

## **CRISES: EVENTS OR PROCESSES?\***

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## Introduction

For several years crisis management has become a focus of attention for many scholars in management. Research in this field is numerous but remain very fragmented. This fragmentation is due to the fact that crisis management has been approached by many disciplines, from various viewpoints. Due to the complexity of the subject under examination, researchers conduct analyses at different levels, have to be aware of the inner and outer contexts of the organization, and may observe very different phenomena gathered under the single concept of ‘crisis.’

Much of the difficulty of conducting research in this domain has to do with empirical observations. Gaining access during a crisis is almost impossible, and would anyway bring more problems than answers. For instance, a great many organizations make decisions and interact with each others during a single crisis situation. This brings practical questions to the field researcher concerning data collection, including very basic ones: where to go, nearby the, say, burning warehouse or in the crisis room; who to observe and interview? The unit of analysis chosen for the research does not always bring a clear answer to those dilemmas. Collecting data after the facts has other well-known pitfalls, such as recollection, *a posteriori* rationalization, missing archives, etc.

However, beyond the problems of observing the dynamics of a crisis and the limits of treating it *a posteriori*, there is a second level of difficulty, namely the integration of research. While the first level is of importance to any one researcher engaging into field research, the second one is of concern to our community as a whole. Integrating research from various disciplines, with different focus and methodologies is no easy task. In fact, the richness of varied approaches brings its own drawbacks, such as having still instable and embryonic theories. Considering this state of the art, a valuable avenue for crisis management relies in working at building integrative frameworks and theories to gather the parts of this puzzle. It should be

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noted that we don't aim at imposing a single paradigm for crisis management research. On the contrary, we believe with Van Maanen (1995: 133) that such a goal would be "philosophically indefensible; extraordinary naive as to how science actually works; theoretically foolish, vain and autocratic; and (...) reflective of a most out-of-date and discredited father-knows-best version of knowledge, rhetoric and the role theory plays in the life of any intellectual community." Rather, our point here has more to do with a better understanding of the (often) untold assumptions underlying crisis management research.

We argue that the major obstacle for researchers stems from a conceptual ambiguity on the notion of crisis itself. In looking for 'what's behind the research' (Slife and Williams, 1995), we were struck by an apparent contradiction between two views of the crisis, namely crisis as an event vs. crisis as a process. This issue leads to some contradictions into the literature: while most of us appear to agree on the fact that crises are processes, we nevertheless often treat them as events. In fact, it's just as if we were all constrained by a sort of "research correctness" imposing us to state (literally) that the crisis is a process. However, this tribute being paid, we keep on working on cases which often are considered as events. This can be viewed for instance in works where the definition of the crisis focuses on processes and evolutions, this being followed by a typology of crises...

## **Event and process views in crisis management literature**

Claiming that the field is fragmented is not new. Numerous authors made this statement before us, and called for integration. Some proposed models or frameworks aiming at unifying our research perspectives. For instance, Milburn, Schuler and Watman (1983: 1143) proposed "a definition and conceptualisation of organization crisis which will: (a) be as inclusive of the crisis relevant organizational and individual phenomena as possible; (b) be as suggestive as possible for effective crisis management strategies and; (c) be as fruitful as possible for generating hypotheses about organizational crises." Their proposed conceptualization includes three major aspects, arranged temporally: antecedents, both in the external and internal environment; moderators, both of the antecedent-crisis and of the crisis-response relationships; and responses, both at the individual and organizational level. The model developed by Shrivastava, Mitroff, Miller and Miglani (1988) is focused on industrial crises, but broader and more precise. Crises are defined as having trans-organizational causes, involving social, political, and cultural variables. They are composed of many loosely coupled interdependent events, each of them setting the stage for the next one to occur in a chain reaction. The authors state that the crisis is triggered by a specific event identifiable according to time and place. Preconditions for this triggering event are created by organizational and environmental conditions. More recently, Shrivastava (1994) proposed a shift in the way we

consider crises and consequently conduct our research. The concept of ‘ecologically sustainable economic development,’ he argues, provides a promising base and overcomes the limitations of our trial-and-error way of learning. Finally, Pearson and Clair (1998) offered a framework depicting the crisis management process and allowing for integration of psychological, social-political, and technological-structural research perspectives. In spite of those repeated efforts towards integration, literature on crisis management still suffers from conceptual shortcomings that pave the way for contradictions and theoretical ambiguities. Literature on crisis management often eludes the underlying debate on crisis considered whether as an event or as a process. We know that this debate is certainly not the unique issue that still needs to be resolved in the way towards integration but we think it may be a valuable angle of analysis in order to have a proper view in the burgeoning literature on crisis management.

This debate as to consider crisis as an event or as a process has rarely been explicitly tackled in recent works. Shrivastava (1995) is one notable exception in opposing clearly the event versus process approach of crisis. As he states, “Crises are not events but processes extended in times and space.” (Shrivastava, 1995: 2).

However, this distinction is not explicitly established among researchers, what is even more striking, and this is certainly the most crucial point, is that most of the authors understate that crises are processes but still treat them as if they were events. Our work precisely focuses on this apparent contradiction. The objective of the paper is to discuss both approaches and see how they contribute to (the confusion of) the literature on crisis management.

## **An analysis of crisis definitions**

We have based this paper on a content-analysis of 28 definitions of crisis found in the crisis management literature (see Appendix). We started with the hypothesis that every definition could be classified as process-based or as event-based. We had in mind some basic categories that could distinguish appropriately between both approaches. We used these categories to codify the definitions and assess to what kind of approach they could be linked to. The categories were derived from the prior definitions we had adopted about what was a process and what was an event. The definitions we had chosen were based on our prior knowledge of the literature on crisis management. We used them as guidelines for the content-analysis.

