot orientation” of the reports helps legitimating the social institutions that write them by underlining their understanding of the events and thus their ability to act. Finally the lessons orientation restores the “fantasies of omnipotence and control” by showing that actions are going to be taken to prevent any other similar crisis.

The trouble is that each demand may contradict the other. For example, encompassing too many different facts weakens the ability to build a plot because of information overload and lack of overall consistency. Similarly, too strong a plot leads to the selection of only the facts that contribute to the plot. It put in jeopardy the truthfulness of the report and opens up avenues for criticism. Likewise, too strong an orientation toward lessons, without being grounded either in facts or in plot conveys the impression of overreaction, that is to say recommendations that are not directly linked with the stakes of the crisis (for example prepared in advance, the crisis being only the pretext to put forward pre-existing recommendations).

Therefore, it is the challenge of the members of commissions that write inquiry reports to find the proper balance between a testimony (strict fact orientation), a novel (strict plot orientation) and a propaganda (strict recommendation orientation).

3.2. THE STORY BEHIND THE STORY

Reading the reports put into light an interesting paradox: though relying on narrative structures to make sense of the crisis, the reports were oblivious of the importance of sensemaking processes during the crisis itself. To some extent, the story they narrate has no story in it: the reports depict a world where information is either available or not, processed or not, true or false. An important consequence of this is that, in this world, you are either in a state of crisis or not. This view of crisis generation and crisis situations pervades the accounts of the heatwave and contributes to seriously restrict the relevance of the recommendations drawn from the experience.

A crisis bursts out as a strong and compelling alteration of the normal state of affairs. Being able to detect a crisis situation means that the normal state of affairs is clear on the one hand and the gap between normality and abnormality has been made sense of (Weick, 1995). In the case of the 2003 heat wave in France, these two factors are far from being self-evident, therefore identifying a crisis situation was somewhat uneasy, for several reasons (Thirion et al., 2005):

- There is no definition of what a heat wave is. Furthermore, the danger of a heat wave is somewhat due to the difference between daylight and night temperature. Defining it requires to define a process, and this is ambiguous and uneasy. Therefore building a triggering level enabling to define the crisis situation is tricky. In any case there was no such thing as a heat indicator in the French health system.
- Attention was not focused on the sanitary consequences of the heat wave but rather on the possible effects regarding ozone pollution, forest fires and nuclear power plant cooling. Sanitary effects of heat were out of the agenda.
- Most of the victims were old persons. Identifying symptoms of hyperthermia is difficult since they may be confused with other symptoms. Calculating over mortality means defining what a “normal” death rate is in the summer and being sensitive to possible excessive numbers.

Overwhelmed emergency services could have provided a more reliable cue, especially in big towns. But emergency services are chronically overloaded with patients of low social status. Head of departments in hospitals are highly reluctant to provide help; they rather struggle to keep these patients out of their departments in order to maintain an available capacity for programmed, specialized care. So victims dying in corridors and staff from emergency services begging for extra beds were not strong cues either. In the end, for some reason (not

investigated by the reports), what provided a clear sign that something unusual was going on was the lack of available space in funeral homes.

The reports do not really address the ambiguity of information and the sensemaking processes of participants. They share an implicit image of a crisis as a kind of cloud or fog that one “enters” and “leaves”, as a specific “milieu”. Though in some cases external effects are so strong (e.g. Chernobyl disaster) that it is not possible for the crisis situation to remain unnoticed, in the heat wave crisis the situation was far more ambiguous and it was not easy to make the distinction between normalcy and crisis.

Hence the importance of questioning the process that give public existence to a crisis, making clear that “we are in a crisis situation”. Going into the details of the information and communication channels of various administrative services or agencies, the reports pinpoint the delaying and distorting effects of bureaucratic pigeonholing and interservice rivalries. For example in the midst of the heat wave, the Firemen Service in Paris refused to communicate its data to the National Institute for Public Health Surveillance (InVS) unless formally asked by the police. Official reason for that was that relieving the data could cause panic in the population. The fear of public panic is all the more surprising that the heat wave was not a contagious disease. The Rapport d’Aubert (8) underlines (p. 112) that it is paradoxically by bypassing official information channels (i.e. using the media) that actors in the field sent a successful warning. Implicitly the report says that in an ideal world media would be useless or would only communicate information given by official channels... Thus they posit a storyworld where all the information available is taken advantage of, whatever the ambiguity and the uncertainty associated with information.

Still, the main point is that the reports stick to a view where correct collection, circulation and assessment of information by well calibrated procedures is expected to produce an unambiguous cue that a crisis has started and where people would react to this cue in a proper way and without any delay. Because of this view, and also maybe because they were cautious to spare some of the high-ranking officials involved, mainly the Minister of Health, they remain mostly silent about the shortcomings of the public identification of the crisis. Moreover, no report gives precise recommendations about the way to organize the “declaration of crisis”. Though sometimes advocating for “networks”, they mostly recommend more information gathering, more accuracy, more meetings and more procedures. In short, they ask for more of the bureaucracy they sharply criticize.

