Crises and Crisis Management: Toward Comprehensive Government Decision Making

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ABSTRACT

Industrial Society is susceptibile to catastrophic events, including technological disasters and social and political crises. Risk, uncertainty, crisis, collective stress, and "normal accidents" now need to be incorporated into a broader understanding of how governments and decision makers respond to the un-ness *of crisis situations: unpleasantness in unexpected circumstances, representing unscheduled events, unprecedented in their implications and, by normal routine standards, almost unmanageable.*

Current horizons in disaster and related studies need to be broadened to incorporate a political-administrative perspective on crises and crisis management. Prevailing insights within disaster studies are reviewed, and a broader crisis typology is presented. In addition, a five-step heuristic is outlined that helps to identify perceived administrative challenges posed by specific crisis events. Finally, some general patterns of governmental crisis intervention are outlined in a second typology in order to stimulate more generic future research into crisis episodes.

With organizational structures more complex (Wilson 1975, 288-92) and technological systems becoming even more interdependent, vulnerable, and problematic in their intended and unintended consequences (Perrow 1984, 330; Sagan 1993), industrial societies are confronted with an increasing susceptibility to numerous and diverse catastrophic events. All too often, unfortunately, the impact of man-made or natural disasters is compounded because policy makers have prepared neither themselves nor the public for appropriate responses once tragedy strikes. Devastating events include natural disasters (Comfort 1989 and 1993); international and domestic disruptions in the delivery of

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vital goods and services (Perry and Haynes 1993); industrial (Shrivastava 1994) and nuclear accidents (Sagan 1993); leisure center fires (Turner and Toft 1989); aircraft and marine accidents (Perrow 1984); loss of control over laboratory experiments (Bradford et al. 1994); and starvation and epidemics (Benini 1993).

Many policy analysts consider adversity to be the key concept of the 1990s (Dror 1986; Wildavsky 1988). Although in international relations, for example, prevention of nuclear war or control of the diffusion of fissionable material may be of pivotal concern, there are many other risks. Natural hazards have the special quality of emphasizing man's relative helplessness. In stressing the relationship between natural disasters and the technological abuse of the environment (Fesbach and Friendly 1992), many geographers now insist on the importance of man's capacity to prevent further deterioration of the ecology (Hewitt 1983).

For many, modern society is characterized by the non-random generation of risk (Beck 1992) and, in particular, by the deployment of high-risk technology (Perrow 1984; Sagan 1993; La Porte 1994). People who live with high-risk technologies do so in a setting where many of these crisis events take on the condition now known as *normal accidents* (Perrow 1984). This does not mean that organizations or actors refrain from taking technological action. According to Perrow, however, some technologies need improvement whilst others need to be restricted, even abandoned, in favor of a Luddite-like belief in solving technological threats. Recognizing and stressing the human as well as, increasingly, the organizational and political components in these crisis events (Winner 1972; Taylor 1975; Lagadec 1988) opens up the challenge of rethinking strategies for planning and preparedness in risk situations (La Porte and Consolini 1991; May 1994; Turner 1994).

It is now time to broaden the horizons of disaster-crisis research. At present, it tends to be overly compartmentalized with important yet separate work in international relations and disaster sociology (Quarantelli 1987; Drabek 1990). Taking a political-administrative perspective on crises and crisis response, the combination of insights on how to manage extraordinary events becomes somewhat more evident, perhaps even more pressing. From the perspective of decision makers and government agencies dealing with crisis situations, there are many similarities between seemingly unique risk settings and crisis events.

A more comprehensive analysis of crisis management needs a more focused understanding of processes involved in crises and of the challenges these processes pose for administrators. This article provides such conceptualization and outlines a more encompassing crisis typology. In addition, the authors outline a five-step heuristic and suggest a procedure to help identify perceived administrative challenges posed by specific crisis events. Finally, they outline some general patterns of governmental crisis intervention, which may serve to stimulate increasingly important future research on crisis management.

CRISES: TOWARDS A MORE GENERIC UNDERSTANDING

According to Dynes (1974), similarities can be established between various categories of exceptional circumstances. One might view disasters, riots, and terrorist actions, for example, as crises. If it is accepted also that crises may be viewed usefully as "occasions for decision," then an approach especially designed to deal with the decision-making and management aspects of crisis situations would seem to be quite appropriate (Robinson 1972). At first glance, then, Hermann's (1972, 13) classic definition seems to be quite apt: "A crisis is a situation that threatens high-priority goals of the decision-making unit, restricts the amount of time available for response before the decision is transformed and surprises the members of the decision-making unit by its occurrence."