The *event approach* focuses on the notions of incidents or accidents as the unit of analysis. Incidents or accidents constitute contingent and/or peculiar events as opposed to routines, regularities and experience. They may be a piece of information, a perturbation, a trouble, a tension that disrupt the fragile balance of the organization. Most of the time, definitions focus

on the triggering properties of the event (e.g. Shrivastava, 1987). Triggering events may be considered as a sort of active constituent that put the organization to the test and push it to its extreme limits. It may be isolated in space and time (it happens in a particular moment in time and in a particular place) and has often quite distinguishable origins (social vs. technical source, internal versus external origin, etc.).

The *process* approach refers to a combination of actions, disruptions or to a succession of sequential (causal and linear) or systemic ( mutual causality, interactions, feedbacks) steps or phases that bluntly combines a series of different familiar or unfamiliar stakeholders, issues and resources resulting in a destructuring effect on the organization and its stakeholders. A process approach also suggests the succession of slow and quick evolution of events and actions prior and after the acute phase of the crisis. Crises are thus seen as phenomenon extended in time and space which induce most of the time a transformation of the organization.

In addition, for each definition, we surfaced the angle under which they were expressed. This analysis led us to distinguish four angles adopted by authors to define crises:

- the *nature* of the crises, i.e. elements of definitions that intrinsically specify the concept;
- the *causes* of crises, i.e. elements of definitions that focus on the causes or the origins of crises;
- the *consequences* of crises, i.e. elements of definitions that focus on the consequences of crises;
- the *dynamics* of crisis, i.e. elements of definitions that focus on the way crises develop and manifest itself.

## **Event approaches in definitions**

Our content analysis suggests that an event approach focuses mostly on the nature and the consequences of a crisis. In this view, crises are explored through the lens of the triggering event, even if authors are not usually explicit on this point. Definitions actually concentrate on the visible part of crises. Authors attempt to define the concept in terms of impacts and damages. This perspective is very helpful to understand the crisis in its acute phase and contributes to nourish the literature on how to react in times of crisis in order to reduce its impact and resume activity as soon as possible. In spite of this contribution, this view privileges a reactive stance amongst managers and is not very helpful to improve prevention measures and learning capacities.

We observed that, in essence, crises were usually considered as negative events. In the event view of crisis management crises are usually defined as damaging and harmful disruptions or perturbations that threaten the very survival of the organization (Reilly, 1993). From another

perspective, crises are considered as unanticipated and low-probability events (Shrivastava, 1987; Mitroff, Pauchant and Shrivastava, 1988; Pearson and Clair, 1988) and are often associated with high impacts (Weick, 1988). The very nature of crisis is precisely defined by the inability to plan or to measure the probability of occurrence and the potential risks it could induce should it occur. This is maybe one of the reasons why crisis management is often associated or even confused with risk management which deals basically with probabilistic methods to assess risks.

This risk perspective offers interesting contributions. Should it be considered only through the triggering event angle, a crisis would undoubtedly be a low-probability event. A hostile take-over, a malicious rumor or an industrial accident are very unlikely and may actually constitute a surprise with potential high impact on the organization. Definitions privileging this perspective regularly emphasize other recurrent facets of crises. They suggest for example that crises are surprising events. The seminal definition of Hermann (1963) is typical of such a position. According to Hermann the surprising effect of crisis induces high levels of stress among decision-makers and restricted time of reaction. Even though this feature is well shared among scholars (Smart and Vertinsky, 1984; Phelps, 1986; Reilly, 1993), the question of surprise has been discussed by others who have moderated this stance by introducing the notion of uncertainty (Lagadec, 1991). Perrow (1984) and Forgues (1993) for instance challenge the characteristic of surprise by referring to high risks industries in which crises are almost “normal”. From that point of view crises are surprising not because we don’t know what is going to happen but instead because we don’t know when it is going to happen. For instance, in the airline industry we all know that air crashes will continue to happen, but we can’t anticipate when and where air crashes they will happen.

## **Process approaches in definitions**

The process approach brings a complementary perspective. Whereas the event approach focuses on the nature and the consequences of crises, the process approach includes more definitions referring to the causes and the dynamics of crises. It suggests that crises must be embraced in an extended span of time and space. The process perspective usefully complements the event approach to the extent that crises are seen as being the result of a long period of incubation which bluntly occurs through the influence of a triggering event. The tenets of the process perspective mostly lie on the idea that crises manifest in phases. Different stages are traditionally distinguished: warning signals, triggering event (acute phase), amplification, resolution. This view goes thus far beyond a symptomatic approach. It suggests the existence of a genealogy of crises that may be potentially tracked long before the acute phase. Many researchers have supported this view (e.g. Shrivastava, 1987; Schwartz, 1987; Pauchant and Mitroff, 1992; Clair, 1995). The process perspective thus acknowledges

that crises are the ultimate moment of a continuous cumulative process of organizational failures (Bowonder and Linstone, 1987).

A quite provocative stance was adopted by Perrow (1984; 1994) who showed that industrial accidents, in high risk technology industries, should be considered as normal, that is, as being “an integral characteristic of the system rather than a statement of frequency” (1984: 5). This perspective rejuvenated the field of crisis management and inspired most of the papers published on the process nature of crises.