Our own understanding is that the heatwave was a story that waited a long time before finding someone to tell it. As Carr puts it, “It has been noted by Alfred Schutz that action has,

temporally speaking, the quasi-retrospective character which corresponds to the future perfect tense: the elements and phases of an action, though they unfold in time, are viewed from the perspective of their having been completed. (...) What we are saying, then, is that we are constantly striving, with more or less success, to occupy the story-teller's position with respect to our own actions.” (Carr, 1997: 15-17). Data collecting and information processing do not provide a storyteller. They just make more or less clear that one is needed or not. Crises have to be enacted. And the more ambiguous the cues are, the more they need someone to enact them through an adequate story. Bureaucrats and specialists may do well when the situation fits expected scenarios and standard knowledge. But in ambiguous, unanticipated situations, it needs people with a more direct link with the population. Politicians are primary candidates to be the storyteller enacting the crisis. As storytellers, they have a performative power (Austin, 1962) that is a key to crisis enactment. In the case of the heat wave crisis in France, only emergency physicians were available for telling a story of thousands of old people suffocating and passing away at home, in retirement homes or in the corridors of public hospitals. Ironically, when officials really started to play this role (by deciding emergency plans in hospital), the crisis was over.

Surely, investigators, whether auditors or politicians, are not social researchers trained in sensemaking analysis and narrative deconstruction. But we can suspect that this ignorance regarding the ambiguities of crisis situations is also a consequence of the hybrid nature of inquiry reports. The insistence on facts and information (as in a chronological account) is a legitimating strategy of the report itself (objectivity). It contributes to the reassurance function, because facts can be detected – you only have to build systems for that. And such an objective world protects some groups, mainly politicians, by shifting the burden of crisis detection to administrative or technical bodies. That is why reports tell a story of a world in which there are no stories.

CONCLUSION

In crisis situations, “people suddenly and deeply feel that the universe is no longer a rational, orderly system” (Weick, 1993:634). One way to restore the feeling of order is to make sense of the crisis through narration. This is one of the tasks devoted to official inquiry reports. Moving from the chaos of a crisis to the order of a story requires taking advantage of narrative features. But in doing so, official reports take the responsibility of the storyteller. They infuse causality and coherence in the chronicles selecting events and silencing other,

they distribute actors in the narrative, attributing praise and blame, they posit storyworlds depicting what normality and efficiency should be.

In telling the crisis story, there are narrative choices to be made, such as the beginning and the end of the crisis, the casting of actors and the distribution of responsibility. All these choices have to bear a triple accountability: accountability towards facts, plot and contribution to recovery. Just as in other fields such as law or physical therapy, framing events as a story lies at the heart of the process itself of diagnosis of the situation (Bennet, and Feldman, 1981; Mattingly, 1998).

It is not clear, though, whether our understanding of crisis generation and crisis situations is improved by this exercise of triple accountability, and whether it increases our ability to deal effectively (detect, prevent, manage, recover) with crises. What is the contribution of inquiry reports to knowledge (meaning social, not scientific, knowledge)? Do they provide resources for further action? Other examples may cast a serious doubt on this (e.g. the Columbia accident following the Challenger accident; see Vaughan, 1996; Starbuck & Farjoun, 2005). The social functions of reports and the implicit worldviews they are bound to stick to because of the constraints of the genre put serious limits on the learning potential one can expect from inquiry reports. Still, they are not “fantasy documents” (Clarke, 1999) without any relevance. They contain a huge amount of information. Officials in charge, executives or, more widely, potential participants in unexpected events have to be aware of the limits we outlined to be able to learn from these documents. In other words, they have to make sense of the reports by constructing their own stories.

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- Le Figaro, 15/8/03 Raffarin rentre à Paris pour endiguer la polémique
- Le figaro, 26/11/03 Mattei : « Les systèmes ont été fautifs, pas les individus »
- Le Monde, 12/8/03 La canicule serait responsable de la mort d'une cinquantaine de personnes en Ile-de-France
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- Le Monde, 20/9/03 Canicule: les pompiers ont dû taire le nombre de morts
- Le Monde, 27/11/03 Jean-François Mattei n'a « pas le sentiment d'avoir commis une faute » pendant la crise de la canicule
- Le Temps, 16/8/03 Le débat politique français s'embrase sous l'effet de la canicule et de ses conséquences
- L'Humanité, 10/9/03 Canicule - Les médecins libéraux dans le collimateur
- L'Humanité, 19/8/03 Catastrophe sanitaire. Mattei se défait sur un haut fonctionnaire
- Libération, 18/12/03 Canicule : comment les chiffres ont flambé
- Libération, 25/9/03 Le 11 août tel que l'ont vécu trois acteurs clés de la santé