Upon further examination, however, this definition requires some adjustment. In order to render the concept suitable for the wider context of social, political, and organizational circumstances, it would be necessary to formulate the reference point of threat in a broader sense; it is not necessarily only goals that are involved. Threat may be more subtle than immediate survival. The crisis decision-making situation is, nevertheless, characterized by the necessity to make critical choices. This is particularly so with protracted crises or 'creeping crises' (Rosenthal, 't Hart, and Charles 1989, 27), especially social, political, or even environmental crises which take some time to develop into more conventionally understood acute or dramatic events (Kouzmin and Jarman 1989; Jarman and Kouzmin 1990; 1994a; 1994b). The third defining feature—the surprise element—presents numerous problems (Hermann 1969; Rosenthal 1986). It would be more appropriate to view the surprise element as only one of many factors that can lead to a relatively high degree of uncertainty and view high uncertainty as a defining feature of crisis situations. This brings one to the following definition of crises:

> . . . a serious threat to the basic structures or the fundamental values and norms of a social system, which—under time pressure and highly uncertain circumstances—necessitates making critical decisions. (Rosenthal, 't Hart, and Charles 1989, 10)

If adversity is associated with unpleasant developments and negative trends, crisis relates to acute, indeed critical, situations (Dror 1986). Crises involve an accumulation of adverse conditions, severe threat, uncertainty, and the necessity for prompt decision making, often in situations where normal communications are cut. With this breakdown of information and decision there is very likely a cut in routine response agency capacities (Comfort 1994; Garnett and Kouzmin 1996). The situation may be caused by nature or may be man-made—for instance, earthquakes versus a fierce confrontation between ethnic groups. Man-made crises may result from the loss of technological control or from identifiable human errors. Man-made crises also point to deliberate attempts to reshape the social and political fabric. They also may follow from a constellation, if not sheer coincidence, of unfortunate factors.

Crises can have international, domestic, local, or organizational dimensions, or they can involve a mixture: for example, threat of nuclear war, an embargo on the export of oil or wheat to hostile countries, or unrestrained conflict in large, nonprofit institutions. Crises also can involve danger to the physical integrity of citizens, inflicting damage arbitrarily or selectively: for example, the hijacking of a train or the kidnapping of a prominent political or corporate leader. Crises can also emanate from a threat to employment and economic prosperity, the closing of a plant in a single-factory town, the closure of a mine in a coal region, or the sudden drop of investment in a national economy.

The variety of crises is stunning (Rosenthal and Kouzmin 1993). Crisis analysts have been trying to impose order on this variety by developing typologies of crisis events. It appears, however, to be increasingly difficult to arrange for typologies on the basis of practical notions. Many classifying criteria suggested in older—and in even more recent—research (Drabek 1986) seem to have lost relevance. Sociological analyses do not focus on the political-administrative dimensions of crisis; the apparent narrowness of natural disaster focus in research needs to be extended to include a wide range of extraordinary and critical events, governmental perspective, and the problems for decision making and management that crises pose.

Natural and Man-made Disasters

Hewitt (1983, v) observes that floods, droughts, and other natural disasters are often due to technological misuse. It also should be noted that some natural hazards may, in fact, be more predictable than many social and political developments (Hewitt 1983, 25; Jarman and Kouzmin 1994b; Vaisutis-White 1994). The greater the emphasis on mitigation and preparedness, the more questionable becomes the idea of natural disasters as acts of God vis-à-vis man-made disasters. In the disaster literature, well-considered classifying criteria such as the speed of onset and the length of forewarning have lost significance. Early warning systems have converted hitherto absolute factors such as the speed of onset into relative and partially controllable ones (Kouzmin and Jarman 1994b). Today, the degree of accuracy of international earthquake predictions more often than not reflects political interests rather than the state of geological or seismological expertise (Olson 1989). International earthquake predictions have now unleashed efforts that turn hitherto uncontrollable forces into social and economic variables (Ink 1990). Technologies may well be man-made, but many observers notice that they give rise to disasters which, except for the notorious element of human error, eventually seem to be virtually devoid of a human component (Perrow 1984).