In accordance with this position, the process view of crises includes a number of definitions related to the causes of crises. An agreement has emerged as to conclude that crises are characterized by the ambiguity of their causes and consequences (Pearson and Clair, 1998). Most of these works mention the need for a systemic approach to analyse crises in order to capture their complexity and ambiguity (Kovoor-Misra, 1995). From a theoretical stance, research is thus very often supported by systemic and cybernetic concepts (Deschamps, Lalonde, Pauchant and Waaub, 1995). As asserted by Deschamps et al. (1995) systemic management is needed to study crises because they reveal hidden systemic patterns by crystallizing different spheres that go beyond the frontiers of organizations. Systemic analysis of crises usually highlights the dynamics of a crisis, delves into its historical roots and multiple consequences and intend to discover the many relations linking diverse stakeholders and issues. Authors who resort to this kind of analysis often minimize the contribution of a purely causal and linear method considering they are too much restricted to embrace the dynamics of crises. The seminal works of Perrow (1984) and Shrivastava (1987) are particularly significant of this kind of process/systemic approach.

Treating crises as a process and a systemic dynamics rather than an event influences the analysis of consequences. In the event view consequences are mostly treated according to their negative outcomes and threats. In the process approach crises are also accompanied by great uncertainty of consequences and a dose of chaos. Rather than considering these outcomes as purely negative, the process view tend also to uncover the positive aspect of crises (Shrivastava, 1995). The systemic study of crises seems particularly relevant to show that crises have revealing properties and to uncover hidden factors that the organization wouldn't have been aware of if the crises had not occurred. In this perspective crises are showed to bring forth changes and transformations at different level of the organization and through several spheres. These revealing and transformation properties are triggered by a sudden collapse of the basic assumptions of the organization that prove to be inefficient to cope with the crisis situation (Pauchant and Mitroff, 1992). Weick (1993) refers to a sudden collapse of sensemaking practices and talks about cosmological episode.

## **Event vs. process views of crises: contradictions and ambiguities**

The distinction between event and process does not necessarily offer a framework to arrange the literature in crisis management neither is it a relevant discriminant structure to classify authors. Even if that classification is tempting, we found out that most of the authors drew in both views to define crisis management. Most of the definitions are mixed and are nourished by process and event components. They build on the obvious complementarity of both perspectives. The question is then to assess to what extent this complementarity is really acknowledged by scholars. As we mentioned in the introduction of this paper, we realized that most of the time, whereas authors do agree on the fact that crisis is a process, they nevertheless treat it as an event. This paradox brings about a set of ambiguities and contradictions in the literature. Different kinds of explanation may be put forward to justify this situation and different sources of ambiguity may be discussed.

### **The perverse effect of typologies**

The famous empirical study on crisis management conducted in the late 80's by Mitroff and his colleagues is an example of such an ambiguity (Mitroff, Pauchant, and Shrivastava, 1988). They derived from their data, raised from 114 organizations in 10 different industries, a typology of 'crises' based on their nature (technical/economic versus human/social) and their origins (internal versus external). Typologies are obviously an attempt to capture the complexity of crises through their triggering events. In essence typologies of crises are typologies of triggering events but do not uncover the dynamics and the processes of crises. While exploiting these data, Pauchant (1988) nevertheless gives a process definition of crises and states that:

“A crisis is an accumulation of improbable events at the level of a subsystem, or at the level of the system as a whole that can potentially damage more than one unit and thus disrupts the present operation or the future of the system under study as well as affecting substantially all four-party victims, at the physical, psychological and/or existential levels.” (Pauchant, 1988: 49)

In this case, the results of the research do not fit with the definition adopted by the author and empirically support an event view rather than a process one. Since then many papers, including ours, have referred to this typology (e.g. Lagadec, 1991; Forgues, 1993; Pearson and Mitroff, 1993; Roux-Dufort and Pauchant, 1993). Later Pauchant and Mitroff (1992) gave another definition of crisis apparently very similar to the aforementioned one but that remains ambiguous. They consider crisis no more as a cumulative process but rather as a *disruption* that physically affects a system as a whole and threatens its basic assumptions (Pauchant and Mitroff, 1992: 12). Consistently, they illustrate this definition with a set of statistical data drawn from the study earlier mentioned and bring forth a similar typology of crises. In the following pages however, they call for a systemic approach of crisis and develop a theory of crisis supported by cybernetics concepts.



These works have had considerable echo in the literature in crisis management and have set the pace for much research that drew extensively on these results. More recent works have thus contributed to maintain an ambiguity on the concept of crisis. Kovoov-Misra (1995) for instance refers to crises as *events* that are a threat to the survival or goals of the organization and explains later that a multidimensional view is necessary to grasp the systemic nature of crises. She also relies on a typology of crises where triggering events are used to differentiate between different types of crises. Again Kovoov-Misra contributes to reinforce the belief that crises are processes in essence but still presents a definition rooted in the event perspective.

### **The limits of the systemic approach**

Earlier in the paper we showed how systemic theories were closely associated with the study of crises in many works. We also explained to what extent this systemic perspective was consistent with a process approach. Much research refers to systemic and cybernetics concepts to describe the triggering and amplifying effects of small variables (Pauchant and Mitroff, 1992; Roux-Dufort and Pauchant, 1993). They show for instance how small incidents may turn into major crises and threaten the entire system. Grounded in systems dynamics theory, Weick (1979) and Perrow (1984) have stressed the potential danger of tightly coupled systems and the role of slacks and buffers to regulate interactions between variables. Systems theory is also helpful to stress the self-feeding properties of crises through vicious circles and positive feedback loops (Perrow, 1984; Shrivastava, 1987). The systemic perspective finally contributes to uncover hidden patterns revealed in the crises and to embrace a multidimensional perspective ignored by analytical approaches (Kovoov, 1991; Kovoov-Misra, 1995).