Exhibit A

- (2) « Dans un contexte global difficile, les hôpitaux, soutenus par leur administration, ont réagi avec courage » (Lalande, titre chapitre III)
- (2) « Soutenues par la DHOS, les directions générales des hôpitaux ont réagi avec détermination » (Lalande, titre, 3.3.)
- (2) « Malgré toute l'énergie déployée, les personnels n'ont pas pu empêcher l'engorgement presque total des services d'accueil des urgences et l'encombrement insupportable des couloirs des hôpitaux » (Lalande, résumé)
- (2) « (...) les SAMU-SAUR, les ambulanciers, mais surtout les pompiers (...) ont connu une augmentation considérable de leur activité (...). Ils y ont fait face avec détermination. » (Lalande, résumé)
- (3) « ... le sentiment que chaque catégorie d'acteurs du système de santé a pleinement joué son rôle dans la limite de ses moyens » (AN1, p. 21)
- (3) « Une indéniable capacité d'adaptation des structures d'urgence parvenue à sa limite » (AN1, p. 23)
- (3) « Cette situation (la crise) n'a pu être surmontée que par un réflexe de solidarité de l'ensemble de l'hôpital. Les urgentistes ont pu, avec plus ou moins de difficultés, convaincre leur administration et leurs collègues des autres services que leurs demandes de lit ne relevaient pas de l'antenne habituelle mais d'une absolue nécessité. » (AN1, p. 24)
- (4) « (...) **jugement globalement positif** porté par la mission sur la réponse hospitalière aux conséquences de la canicule » (souligné dans le rapport, IGAS1, p. 52).
- (7) « Au total, l'analyse de la crise de la canicule conduit non pas à mettre en cause le dévouement de tout ou partie du personnel médical, ou des Français dans leur ensemble, mais plutôt à s'interroger sur les défaillances de notre système sanitaire et social. » (Sénat p. 176)
- (8) « Les hôpitaux ont assumé leur mission, malgré des handicaps très importants, dont le drame du mois d'août a montré qu'ils ne peuvent plus être éludés. » (AN2, p. 113)

Exhibit B

- (2) « Le manque d'anticipation a gêné gravement la compréhension du caractère exceptionnel du phénomène et de ce fait l'adaptation rapide du système » (Lalande, titre).
- (2) « Il y a eu un manque d'anticipation, sans doute dû au mode de fonctionnement de l'institut de veille sanitaire, qui ne lui a pas permis de jouer pleinement le rôle que la loi lui a confié » (Lalande, titre).
- (2) « Le cloisonnement entre administrations du ministère, entre ministères, et avec les services opérationnels, a empêché la mise en commun des informations disponibles » (Lalande, titre).
- (3) « Le drame de cet été n'a été ni anticipé, ni détecté très rapidement, et la gravité de son bilan est liée en grande partie à cette situation » (AN1 p.11).
- (7) « Le système d'alerte et de gestion de crise n'a pas permis de coordonner les efforts d'acteurs multiples et éclatés » (Sénat, titre).
- (7) « Des signaux épars et non synthétisés » (Sénat p. 179).
- (8) « Une catastrophe imprévue et mal décelée » (AN2, titre).
- (8) « Les défaillances du dispositif de veille sanitaire » (AN2, titre).

Exhibit C

- (3) « On peut considérer que l'ensemble de notre système sanitaire a su faire face à cette situation, même si la crise a mis au jour certains dysfonctionnements latents ou déjà connus. » (AN1, p. 21)
- (7) « Au total, l'analyse de la crise de la canicule conduit non pas à mettre en cause le dévouement de tout ou partie du personnel médical, ou des Français dans leur ensemble, mais plutôt à s'interroger sur les défaillances de notre système sanitaire et social. » (Sénat p. 176)
- (8) « La canicule a été le révélateur des carences structurelles du système sanitaire français » (AN2 p. 102).

Exhibit D (source : rapport Lalande 1)

La chronologie révèle des décalages entre la perception des administrations sanitaires et la réalité de la crise

JUIN 2003

Le mois de juin a été globalement chaud, avec des températures moyennes excédant de 4 à 5° C les normales saisonnières.

19 juin 2003

Météo-France émet un communiqué de presse annonçant un épisode caniculaire sur certaines régions françaises :

Nouvelle vague de chaleur. Après un répit en début de semaine, la chaleur s'accroît à nouveau au sud de la Loire vendredi et gagnera toute la France durant le prochain week-end. Elle deviendra caniculaire sur le Sud-Ouest, le sud de Rhône-Alpes, l'intérieur de la Provence et du Languedoc avec des températures maximales qui dépasseront souvent 35 degrés et atteindront localement 35 à 40 degrés. (...) source : *météo-France*

JUILLET 2003

Les températures observées au mois de juillet ont été proches des normales saisonnières, à l'exception d'une période de chaleur marquée en deuxième décennie.