It should also be noted that an intimate knowledge of specific disaster cases invariably produces questions rather than answers and unambiguous classifications. The Holland flood disaster of 1953, for example, is best understood in terms of a complex set of contributing factors—short-term and long-term, within, as well as beyond, human control and foreseen by some but not others (Rosenthal 1986 and 1988). Similarly, train accidents and a number of medium-scale petrochemical calamities (Leivesley 1993) could have been prevented, at certain cost, but paying for safety in one sector might easily have meant reduced protection and an increased risk in other sectors of the economy (Wildavsky 1988).

Consensus and Conflict Emergencies

Some insight is gained by distinguishing between consensus and conflict in emergencies (Stallings 1978). However, it should be said that natural disasters, which have been seen as the prototype of consensual emergencies, often turn out to have considerable conflict potential. The greater the number of people who are aware of the costs, benefits, and actual distribution of costs and benefits of natural disaster management, the greater will be the inclination to define the situation in antagonistic terms. Modern

interpretations of natural disaster processes stress the conflictive dimensions of the relationship between emergent groups and formal organizations in disaster responses (Drabek 1986; Dynes 1990; Comfort 1993; Quarantelli 1988 and 1993).

On their part, apparently conflictive emergencies such as wars, revolutions, revolts, civil disturbances (Jacobs 1993), and terrorist actions (Birrell 1993) show many characteristics short of absolute confrontation. For conflicts to emerge and be understood, there should be at least some common ground among the conflicting parties (Coser 1968) and these parties should have a minimal understanding about the mutual incentives to act in a certain ways (Dror 1994). Even during the purest type of open confrontation (wars), common understanding and communication may prevail (Axelrod 1984; McInnes 1994). It is far too simple to conceive of conflictive emergencies as bipolar encounters. Such emergencies feature many interests and shifting coalitions. Interestingly enough, seemingly opposing parties may, after all, lack the will to go for a final contest (Coser 1968). At the ultimate moment, revolts, civil disturbances, and hostage taking also may become entangled in a web of antagonistic, as well as reconciliatory, orientations.

Nuclear and Nonnuclear Emergencies

The growing fear of nuclear plant disasters has stimulated an interest in the nuclear/nonnuclear dimension to high-risk technologies (Perrow 1984; Sagan 1993; Rosenthal and Kouzmin 1994). Lagadec (1982, 471) pleads for "a general educational programme to prepare for life in the nuclear era," while Perrow (1984, 327) places nuclear plants and nuclear weapons next to each other on the scale of high-risk technologies, both being ominous combinations of complex and tightly coupled systems. Perrow (1984, 349) further suggests that while dams, mines, airways, and petrochemical technologies should and can be improved, marine transportation and DNA technologies, for example, should be abandoned.

But it is not as simple as that. In one of the most intriguing analyses of nuclear crisis management, Lebow (1987) cites the outbreak of World War I (a conventional war) as the foremost analogy for the scenarios that might lead to World War III. Coming full circle, he also suggests that nuclear crisis analysts and policy makers may have something to learn from organizational studies on high-risk technologies (Lebow 1987). As to the possible consequences of nuclear war, Thompson (1985, 36) comes to the modest conclusion that "no accurate predictions can

be made without assuming that findings from other threats can be applied to nuclear warfare."

Analytical Typologies

Others have developed more-analytical typologies, distinguishing between different *phases* of emergencies, which are said to give rise to specific phenomena of collective behavior and management problems (Barton 1969; Perry 1985). Scope of impact, speed of onset, duration of impact, secondary impact, and social preparedness pertain to different phases of emergency management. Aside from the fact that these typologies are strongly biased toward disaster types of crises, they are also unspecific with regard to the actors potentially involved in emergency management. These analytical typologies run the risk of moving toward a prematurely generalized theory without sufficiently taking into consideration the many pitfalls already present in current and less generic approaches.

An Alternative Typology

Aiming for a more comprehensive approach, one that enables an understanding and categorizing of the variety of crisis events, an alternative typology is proposed and presented here. It is based on the distinction between two types of variables: those pertaining to the threat itself and those pertaining to the perception of solutions held by crisis participants. The typology is depicted in exhibit 1.