However there is little question about the theoretical foundations of such a stance. As far as system theory is concerned, we have pointed out two types of confusions. First, systems are not processes and the systemic approach does not necessarily fit with a process approach of crisis. Second, authors seem to remain blinded by the theoretical power of systemic theories and lose sight of the limits of this theoretical framework.

Except from the ground breaking works of Perrow (1984) and Shrivastava (1987; 1995) little research actually reflects a process view of crises by using system theories.

## Foundations of process research

As we have seen before, definitions of the crisis often assumes it is a process. This is more generally true of social reality, which is a dynamic process, not a steady state. The emphasis in research should therefore be on development, movement, action, dynamics. Moreover, much of crisis writing espousing this view refers to system analysis. It's just as if system analysis was the only way to deal with a process view of crisis.

This section is divided into two parts. The first one draws on various contributions from the social sciences to discuss process analysis. The second one introduces system analysis and presents other longitudinal analyses.

### Some characteristics of process research

Attempts to classify research in the social sciences often use criteria such as the level of analysis or the embraced perspective. This includes the dichotomy of variance research and process research, or the individualist, structuralist, and interactive process perspectives (Slappendel, 1996). The basic assumptions of these three perspectives emphasize actions, determinism, and interactions of structural influences and actions of individuals, respectively. The latter implies a process research and leads to methods such as case studies.

Process research is becoming increasingly important in various social science disciplines. Therefore, instead of starting from scratch, we can draw on similar debates which occurred elsewhere. One such debate originated a few years ago in strategy research. In a series of articles dealing with process research, Van de Ven and colleagues first argued that the term 'process' is often used in three different ways in the literature. In the first one, it refers to "the underlying logic that explains a causal relationship between independent and dependent variables in a variance theory," in the second one, it refers to "a category of concepts of organizational actions, such as rates of communications, work flows, decision making techniques, or methods for strategy making." The third one "focuses on explaining the temporal order and sequence of steps that unfold" (Van de Ven and Poole, 1990: 313). This third approach is the only one able to describe and account how some entity or issue develops or changes over time (Van de Ven, 1992).

Building a process theory, as opposed to a variance theory, requires four basic methodological steps (Van de Ven and Poole, 1989: 31-32):

1. a clear set of concepts for selecting and describing the objects to be studied;
2. systematic methods for observing change in the objects over time;
3. methods for representing raw data to identify process patterns;
4. a motor or theory to make sense of the process pattern and a means of determining whether the theory fits the observed patterns."

To these, Pettigrew (1992) adds some requirements for the field of strategic management, which are also very useful for crisis management, as our field shares with strategic

management the same characteristics. His advice focuses on the complexity of the situation to be studied. For instance, he stresses that there may be different processes at different levels of analysis and that a change observed at any one level may originate in the processes at another level. Also, he insists that context and action are always interwoven. This is consistent with recommendations made earlier by Mohr (1982). This author states that process research aims at explaining change, using probabilistic rearrangement of objects over time. Here, objects might be events occurring at various levels of analysis. However, as Slappendel (1996: 118) points out, "some events and states may relate directly to the purposive actions of individual actors, while others may emanate from external structural influences (... Then,) there is an implicit need to address the complex, and paradoxical, relationship between action and structure. In particular, attention needs to be given to understanding how action and structure interrelate."

Researchers in crisis management have so far favored one method to grab the complexity of the situation: a system analysis. We will show that several other methods qualify to study organizational crises processes.

### **Methods for studying crisis as a process**

The system analysis, as theorized by von Bertalanffy (1975), has been of great help to consider the crisis as a whole. While an analytic view tried to reduce the complexity in looking for common units and regularities, the system view allowed for taking into account that the total is more than the sum of its parts. The introduction of open system models has been useful to study the crisis in its context. Smith (1990), for instance, has proposed a model of crisis management which placed the triggering event into its broader context.

System analysis can greatly clarify the object of study and help define what is to be observed. However, as Drabek (1970: 334) puts it, "Too often we have tried to focus on activities of many different types of groups in a single event. What this strategy suggests is that we consider the study of many units of the same type in several events." He insists that this requires two important steps. Firstly, we need to define what "units of the same type" are. This implies a careful analysis of the criteria to be used to define the system. Secondly, we have to define what the event is. It should be noted that what he calls an event refers to what we call a process. Indeed, in his clarification of the event, he states, that "it appears to be more fruitful theoretically to recast the issue and ask how do systems respond to severe environmental disruption? This emphasizes the interaction between the focal system and sectors of the environment, and it places disaster research within a larger research perspective" (Drabek, 1970: 334). One could then think an open system perspective is especially well suited to study organizational crises. However, it depends on what we call open system. Drawing on Boulding's hierarchy of system complexity, Pondy and Mitroff

(1979) claim that what is currently considered as an open system model of organizations<sup>1</sup>, does not qualify. As they put it: “We would argue that we need to develop a theory of error, pathology, and disequilibrium in organization (...). And open system models as currently interpreted are of little help for that purpose.” (Pondy and Mitroff, 1979: 17). Nevertheless, system analyses of crises have brought major advancements, such as the existence and interactions of multiple causes of a single crisis. Examples of such analyses are the works of Perrow (1984) or Shrivastava (1987).

However, system analysis is but one method among many for studying processes, and it’s probably not the best suited.