8 juillet

Conférence de presse à la Mairie centrale de Marseille, animée par l'adjoint au maire en charge de la santé et le professeur Jean-Louis San Marco. Le professeur San Marco y diffuse des messages médicaux adressés aux diverses tranches d'âge et des messages demandant à l'entourage des personnes âgées une solidarité renforcée. Cette conférence est relayée dans la presse locale.

AOÛT 2003

Les températures à Paris. Les fortes chaleurs démarrent à Paris le 2 août. La période du 4 au 12 août, par son intensité et sa durée, est unique dans les annales depuis 1873, date de début des mesures de temps à Paris-Montsouris. Une séquence de neuf jours consécutifs est observée du 4 au 12 août avec un maximum de 39,5 °C (températures moyennes observées sur cette période : minimale : 23,3 ; maximale : 38,1 ; moyenne : 30,8). Les 11 et 12 août, les températures minimales et la température moyenne quotidienne atteignent à Paris des niveaux jamais observés depuis 1873.



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Dans les autres régions. Un grand nombre de régions ont connu des phénomènes climatiques comparables. Du 4 au 11 août, des températures supérieures à 35°C ont été observées dans les 2/3 des stations météorologiques, réparties sur l'ensemble des régions françaises. Des températures supérieures à 40°C ont été enregistrées dans 15% des villes (sur 180 villes). Le 12 août, les températures ont oscillé en moyenne sur l'ensemble du pays entre 36 et 41°C, sauf sur les côtes de la Manche.

Chronologie du mois d'août vendredi 1^{er} août

Météo-France annonce par communiqué de presse l'arrivée d'une nouvelle vague de chaleur :

Forte chaleur. Une nouvelle vague de chaleur s'installe aujourd'hui par le sud. Elle enveloppera l'ensemble de la France ce week-end et se maintiendra plusieurs jours sur la majeure partie du pays. Il n'est pas prévu d'épisodes pluvieux significatifs au cours de la semaine prochaine ; en conséquence l'état de sécheresse persistera sur les régions déjà concernées. (...) *source : météo-france*

lundi 4 août

Certains hôpitaux parisiens connaissent une augmentation des passages et des hospitalisations des consultants dans les services d'urgence. Les sapeurs pompiers de Paris observent le même phénomène, sans notion de décès.

mardi 5 août

Comme chaque année, une réunion de la cellule de veille de l'AP-HP se tient pour faire le point sur la situation des capacités d'accueil hospitalières dans la capitale en période estivale. L'impact sanitaire de la canicule n'est pas évoqué à cette occasion.

mercredi 6 août

- Certains spécialistes de la médecine d'urgence (SAMU, services hospitaliers, sapeurs-pompiers) commencent à identifier le caractère anormal de la situation.

- Un médecin inspecteur de santé publique de la DDASS du Morbihan informe la DGS et l'InVS de la survenue le mardi 5 août de 3 décès par hyperthermie de personnes jeunes sur leur lieu de travail.

- Point de la DGS avec un conseiller technique du cabinet sur les dossiers santé-environnement. La DGS évoque les problèmes de pollution en cours et indique qu'elle prépare un communiqué de presse à ce sujet. Le cabinet demande d'étendre le communiqué à l'impact sanitaire de la chaleur.

Extrait du mail adressé par le cabinet à la DGS « L'épidémiologie nous permet d'anticiper un excès de mortalité lié à la canicule. Il serait utile que la DGS prépare un communiqué rappelant quelques précautions élémentaires notamment chez les plus jeunes et les plus vieux. Il existe de nombreuses études sur l'impact sanitaire des vagues de chaleur. L'InVS pourrait les signaler (je crois que les CDC les ont synthétisées) et cela pourrait faire l'objet d'un message DGS-URGENT ». (...) *Source : DGS*

- Diffusion de messages préventifs sur les panneaux lumineux de la Ville de Paris.

jeudi 7 août

- Le service d'accueil des urgences de l'hôpital Saint Joseph prévient la DDASS 75 de la survenue d'un cas de décès par « coup de chaleur » d'un homme d'âge moyen au retour de son travail. La DDASS le signale au bureau des alertes de la DGS.

- Le président de l'association des médecins urgentistes hospitaliers de France, le Dr Patrick Pelloux, signale par téléphone, à un conseiller technique de la DHOS, un encombrement des urgences et le manque de disponibilité en lits à Saint Antoine et dans d'autres hôpitaux de l'APHP. Ces informations sont transmises au cabinet. La DHOS active une cellule de veille.

- La DHOS demande à l'ARHIF un point général de la situation des établissements publics et privés d'Ile de France (hors AP-HP). L'ARHIF ne signale pas de difficulté dans les services d'urgence d'Ile de France (hors AP-HP).