First, crises differ according to the *object of the basic threat*. In some cases it concerns basic structures of institutions within social, organizational, and political life. Examples might include occupation of government buildings by hostile groups or destruction of major urban infrastructures by earthquakes. In other crises, the threat primarily concerns certain crucial norms and values: the physical and mental well-being of citizens or the rule of law or prosperity.

Second, *the domain of threat* can be viewed in geographical terms: within a certain organization or building, local, regional, national, and international. Threat domains may fluctuate due to spillover effects. For instance, the Falklands crisis and the subsequent war between Argentina and Great Britain ultimately brought about the demise of Argentina's ruling junta. Domain also can be categorized according to the extent of damage suffered. From this perspective, wars and large-scale disasters stand out quite prominently—although this partly depends on the size and culture of countries involved.

Exhibit 1
Crisis Typology

Basic Threat	"Conflict" Crises		"Solidarity" Crises	
Domain of Threat / Origin	Endogenous	Exogenous	Endogenous	Exogenous
International	(Red Army) RAF (Basque Resistance) (ETA)	Terroristic hijackings		Chernobyl in Western Europe
National	IRA		Flood Zeeland 1953	Sandoz poisoning of Rhine Delta
Regional				
Local	Squatter riots Violent demonstrations		Bhopal	
Organizational	Factory occupations		Factory fire	

Third, *the origins of threat* can be either endogenous or exogenous to the system affected. It may be difficult to fight the cause of a threat from without. The West-German government at the time of Chernobyl could not prevent or directly mitigate the spread of contamination over the country, as territorial boundaries limited its freedom of action—what was left was the challenge to cope with the facts of life imposed by events outside West German control (Löwenhardt and van den Berg 1989; Czada 1990). This limitation to crisis response posed by sovereignty raises some fundamental issues for government decision making and administration conceived in terms of specific and sovereign jurisdictions.

On the other hand, endogenous threats often bring tensions into the open and have an escalatory power that threatens an organizational or political system. If decision makers themselves are among the threat agents, questions emerge about the crisis management capacity of those held responsible for averting the threat.

Turning to the perceptions of crisis participants, two additional distinctions complete the basis for the crisis typology. Crisis participants may concur or differ as to the *perceived necessity of response* ('t Hart, Rosenthal, and Kouzmin 1993). This pertains to the well-known problem of objective and subjective dimensions of crisis. Crises are in the eyes of their beholders; if individuals (and the media) define a situation as a crisis, it is crisis in its consequences (Crelinsten 1994). Yet it should be noted that what certain groups within society deem a crisis well may be perceived by others as an opportunity to induce change (Rosenthal, 't Hart, and Kouzmin 1991). One's crisis is often another's opportunity. During large-scale disasters, these different perceptions and interests will not immediately constitute a major issue; however, they do so when it comes to perceiving the degree of threat embedded in protest demonstrations (Rosenthal 1989), kidnappings (Rosenthal and 't Hart 1989), bombing attacks (Assefa and Wahrhaftig 1989), or environmental damage (Nakamura, Church, and Mumpower 1994; Nijkamp 1994).

Even when all parties more or less agree about the gravity of the situation, differences may arise over appropriate implementation strategies for crisis resolution (Kouzmin and Jarman 1989, 408-10). Value conflicts may form the basis of painful decisional trade-offs (Dror 1994). In the initial stage of a natural disaster, for example, should all efforts be directed at the then-known epicentre of the disaster or should personnel and material resources be kept in reserve in order to fight further, even worse,

calamities in other areas (Comfort 1989)? What priorities must be set in urgent evacuations from contaminated areas (Scanlon 1989)? Who gets into the fall-out shelters in the advent of an (accidental) nuclear war? What is the best approach to use in containing urban riots (Jacobs 1993)? Which AIDS patients will be selected for a new, promising—but costly—treatment? During an escalating mass event such as crowd violence at a sporting venue, should priority be given to restoring public order or to clearing critically injured victims from the fighting area ('t Hart and Pijnenburg 1989)?

If all participants converge on a particular implementation strategy for crisis resolution, the crisis is characterized by a solidarity response. This is said to happen when an entire community faces a common external threat, such as during wide-scale natural disasters (Quarantelli 1993). It has already been remarked, however, that few crises actually conform to this pattern; disasters have been known to trigger conflicts between communal and official relief efforts as well as true bureaucratic battles between the good Samaritans of various competing rescue and relief organizations (Benini 1993). When conflict over crisis response strategies and tactics prevails, conflictual emergencies occur.