Studying processes require longitudinal data and longitudinal analysis of those data. One method to systematically analyze longitudinal qualitative data and help identify process change patterns has been proposed by Van de Ven and Poole (1989). Slightly adapted to the study of crises, this method involves the four following steps: 1/ develop a chronological listing of events that occur in the development of the crisis being investigated; 2/ code the chronological listing of events into multiple tracks that correspond to the conceptual research categories; 3/ run a phase analysis, consisting in the identification of discrete phases of activity and in the analysis of their sequences and properties, a phase being a meaningful set of co-occurring activities across the tracks built in step two; 4/ examine the sequence order in series of related events. An example of such an analysis in crisis research is to be found in Forgues (1993).

Other methodological guidelines for investigation, which are beyond the scope of this article, are proposed by Monge (1990) or Barley and Tolbert (1997).

In the last part of this article, we come back to the dichotomy between event and process views of crises, and discuss implications for research.

## **Implications for the research agenda in crisis management**

The distinction between event or process views of crises has consequences on the research avenues and the research agenda in crisis management. In this last part of the paper, by reviewing a series of work we demonstrate to what extent the event/process view contributes to highlight different facets of crisis management research.

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<sup>1</sup> As defined by Thompson (1967: 10): “we will conceive of complex organizations as open systems, hence indeterminate and faced with uncertainty, but at the same time as subject to criteria of rationality and hence needing determinateness and certainty.”

## **Contributions and implications of the event view on crisis management**

The event view of crisis has contributed to apprehend several characteristics of crises. We focus our attention on two of them that are particularly important both for research and practice in crisis management: risk management and the magnitude of crises.

### **Risk management**

Considering crises as events is to focus on the triggering event. This perspective has conducted corporations and researchers to apprehend certain events and dangers associated with particular activities and technologies. This apprehension have induced engineers, decision-makers and scientists to grapple with the subject of risk (Weber, Rakel and Roberts, 1992). Risk analysis includes risk identification, risk assessment and risk management. The risk management approach is rooted in the event view because it relies on a definition of risk as a product of magnitude and probability of occurrence. As mentioned earlier, for some authors crises are precisely defined through this lens. Much research has thus been conducted on risk perception (Slovic, 1987), risk mitigation (Perrow, 1984), and the sociology of risk (Beck, 1992) and progress has been made in several of these fields. Risk management is closely associated and nourishes several crisis management practices like scenario planning, crisis management plan (Kovoor-Misra, 1995) and crisis and technology portfolio (Shrivastava, 1987; Pauchant and Mitroff, 1992; Pearson and Mitroff, 1993) which are all rooted in an event perspective of crisis.

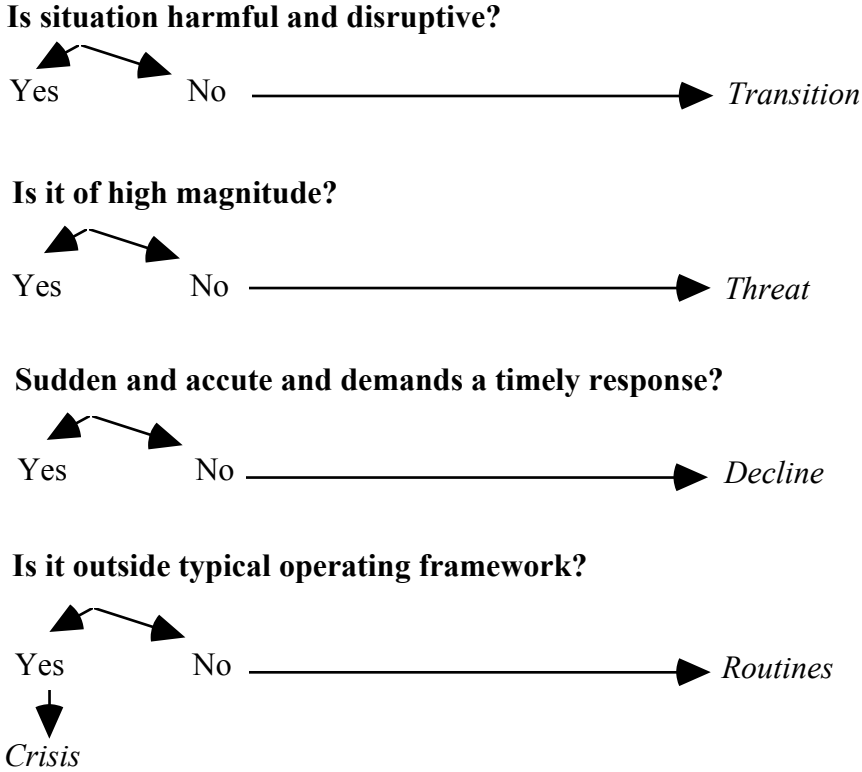
Risk management approach has however been strongly criticized. Perrow (1984) for example explains that risk analysis is very often a means to rationalize and legitimate decisions. Laufer (1993) deplores the sophistication of the field that becomes the realm of inaccessible expertises. Fisher (1991) asserts that risk analysis is a technocratic response to the increase of risks in modern societies and provides a rational and scientific basis to deal with events that do not only integrate technical components. Finally risk analysis is also suspected to legitimate and induce a passive attitude in crisis management. The degree of commitment and preparation would be closely related to the degree of risk of an event (Pauchant, 1988). The risk analysis approach is thus often completed with a magnitude analysis. This facet of crises has been widely discussed in the literature.