- Un communiqué de météo-France annonce à nouveau des températures élevées :

Poursuite de la canicule sur la France L'air très chaud qui s'est installé sur la France se maintiendra durant les sept prochains jours (jusqu'au jeudi 14 août). (...) des températures très élevées continueront à régner sur le pays. Les températures minimales seront, sur de nombreuses régions, voisines ou supérieures à 20 degrés, atteignant localement 24 ou 25 degrés. Les températures maximales s'élèveront elles jusqu'à 36 à 40 degrés ». La persistance de cette situation, qui conjuguée températures minimales et maximales élevées, est exceptionnelle et constitue un risque sanitaire pour les personnes sensibles (personnes âgées, personnes malades et nourrissons). (...) *Source : météo-France*

- Le service de presse de l'INPES (Institut national de prévention et d'éducation pour la santé) contacte celui de la DGS afin de lui faire part des inquiétudes du Pr San Marco sur les conséquences sanitaires de la canicule. La DGS indique que le problème est identifié et qu'elle s'approprie à émettre un communiqué de presse sur ce sujet.

vendredi 8 août

- Dans la matinée, la DDASS 92 signale à la DGS l'apparition de décès en institutions.

- A la suite de cet appel, la DGS contacte le SAMU de Paris, la Brigade des sapeurs pompiers de Paris (BSPP) et l'AP-HP. Selon la DGS, les services d'urgence et de secours indiquent qu'ils sont fortement sollicités, qu'ils ne peuvent évaluer la part liée à la chaleur et qu'ils font face à la situation. Les représentants des sapeurs pompiers auditionnés indiquent n'avoir pas connaissance de ce contact.

- La DGS informe l'InVS de remontées « éparses mais alarmantes » des DDASS sur des cas de décès liés à la chaleur. Elle demande à l'InVS de mettre en place une surveillance des décès liés à la chaleur.

- Le chef du service de gériatrie de l'hôpital de la Pitié-Salpêtrière, tente de joindre, sans succès, le bureau des alertes de la DGS pour signaler deux décès du fait de la chaleur de malades hospitalisés dans son établissement. Il alerte alors le chef du service « prévention, programmes de santé, et gestion des risques » de la DGS.

- Le responsable du pôle urgences/réanimation de l'hôpital Saint Joseph (Paris) signale à l'InVS des « cas de coups de chaleur graves, pas nécessairement chez les personnes âgées, dont un avec décès ». L'InVS en informe la DGS.

- Dans l'après-midi, la DGS diffuse un communiqué de presse mettant en garde contre les risques sanitaires inhérents à la canicule et fournissant une série de conseils de prévention. Ce communiqué précise notamment que :

Fortes chaleurs en France : recommandations sanitaires « (...) la vague de chaleur est susceptible d'entraîner des répercussions graves sur la santé des personnes »

« La chaleur expose aux risques de déshydratation, de coup de chaleur, et d'aggravation de maladies chroniques. Ces risques sont particulièrement importants et d'évolution plus rapide chez les nourrissons et les personnes âgées (...) car ils n'expriment pas la soif ou ne peuvent accéder, sans aide extérieure, à des apports hydriques adaptés. » « (...) il convient de leur proposer régulièrement des boissons fraîches, même en l'absence de demande et au besoin les aider à boire. » « (...) les bains et des brumisations peuvent être utiles pour les personnes âgées. » « La conduite à tenir et les consignes, tout particulièrement pour les responsables de collectivités (...) », sont détaillées dans l'avis du 18 avril 2000 du Conseil supérieur d'hygiène publique de France ci-joint. » *source : DGS*

(Ce communiqué, diffusé aux agences sanitaires, à la DHOS, aux DDASS et DRASS, ainsi qu'à la presse nationale, régionale et médicale, ne sera que faiblement relayé par les médias.)

- Par requête informatique, le responsable du SAMU de Paris compare le nombre d'appels adressés au 15 depuis le début du mois à celui des deux années précédentes. Il constate que ces appels sont moins nombreux, mais qu'ils émanent dans une proportion importante de personnes très âgées et beaucoup plus malades qu'habituellement. Il alerte la direction générale de l'AP-HP dans la matinée.

- Le secrétaire général de l'AP-HP réunit alors une cellule de crise et diffuse immédiatement une note demandant aux directeurs de tous les établissements hospitaliers de libérer un maximum de lits (report de l'activité programmée, réouverture de lits de médecine et de réanimation).

Extrait de la note (...) La situation est globalement très préoccupante. Je vous demande instamment de prendre toutes initiatives nécessaires dès réception de cette note. (...) (mention manuscrite sur la note) *source : direction générale AP-HP*

- L'un des responsables de la BSPP, annonce par l'intermédiaire de l'AFP, que les sapeurs-pompiers de Paris ont effectué dans la première semaine d'août de nombreuses interventions pour des malaises dus à la chaleur, affectant essentiellement des personnes âgées.

Extrait du communiqué (...) Sur les sept premiers jours d'août, les pompiers, qui couvrent Paris et la petite couronne, ont effectué 1 798 interventions pour des malaises liés à la chaleur (déshydratation, coup de chaleur...), contre 1 180 interventions en 2002. *source : AFP*

samedi 9 août

- Très fort taux de mortalité chez les personnes âgées, constatés par la BSPP, le SAMU, et les services de police de Paris.