The typology should not be viewed as a comprehensive device for attempted grand theory or analysis (Rosenthal, Charles, 't Hart, Kouzmin, and Jarman 1989, 436-47). It should, instead, be used as a tool for placing crisis events within a broader framework of similar events. Taking a dynamic view, one could use the typology to trace the developments of a crisis event as it changes over time, taking on new dimensions, posing new decisional problems, and requiring different response strategies (Kouzmin and Jarman 1989; Jarman and Kouzmin 1990).

FROM CRISES TO CRISIS MANAGEMENT: REINTRODUCING A GOVERNMENTAL PERSPECTIVE

The notion of crisis is not contingent upon any specific administrative design for coping with the situation. The crisis concept gives free range to the widest possible consideration of causes, triggers, coincidental factors, and social or organizational actors. It is clear that governments themselves may provoke crises; that apparent crises may, in fact, turn out to be pseudo crises; and that there is a great difference between risk, threat, and urgency on the one hand and consequent action on the other.

There has been a tendency in the research on particular kinds of emergencies to play down the role of government

(Quarantelli 1978). This is not to deny the relevance of that approach. Sociologists and social psychologists who dwell on the significance of emergent groups and nongovernmental decision making provide valuable insights. But, in many countries and regions—both in the West and in the Third World, not to mention transitional former socialist countries—one cannot wish away the prominent role of government in emergency situations. In the United States, where this tendency has been particularly strong, one may indeed observe a renewed interest in governmental policies with regard to emergencies, if not emergency decision making in the strict sense (Petak and Atkisson 1982; *Public Administration Review* 1985; Comfort 1988).

To stress the importance of analyzing governmental dimensions in crisis management ('t Hart 1990) is also to imply an awareness of controversial elements with regard to governmental crisis management. First, it should be understood that governmental authorities suffer because in a crisis situation their legitimacy is not uncontested. The occurrence of a crisis raises questions about the ineffectiveness of governmental agencies and authorities in preventing the occurrence (Kouzmin and Jarman 1989, 397-98).

Second, there is no specific reason to ascribe a specific role to government during processes of crisis decision making. Governments may make decisions that unduly aggravate the crisis. Governmental authorities may lack physical courage. They may be completely passive ('t Hart, Rosenthal, and Kouzmin 1993). They may be hypervigilant and overactive. They may learn wrong lessons (Axlerod 1976; Ford and Hegarty 1984; Ahrari 1987; Schwenk 1988). In short, the frequency of government (in-)action during crises certainly does not imply that government action is always functional or beneficial (Janis 1972 and 1989; Quarantelli 1978; Cuny 1983; Christensen 1985).

Third, one should forget about *the state* or *the government* as reified and unified actors during crises. Crises are political events par excellence. Not only are they "occasions for decisions," but they are also occasions for a restructuring of power relations. Intergovernmental and bureaupolitics are an integral part of governmental decision making in crises (Rosenthal, 't Hart, and Kouzmin 1991). *Comprehensive* emergency management and *integrated* emergency management systems sound rational. In most countries they are, however, best viewed as official doctrines and rationales disguising conflictive political and organizational realities (Cohen, March, and Olsen 1972). For instance, official doctrine may give local governments some say, but when crisis manifests itself, local officials may be fully

subordinate to strong politicians with nationwide and, increasingly, CNN-sought appeal.

Fourth, this applies not the least to the very organizations that are supposed to play a prominent role in emergency situations. The activities of so-called emergency organizations such as the civil defense, police, fire squads, and the military often show a peculiar combination of functional and dysfunctional qualities. On the one hand, they tend to be the first to appear on the site of the calamity. During the first hours of chaos, they demonstrate the highly necessary skills for improvization and immediate action. They know how to launch large-scale operations involving large numbers of people and equipment, as well as increasingly sophisticated emergency technology.

On the other hand, the problems and intricacies of crisis and emergency management manifest themselves patently in the single and coordinative activities of these emergency organizations. Many emergency organizations have much to gain or lose in crises and emergency situations. The actual moments of crisis are the very moments their organizational existence may be at stake. If they fail in crisis and emergency management, they fail in their core business. This may cost dearly and, indeed, raise questions about organizational tensions. Elsewhere, the reorientation of the armed forces in the direction of constabulary and counterdisaster assignments has given rise to both fundamental questions and more prosaic sorts of allocative and budgetary considerations from civilian agencies.