### **The magnitude of crises**

Whereas risk management is primarily concerned with the probability of occurrence of triggering events, researches on the impacts and consequences of crisis have focused on the magnitude of the event. The event view of crisis often suggests the idea of violence, gravity, critical phase, deadlock, conflict and tensions. Crisis is more often than not associated with the extreme severity of the difficulties it induces and its consequences. In nature crises are considered as a sudden attack. Its abruptness assumes a sudden start and an uncertain end. However any event can not be interpreted as a crisis until its actual and potential

consequences on the organization are known. Most of the researches in crisis management concentrate on this aspect. Different kind of impacts and consequences have thus been identified: impacts on the organizational behavior (Schmidt, 1983; Dutton, 1986; Forgues, 1993; Reilly, 1993), impacts on the strategic management of firms (Nystrom and Starbuck, 1984, Phelps, 1986; Lagadec, 1991), psychological impacts (Raphael, 1986; Powell, 1991), ecological impacts (Shrivastava, 1995). An agreement has been reached on the fact that crises are multidimensional and trans-situational (Gephart, 1988). In nature they expand their effects towards unexpected spheres of society, organizations and individuals.

This body of research is helpful to assess the magnitude of a crisis and its extension but also to induce managers to prepare a multidimensional crisis management strategy that embraces economic, strategic, technical, ecological and individual aspects (Kovoor-Misra, 1995). The research on consequences and impacts of crises also provides frameworks and interesting avenues to address the outset of crises and to distinguish between different “ levels ” of crises. For managers the question still remains to know when a situation has to be qualified as a crisis. What is the threshold between normality and crisis? There seems to be a continuum between what we call a normal situation and a crisis situation but the intermediary steps still remain unclear. Reilly (1993) for instance has distinguished five degrees: normal, transition, threat, decline and crisis each of them having different types of impacts on the organization (see figure 1).



### Figure 1.— Defining Crisis: A Heuristic (Reilly, 1993: 117)

This heuristic method is clearly inspired by an event approach and sets a series of landscapes to differentiate crisis from other kind of events based on the nature of their consequences on the organization.

Although research has provided useful results on the impacts of crises, more work is needed to increase our comprehension on the gap between the multidimensional characteristics of crisis and the technical orientation of most of the crisis management strategies in firms. Empirical evidences still emphasise this trend in the corporations (Kovoor, 1991; Roux-Dufort, 1997). The research agenda would benefit from works that could provide explanations on the articulation of the nature of crisis impacts and crisis management practices.

### **Contributions and implications of the process view on crisis management**

The study of crises has also benefited from the process perspective. This view offers others advantages for research and forces us to adopt different stances to grasp crises. The phases and steps that characterize crises in the process approach drive us to apprehend the chronology of crisis after and before the triggering event. Envisioning crisis as a process have progressively induced scholars to study the combinations, the connections, the sequences of circumstances that contributed to have it occurred, amplified and extended. The process view thus focuses the attention of researchers both before and after the triggering event. This perspective offers attractive avenues of research but still includes methodological limits.

### **The dynamics of occurrence**

The dynamics of occurrence of crises has been extensively studied based on a set of works that identified several phases in the occurrence of a crisis: crisis preconditions, warning signals, crisis triggers, crisis expansion, crisis resolution (Fink, 1986; Shrivastava, 1995). Combined with these works, the seminal research of Shrivastava (1987) has contributed to embrace crisis in a large historical, strategic and structural context. His work draws in the roots of past organization choices and decisions to explain the occurrence of crises. These perspectives on crises were helpful to distinguish the crisis from the triggering event and to capture the dynamics of it. What is even more important for research relies in the fact that longitudinal perspective may be used to track the crisis long before its occurrence and that case study appears to be one of most suitable methodologies to grasp the way crises have occurred in particular contexts and under peculiar conditions (Yin, 1990). However there are a number of limits of such methodologies. One of them, emphasized by Perrow (1994), is that what we learn about crisis occurrence is always based on a retrospective analysis of organizations that failed. For instance, it is only when a crisis has occurred that we delve into the organization and its systems. Doing so we often find a number of warning signals that, retrospectively, seem to be at the root of the crisis. To what extent the organization could have

identified these signals as warning signals before the crisis? Perrow (1994) adds that we lack a basis for comparison with other organizations and systems that do not fail:

“We say X and Y produced the accident, but if we find X and Y in many other plants but no accidents, where are we? Every time we try open the lid of damaged systems (Bhopal, Three Miles Island, Chernobyl, Challenger, etc.) we find an incredible array of precursorial errors. Aghast, we repeat on each occasion ‘This was an accident waiting to happen’. We do not look carefully at other systems in the same industry where no accidents have been experienced and conduct a thorough investigation to look for the causes of a hypothetical accident”. (Perrow, 1994: 9)

The question remains to understand why, in the same conditions, one firm fails and others don't. Perrow (1994) denounces the confusions we could make between precursorial signs and causes. Every investigation induces people to find what they expect. In case of a crisis, they find precursorial signs and causes and certainly conclude that an accident was actually waiting to happen; in case of a safe system, they will find that everything is in order. These limits offer us some interesting perspectives for future research. They suggest that the dynamics of occurrence of crisis should be studied in terms of risky configuration rather than primary causes or warning signals. An attractive avenue for crisis management from a process perspective would consist in identifying typologies of risky processes or configuration rather than typologies of triggering events.

### The dynamics of amplification and propagation

The process view also focuses on the evolution and the extension of a crisis to different spheres of the organization and its environment. Beyond the study of impacts or consequences that mostly falls within an event perspective, the process view helps understanding the propagation and the amplification of crises. A set of variables have been addressed to apprehend this process. The role of the media have been extensively studied but it still is the privilege of consultants and lacks scientific basis (Barton, 1993). Unfortunately few academic researches have been conducted on this topic in the field of crisis management. The burgeoning literature on crisis communication, very often coming from consultants also, has contributed to throw confusion in the field of crisis management by raising the feeling that crisis management was primarily a question of communication (Forgues, 1996).