- Les collègues des services d'accueil des urgences d'Ile de France et de province (Bourges, Orléans, La Rochelle) du Dr Pelloux lui signalent de nombreux décès dans leurs établissements.

- Le responsable du SAMU de Paris appelle le médecin-chef adjoint du service de santé de la BSPP. Ensemble, ils établissent un protocole de refroidissement précoce des victimes, mis en œuvre le jour même.

dimanche 10 août

- Le Dr Pelloux explique, dans Le Parisien que les médecins sont confrontés à « une véritable hécatombe ». Le chef du service de la DGS y indique « qu'il faut s'attendre à plusieurs centaines de décès. » Sur TF1, le Dr Pelloux annonce une cinquantaine de décès dus à la chaleur en 4 jours en région parisienne.

- Le chef de service de la DGS demande à l'administratrice de garde de la DHOS si elle dispose d'un plan canicule. Celle-ci répond par la négative.

- Le responsable du SAMU de Paris alerte la DDASS de Paris sur le fait qu'il constate un afflux inhabituel de personnes âgées dans les services d'urgence. A sa demande, la DDASS de Paris, assistée des services de la Ville de Paris, transmet par téléphone à l'ensemble des responsables des maisons de retraite des informations pour que l'on organise des gestes préventifs.

- La directrice de l'AP-HP interromp ses vacances et visite trois hôpitaux parisiens avec le responsable du SAMU de Paris.

- Le service d'accueil des urgences de l'hôpital Saint Joseph « déleste ».

- La maison de retraite « les jardins d'Arcadie » à Suresnes signale à la DGAS des difficultés liées à l'absence de place en funérarium (décès de deux résidents). Cette information est transmise au cabinet du Secrétaire d'Etat aux personnes âgées.

lundi 11 août

(pic de surmortalité, cette notion n'étant pas connue à cette date)

- Le chef de service de la DGS rend compte par mail (10h) à la directrice adjointe du cabinet des faits de la semaine précédente et du week-end :

Extrait du mail « La DGS a reçu vendredi dernier –pour la première fois depuis le début de la vague de chaleur- des appels de DDASS signalant des décès par coup de chaleur chez des personnes hospitalisées, ou en institution. Nous avons essayé de faire le point rapidement avec le SAMU de Paris, les pompiers, ...ce qui nous a confirmé que les 48 dernières heures avaient constitué un tournant, mais que la situation était maîtrisée. » (...) *source : DGS*

- une cellule nationale de crise est constituée au sein de la DHOS, avec mise en place d'un dispositif de remontée d'informations.

- réunion interne à l'AP-HP, avec la participation de la DHOS, de l'ARHIF, de la préfecture d'Ile de France, du SAMU de Paris et du Dr Pelloux. Le responsable du SAMU de Paris fait le point sur les caractéristiques de l'hyperthermie maligne.

- Elaboration en urgence et déclenchement par la direction de l'AP-HP du plan « chaleur extrême » (Plan PACE). Ce plan prévoit la réouverture de lits fermés durant l'été, le report des hospitalisations programmées, la mobilisation des établissements gériatriques pour l'aval des urgences, le rappel de 400 élèves infirmières, l'appel aux volontaires de la Croix-rouge.

- Dans une conférence de presse, la directrice générale de l'AP-HP explique que les hôpitaux parisiens sont confrontés à une « situation exceptionnelle ». Le responsable du SAMU de Paris alerte la presse sur l'état critique de nombreuses personnes âgées dans les maisons de retraite. Il demande aux médias de faire passer des conseils de prévention aux proches des personnes âgées et aux maisons de retraite. *(Ces messages seront, selon lui, peu relayés par les médias, au profit du débat sur le nombre de décès).*

- Le directeur du CHIC de Créteil déclenche le plan blanc

- Communiqué de presse du cabinet

Extrait du communiqué Fortes chaleurs en France : aspects sanitaires et recommandations La situation de fortes chaleurs que connaît actuellement la France est susceptible d'entraîner des répercussions graves sur la santé des personnes. Plusieurs actions ont été mises en œuvre par le Ministère de la santé, de la famille et des personnes handicapées pour mieux prévenir et prendre en charge les risques de déshydratation et les conséquences de la situation de forte chaleur. Cette vague de chaleur appelle notamment une attention renouvelée de la population vis-à-vis des personnes les plus fragiles (personnes âgées, nourrissons). (...) Il faut savoir reconnaître les premiers signes du coup de chaleur, caractérisés par un malaise, des maux de tête, une sensation de faiblesse ou de vertige, une impression de fièvre... Toute apparition de ces signes, surtout chez des personnes fragiles, nécessite une mise au repos et de donner immédiatement à boire. (...) Dans l'ensemble des services hospitaliers, une augmentation des passages de personnes âgées est perceptible, mais il n'existe pas d'engorgement massif des urgences. Les difficultés rencontrées sont comparables aux années antérieures, en dehors de cas ponctuels de certains établissements, et d'un ou deux départements d'Ile de France. (...) *Source : DGS*