One does not have to wait for the actual occurrence of crises and emergencies to notice the role of emergency organizations in the politics of crisis management. In some countries, the loss of leverage on the part of civil defense and the increasing importance of fire chiefs did not come without considerable strife and interorganizational tensions. Elsewhere, the reorientation of the armed forces in the direction of constabulary and counterdisaster assignments has given rise to both fundamental questions and more prosaic sorts of allocative and budgetary considerations from civilian agencies.

It should be added that those emergency organizations which, apart from acute crisis and emergency situations, operate as the front runners preserving and guaranteeing the regular functioning of the social fabric, may feel the burden of these duties in their day-to-day activities. Taking one step beyond the hectic moments of acute crises, sudden disasters, and riot-prone flashpoints, some emergency organizations such as the police may feel constant pressure to perform better in a context best

described in terms of "impossible jobs" (Hargrove and Glidewell 1990). Consequently, they may experience exhaustive stress, which tends to bear negatively on their ability to do a "proper" job the moment the crisis strikes (Wenger, Quarantelli, and Dynes 1989).

GOVERNMENT CRISIS DECISION MAKING: FIVE HEURISTIC STEPS

An important distinction in crisis management relates to *actor* (contemporary, subjectivist) and *observer* (post-hoc, objectivist) perspectives on crises. What constitutes a crisis for a government may be perceived by its critics as a rare opportunity to initiate and enforce policy or regime changes. Also, governments often misperceive the gravity or specific nature of threat. "Autistic" administrators fail to react to clear-cut warning signs of impending danger, as happened in Colombia before the volcanic eruption of 1985. "Hyper-vigilant" administrators may engage in frantic mitigatory action in view of contingencies that do not really materialize, or they may prepare for the wrong threat, perhaps guided by inappropriate lessons from the past.

Recognizing the importance of multiple and reflexive cognitions (Kouzmin 1983; Leivesley, Scott, and Kouzmin 1990, 387), research in strategic management, for example (Schwenk 1988), has begun to focus not on individuals and individual differences, but on cognitive structures and processes which may in crises situations be shared by strategists (Axlerod 1976). Modeling complex intellectual processes embedded in social, political, and organizational contexts is certainly a daunting ambition (Jarman and Kouzmin 1994a and 1994b). However, it is increasingly important to consider decision strategies and heuristics that move toward such understanding. Cognitive heuristics and biases (Schwenk 1988), cognitive frames (Janis 1972 and 1989), strategic assumptions (Ford and Hegarty 1984), and analogies and metaphors (Morgan 1980; Alvesson 1993) do not exhaust a possible list of areas linked to crisis cognitions, but, clearly, these areas help us to understand ways in which crisis elites comprehend and routinize crisis situations (Jarman 1994).

Schwenk's (1988) survey of contemporary research on strategic cognition, for example, is extremely pertinent to comprehension and modeling in many different crisis situations. The "un-ness" of crisis (Hewitt 1983, 10), manifested as an unpleasantness in unexpected circumstances, representing unscheduled events, unprecedented in their implications and almost unmanageable, by definition, renders crisis situations cognitively complex. Yet, within this putative complexity,

cognitive simplicity has tended to prevail. This may operate through simplifying biases (Hogarth 1980), which can lead to severe and systematic error; it may also operate through limited cognitive maps that exist at organizational levels. Schwenk (1988, 46) points out that cognitive maps, though often used to represent individual worldviews, also may be used to represent shared assumptions among strategic decision makers. Whilst the purpose of cognitive mapping is relative to constructing a policy domain, such maps also oversimplify. According to Ross, in decision makers' cognitive maps

> . . . few goals are represented, even though multiple goals may be relevant to any particular problem; only short paths of arguments are represented, even though larger chains of causality may be justified and causation between variables is seldom part of these maps. Decision-makers tend to think in terms of one-way causation. (1976, 96-112)

A political perspective on crises and crisis management should take into account that some actors within or outside government actually may attempt to create a crisis atmosphere in order to achieve personal, institutional, or political advantages: in other words create pseudo crises. A familiar example of crisis creation is embodied in the so-called domestic causes thesis of international conflict. According to the proponents of this theory, the aggressive foreign behavior of nations can be explained by their leaders' desire to deflect attention from domestic adversities and opposition toward external opponents (Coser 1968; Wilkenfeld 1973; Lebow 1981).