Paradoxically, the media have often been used as a data material to study the amplification of crisis through the examination of alternative interpretations and conflicts of rationality from different stakeholders (Gephart, 1984, 1988, 1990; Roux-Dufort and Pauchant, 1993, Deschamps, Pauchant and Lalonde, 1995).

Another avenue for apprehending the process of amplification and propagation is the study of sensemaking practices. Beyond the understanding on how people gives meaning to a crisis,



the sensemaking perspective views crises as subjective experiences. Research thus suggests that the reality of crises may vary according to the meaning attributed by people. In essence, situations may be experienced as crises by some people whereas others view it as a simple perturbation. Weick (1988) shows that the act of exploring has an impact on what is being explored. In crisis situation people can't know what is the appropriate action until they take some action to manage the crisis and see what is actually happening. Actions are thus determined by the situation. The actions taken by people will strongly depend on their preconception of the situation and the initial behavior and action will determine the trajectory of crisis (Weick, 1988).

This sensemaking approach echoes the works on risk perception that have contributed to emphasize the subjective view of risk and the degree of risk that people may attribute to a situation. The level of risks attributed by people will influence partly the type of action they take to manage the crisis and thus will determine also the way crisis may develop over time. Dutton (1986) shows that crisis implies a perception that people face a potentially negative outcome. Crisis is thus the result of mixed perception based on different dimensions: importance, immediacy and uncertainty of an issue. The perceived value of loss and time pressure of an issue will then determine the interpretation of people and the strategy to manage this issue. Dutton and Jackson (1987) also draw on categorization theory to show that people and organization may respond very differently to the same strategic issue including crisis situations. They may attribute the category of threat, opportunity or crises to the same event. In the same vein, in the crisis management literature Pauchant and Mitroff (1992), Pearson and Mitroff (1993) have strongly insisted on the subjective and existential side of crises by identifying individual and collective defence mechanisms that could prevent people from preparing or responding to crises.

### Organizational change and learning

Behind the process view, a certain conception of time and evolution is adopted. The process view considers crisis as a series of phases and steps extended in space and time (Shrivastava, 1995). Moreover, crisis is seen as a step in itself in the evolution of an organization. Whereas the word crisis in French or in English refers to the idea of abrupt disruption, the Greek or the Chinese etymology of the concept preserves the idea of opportunity, evolution and transformation. Crisis may be thus analyzed as an intense moment of transformation that could potentially brings about radical changes in the organization. In the field of crisis management this view is pretty new. Shrivastava (1995) defines crisis as a process of transformation induced by a major disruption that forces the restructuration of social, human and natural systems. Deschamps *et al.* (1995), referring to the seminal paper of Morin (1993), show that crisis is a unique opportunity to change and learn. In the same vein Roux-Dufort (1996, 1998) treat crisis as a revealing event.

This perspective is rooted in a conception that denies the fact that evolution is a linear and continuous process (Morin, 1993). Rather it is viewed as the result of a series of accidents and disruptions that are the necessary conditions for transformation. In such a context crises may be an interesting angle to study changes and organizational learning in the organization. Crises would thus be seen as an operator of the organizational change. This perspective also forces us to consider crises as a positive rather than a negative experience. Even though theoretical and empirical evidences have been collected to show that firms were reluctant to learn from crises (Kovoor-Misra, 1995; Roux-Dufort, 1998) this perspective is one of the most promising avenue for future research in crisis management.

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**APPENDIX: A CONTENT-ANALYSIS OF THE DEFINITIONS OF CRISIS**

AUTHORS	Angles	DEFINITIONS	PROCESS PROPERTIES			EVENT PROPERTIES			
			Steps	Combin.	Transform.	Peculiarities	Surprise	Triggering	Origin
Hermann (1963)	<i>Consequences Dynamics</i>	<b>An event surprising individuals, restricting their time for developing a response and threatening their high-priority goals.</b>							
Billings, Milburn and Schaalman (1980)	<i>Nature Dynamics Consequences</i>	<b>Crisis is a situation that underlies a probability of potential loss for the organization and time constraint to solve.</b>							
Phelps (1986)	<i>Nature Consequences</i>	<b>State of urgency that requires an immediate attention and that may weaken the competitive position of the organization</b>							
Nystrom and Starbuck (1984)	<i>Consequences</i>	<b>Seriously threatens the continuity of the existence of the firm</b>							
Müller (1985)	<i>Consequences Nature</i>	<b>An undesired event that threatens the existence of the organization.</b>							



Shrivastava and Mitroff (1987)	<i>Consequences</i>	<b>Serious threat to the vital interests and the most important goals of survival of the organization.</b>							
Kovoor-Misra (1995)	<i>Consequences</i>	<b>Events that are a threat to the survival or goals of the organization</b>							

**APPENDIX (continued): A CONTENT-ANALYSIS OF THE DEFINITIONS OF CRISIS**

AUTHORS	Angles	DEFINITIONS	PROCESS PROPERTIES			EVENT PROPERTIES			
			Steps	Combin.	Transform.	Peculiarities	Surprise	Triggering	Origin
Forgues (1993)	<i>Consequences</i> <i>Dynamics</i> <i>Nature</i>	<b>Crisis is an event that provokes or may provoke tremendous damages (material or immaterial) where multiple stakeholders are involved and that demands an immediate attention.</b>							
Mitroff and Pauchant, and Shrivastava (1988)	<i>Consequences</i>	<b>Vast damages and social disruption (...) high impact damages on people and environment, important economical and social costs</b>							
Lagadec (1991)	<i>Consequences</i> <i>Nature</i>	<b>High impact disruption with vital stakes</b>							
Weick (1988), Mitroff, Pauchant and Shrivastava (1988) Shrivastava and Mitroff (1987)	<i>Nature</i> <i>Consequences</i>	<b>Low-probability, high impact event</b>							