- Vers 17h, premières remontées d'informations à la DHOS, faisant apparaître une affluence modérée dans les services d'urgence de la plupart des grandes villes le 11 août, mais une situation particulièrement aiguë en Ile de France et en Bourgogne. La DHOS en informe le cabinet du ministre.
- Panne prolongée de l'informatique et de la messagerie du ministère de la santé
- Le Secrétaire d'Etat aux personnes âgées adresse à l'AFP un communiqué rappelant les recommandations contenues dans les circulaires des 12 juillet 2002 et 27 mai 2003 (cf. annexe 7).
- Mise en place par le Centre d'action sociale de la Ville de Paris de mesures en direction des personnes âgées vivant à domicile
- En soirée, la DGS transmet par mail au cabinet un projet de communiqué de presse relatif à la saturation des chambres funéraires en Ile de France.
- Extrait du projet de communiqué **Saturation des chambres funéraires ou mortuaires en Ile de France** Plusieurs facteurs concourent actuellement à la saturation des chambres funéraires ou mortuaires en Ile de France :
 - Augmentation des décès dus à la canicule
 - Recours plus fréquent aux chambres funéraires en raison de fortes chaleurs qui rendent difficile la conservation des corps à domicile
 - Réduction des effectifs de personnel en période de vacances (...) Source : DGS
 - Intervention télévisée du ministre de la santé, de la famille et des personnes handicapées.
- mardi 12 août** (aggravation du pic de surmortalité, cette notion n'étant pas connue à cette date)
 - Le plan blanc est déclenché dans le Val de Marne
 - Le chef du service «prévention» de la DGS et un conseiller technique de la DHOS participent au « téléphone sonne » sur France Inter à la demande du cabinet.
 - Ouverture du numéro vert
 - Le secrétaire d'Etat aux personnes âgées adresse à l'AFP un communiqué de presse complétant les recommandations déjà adressées aux professionnels, et faisant appel à la mobilisation et à la vigilance des bénévoles et de chaque citoyen (cf. annexe 7).
- mercredi 13 août** (persistance du pic de surmortalité, cette notion n'étant pas connue à cette date)
 - Fin des très fortes chaleurs en région parisienne.
 - Arrivée de 20 secouristes de la Croix Rouge, répartis dans différents hôpitaux de Paris et de la petite couronne
 - Par instruction de la DHOS, levée du dispositif des ententes préalables pour l'admission directe des urgences en soins de suite et de réadaptation jusqu'au 20 août.
 - La DHOS pilote les problèmes de saturation des morgues et de transport des corps.
 - Réunion inter-directions au cabinet (cabinet, DGS, DHOS, InVS, APHP). Le chiffre de 3000 morts est avancé.
 - Le responsable du pôle urgences/réanimation de l'hôpital Saint Joseph (Paris) signale à l'InVS 7 décès par hyperthermie maligne dans la nuit précédente dans son service.
 - L'InVS appelle le cabinet du ministre de l'intérieur, qui demande à tous les préfets pour le lendemain le dénombrement des décès jour par jour par département depuis le 25 juillet et les mêmes données pour 2002. Les données doivent être adressées aux ministères de l'intérieur et de la santé, et à l'InVS.
 - La DGS obtient de l'AP-HP, de la DHOS et des entreprises de pompes funèbres les premières informations chiffrées sur les décès.
 - Le responsable du SAMU de Paris réunit les responsables des services d'urgence de l'AP-HP. Ceux-ci font état de la persistance d'une situation très préoccupante dans leur service.
 - Le premier ministre demande aux préfets des départements d'Ile de France, par l'intermédiaire du ministre de l'Intérieur, d'activer le « plan blanc ». Ce plan, visant à adapter « l'organisation du système hospitalier en cas d'afflux de victimes », prévoit la mobilisation de tous les moyens humains et matériels, y compris le rappel des personnels de santé en congés.
- jeudi 14 août**
 - Réunion interministérielle à Matignon. Le premier ministre demande l'extension du « plan blanc » à l'ensemble du territoire, sous réserve de l'appréciation des préfets dans leur département. Mobilisation générale et déblocage de la situation dans les hôpitaux.
 - Selon la DHOS, situation maîtrisée dans les hôpitaux notamment en Ile de France à partir de jeudi soir (plus de 1000 lits disponibles en vue du week-end suivant).
 - Communiqué de presse DGS/InVS intitulé « première estimation des décès dus à la canicule ».
 - Le responsable du SAMU de Paris constate que le nombre de personnes âgées en attente dans les services d'urgence qu'il contacte est en forte baisse. Il estime que « l'effet Plan blanc a été spectaculaire ».