Quarantelli (1988)	<i>Dynamics</i>	<b>Situation that offers little time to respond</b>							
Aguilera (1990) Slaikou (1990)	<i>Consequences Nature</i>	<b>Situation that presents a dilemma in need of decision or judgement that will result in change for better or worse</b>							

**APPENDIX (continued): A CONTENT-ANALYSIS OF THE DEFINITIONS OF CRISIS**

AUTHORS	Angles	DEFINITIONS	PROCESS PROPERTIES			EVENT PROPERTIES			
			Steps	Combin.	Transform.	Peculiarities	Surprise	Triggering	Origin
Fink, Beak and Tadeo (1971)	<i>Consequences</i>	<b>A human system (individual, group, organization or other) is assumed to be in a state of crisis when its repertoire of coping responses is not adequate to bring about the resolution of a problem which poses a threat to the system</b>							
Reilly (1993)	<i>Nature Consequences</i>	<b>A crisis is an harmful and disruptive situation, of high magnitude, sudden and acute that demands a timely response and outside the typical operating frameworks</b>							

**APPENDIX (continued): A CONTENT-ANALYSIS OF THE DEFINITIONS OF CRISIS**

AUTHORS	Angles	DEFINITIONS	PROCESS PROPERTIES			EVENT PROPERTIES			
			Steps	Combin.	Transform.	Peculiarities	Surprise	Triggering	Origin
Weick (1993)	<i>Nature Dynamics</i>	<b>A cosmology episode occurs when people suddenly and deeply feel that the universe is no longer a rational orderly system. What makes such an episode so shattering is that both the sense of what is occurring and the means to rebuild that sense collapse together. Stated more informally, a cosmology episode feels like vujàdé - the opposite of déjà vu : I've never been here before, I have no idea where I am, and I have no idea who can help me.</b>							
Dutton (1986)	<i>Causes Consequences Nature</i>	<b>Ambiguous situation where causes and consequences are unknown.</b>							

Shrivastava (1987)	<i>Nature</i>	<b>An accident turns into crisis when one is unable to manage it.</b>							
November (1984)	<i>Consequences</i> <i>Nature</i> <i>Dynamics</i>	<b>Crisis occurs bluntly turning from a latent into an acute state. It throws incoherence and leaves a feeling of “ rien ne va plus ”.</b>							

**APPENDIX (continued): A CONTENT-ANALYSIS OF THE DEFINITIONS OF CRISIS**

AUTHORS	Angles	DEFINITIONS	PROCESS PROPERTIES			EVENT PROPERTIES			
			Steps	Combin.	Transform.	Peculiarities	Surprise	Triggering	Origin
Pauchant and Mitroff (1992)	<i>Consequences</i> <i>Causes</i> <i>Nature</i>	<b>A crisis is a disruption that physically affects a system as a whole and threatens its basic assumptions, its subjective sense of self, its existential core.</b>							
Pauchant (1988)	<i>Consequence</i> <i>Causes</i>	<b>A accumulation of improbable events at the level of a subsystem or at the level of the system as a whole that can potentially damage more than one unit and thus disrupts the present operations or the future of the system under study as well as affecting substantially victims at the physical, psychological and/or existential levels.</b>							

Laufer (1993)		<b>Crisis stems from a disruption of shared meanings, socially constructed relationships and conventional legitimation mechanisms.</b>								
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**APPENDIX (continued): A CONTENT-ANALYSIS OF THE DEFINITIONS OF CRISIS**

AUTHORS	Angles	DEFINITIONS	PROCESS PROPERTIES			EVENT PROPERTIES			
			Steps	Combin.	Transform.	Peculiarities	Surprise	Triggering	Origin
Roux-Dufort (1997)	<i>Causes</i> <i>Consequences</i> <i>Dynamics</i>	<b>A process triggered by an event that activates a series of disruptions that, separately have no reason to degenerate and initiates a movement where a set of familiar and unfamiliar stakes and stakeholders clash. Crisis results from a sudden obsolescence of the organizational frame of reference that defeats temporarily or definitively its capacity of apprehending, managing and controlling the emergent events and generates consequences that may affect the strategy, the existence and the behaviors of the organization members and the stakeholders.</b>							

<p>Pearson and Clair (1998)</p>	<p><i>Nature</i> <i>Consequence</i> <i>Causes</i></p>	<p><b>An organizational crisis is a low-probability, high impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effects and means of resolution, as well as by a belief that decisions must be made swiftly.</b></p>							
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**APPENDIX (continued): A CONTENT-ANALYSIS OF THE DEFINITIONS OF CRISIS**

AUTHORS	Angles	DEFINITIONS	PROCESS PROPERTIES			EVENT PROPERTIES			
			Steps	Combin.	Transform.	Peculiarities	Surprise	Triggering	Origin
Shrivastava (1993)	<i>Nature Dynamics Consequences</i>	<b>Crisis refers to disruptive situations characterized by urgency of decision, large impacts and systems restructuring</b>							
Shrivastava (1987)	<i>Causes</i>	<b>Interactions of human, organizational and technological failures inside the organization coupled with interactions of economical, social and regulations policies failures outside the organization</b>							
Shrivastava (1995)	<i>Nature Causes Consequences</i>	<b>A crisis is a process of transformation induced by a major disruption that forces the restructuring of the involved social, human and natural systems.</b>							