Abridged translation :

Chronology reveals gaps between the perception of the crisis by health administrations and its reality

- June 2003: According to French meteorological service (Météo France – a state-owned agency), the temperature has been exceptionally hot in France during June, 4 to 5 degrees Celsius above average.
- July 2003: Temperature has been in line with average temperature in the season.
- August 1st: (Météo France) warns about a new heatwave that should last several days.
- August 4th: Hospitals and firemen notice an increase in consultation because of the hot temperature. They do not notice deaths.
- August 5th: As every year, an official meeting is held in the Ministry of Health in order to plan hospital availability during vacation. No mention of the heat wave is made on this occasion.
- August 6th: Emergency professionals notice the abnormality of the situation: too many people are calling for help. Several deaths because of the temperature are recorded.
- August 7th: A new press release from Météo France explains that the exceptional temperatures are going to last till August 14th and warns about the danger of the heat wave for the elder and the babies.
- August 8th: Sparse informations about deaths because of the temperature are sent to the officials in charge of health. A press release is made by officials warning about the danger of the hot temperature for the population. The media coverage of this release remains weak.
- August 10th (Sunday): Dr Pelloux (who represents emergency room doctors), says in the newspaper that the emergency services have to face a "bloodshed". He adds at the TV news that there have been already 50 deaths in the last four days in Paris. Officials are concerned by the low level of rivers, putting nuclear power plants and energy supply at risk.
- August 11th: Hospitals in Paris are put on high alert. Emergency plans are organized. The Minister of Health gives an interview on TV. (High death rate, information unknown at that time).
- August 12th: A free phone number is created in order to explain how to cope with the high temperatures. (Death rate still worsening, information unknown at that time).
- August 13th: The heat wave is moving to the east part of France. The funeral services are overwhelmed. (The high death rate remains stable, information unknown at that time).
- August 14th: The Prime Minister orders that hospital emergency plans are extended to the whole country. Temperatures are cooling down.

Exhibit E

- (2) « Un système de permanence des soins libéraux souvent défaillant, entraînant un recours toujours accru aux SAU » (Lalande, titre).
- (3) « La médecine de ville, une action réelle mais peu visible » (AN1 p.22)
- (5) « La continuité des soins pendant les jours de semaine de la canicule a été assurée par les médecins libéraux, selon leurs modes d'exercice usuels. » (IGAS2, titre).
- (5) « Les difficultés que rencontre la permanence des soins ne sont pas propres à la canicule. » (IGAS2, titre).
- (5) « La dispersion numérique de la médecine de ville rendait impossible sa participation à l'alerte. » (IGAS2, p. 16, souligné dans le rapport).
- (6) « Allant parfois jusqu'à évoquer un problème général de compétence en gériatrie, plusieurs des interlocuteurs rencontrés par la mission ont ainsi fait état du manque de réactivité de nombreux médecins face à un phénomène caniculaire très inhabituel. » (IGAS 3, p. 37).
- (7) (*les médecins libéraux*) « présents mais peu sollicités » (Sénat p. 174).

(8) « Il est indéniable que la médecine de ville n'a sans doute pas joué un rôle aussi important qu'elle avait vocation à le faire. (...) Il semble néanmoins abusif de considérer que les médecins libéraux ont failli à leur mission (...) » (AN2 p. 160).

(8) « Le Rapporteur se doit d'indiquer que bon nombre d'entre eux (*NB. Les médecins libéraux*) ont accompli avec dévouement et efficacité cette tâche quotidienne de suivi des personnes âgées. » (AN2 p. 162).

(8) « Les cas sont nombreux d'interventions, de visites quotidiennes qui ont sauvé la vie des personnes âgées ». (AN2 p. 164).

Exhibit F

(7) « Je considère qu'attendre 8 heures pour un petit bobo parce que l'on aura fait passer, en priorité, les cas urgents, ne pas être considéré comme un dysfonctionnement. (...) il est nécessaire de développer la pédagogie sur ce point. » (directrice de l'AP-HP, in Sénat, p. 226).

(8) « (...) les personnes malades privilégient un déplacement aux services d'urgence de l'hôpital lorsqu'elles contractent une pathologie assez sérieuse, plutôt que de s'adresser à des médecins généralistes ou spécialistes libéraux. Il est vrai que la modicité des tarifs appliqués à l'hôpital peut expliquer pour partie ce phénomène d'affluence aux urgences. » (AN2 p. 114).

(8) « La DREES a souligné qu'**une infime proportion des patients qui se présentent aux urgences le fait sur prescription médicale** (*souligné dans le rapport*). En d'autres termes, les patients court-circuitent les médecins libéraux dès lors qu'ils sont confrontés à une pathologie relativement grave. Il n'y a donc rien d'étonnant à ce que la médecine de ville n'ait pas joué un rôle de premier plan lors de la canicule, les cas d'hyperthermie représentant des symptômes suffisamment sérieux pour justifier l'envoi direct des victimes aux urgences hospitalières. » (AN2 p. 161-162).