To allow for a more clear-cut analysis of governmental crisis decision making, therefore, a five-step framework bridging the gap between observer and actor perspectives is needed. Analysts of crisis events might consider five consecutive heuristic steps in order to help establish whether in any given political setting governmental crisis decision making is taking place or is actually necessary.

STEP 1: Does a serious threat exist to the social-political system?

The central question is whether there is a threat to the *existing* sociopolitical system. Threats pertain to the system as a whole or to widely divergent configurations of subsystems at different points, such as limited geographic areas, specific areas of economic activity, or specific population groups.

For instance, while terrorist hijackings could be viewed narrowly as simply a threat to hostages whose lives are at risk,

the broader issue is one of a direct challenge to an organization or government to make concessions on a contested political issue. Beyond the immediate time frame of any terrorist action, a government's handling of such a crisis may affect other groups' propensities to engage in similar actions in the future.

Rapid technological and social-economic developments over the last decades have installed a widespread faith in new technologies, but they also have increased society's interdependence and a vulnerability in the absence of the smooth operation of high-technology facilities (Perrow 1984; Wildavsky 1988; Sagan 1993). Catastrophes such as those in Bhopal (Shrivastava 1989) and Chernobyl (Löwenhardt and van den Berg 1989) raise questions about prevailing social, economic, and technological priorities. It is conceivable that social and political systems cannot handle certain high-risk technologies (Perrow 1984; Rosenthal and Kouzmin 1994). Technological emergencies (Lagadec 1982 and 1988) undermine the general legitimacy of technological and scientific developments and from this emanate additional threats to dominant values of "laissez-innover" ideologies (McDermott 1969, 27) that prevail in developed political economies.

STEP 2: The Necessity to Respond to Threat

It is often forgotten that a severe threat to the fundamental structure of a social-political system is a problem only to the extent that the *persistence* of that system is considered to be an important postulate. There have been times when a natural disaster was seen not only as an act of God but also as a metaphysical message that one might consider leaving the stricken area to Providence.

In systemic terms, a key question regarding the necessity of a response to threatening inputs bears on the dilemma of *restoration* versus *adaption* or *innovation* as the appropriate functional requirement. How broadly should *persistence* be defined? Is every form of challenge implying structural or cultural adaption to be considered a threat? Systemic stability is not always a widely held axiom (Rosenthal 1990, 392), especially in pluralist settings. Indeed, crises may be catalysts of long-needed change and innovation. However, in many cases, this requires an often painful and controversial process of redefining the situation, the *unlearning* of long-established behaviors and expectations, as well as the development and implementation of specific and adaptive policies.

STEP 3: The Necessity for Government Decisions

Here the point of reference is the capability of elites, the political and bureaucratic authorities in particular, to respond to the challenge of serious threat. Having accepted the postulate of system survival, one faces the question of capabilities and responsibilities. It should be stressed that there is no logical requisite for political and bureaucratic authorities to get involved. Furthermore, there is no guarantee that their activities should invariably result in effective crisis management (Jarman 1994).

An appreciation of contingency-related possibilities is one of a political actor's important skills. For administrative and organizational actors alike, however, contingency stemming from adverse or complex situations has not yet been fully recognized as a critical element in decision-making strategy. This is, in part, a consequence of the fondness for divided responsibilities in administration with an attendant fragmentation of, and an inability to coordinate properly, various interdependent activities. Surprisingly, even today, functional organization dominates in spite of the problem of departmentalism that centers around two conflicting variables: one that emphasizes the requirements of coordination and another that emphasizes the requirements of specialization. Forms of departmentalism that are calculated to be advantageous in terms of one are often costly in terms of the other. Little attention is paid to the specific requirements of increasingly contingent, crisis-related tasks. Often, government authority is not of first importance in the face of disaster, and in such a power vacuum situational leadership opportunities emerge ('t Hart, Rosenthal, and Kouzmin 1993).

Contingency and the need to develop new activities quickly make administrative coordination based on preplanning of routine tasks obviously difficult. Where neither means nor ends are explicit, one administrative strategy sensitive to acute contingency is associated with *synthetic* organization (Thompson 1967, 52-53). Such forms emerge without the benefit of planning or formal blueprints and without prior designation of authority or formal sanction to enforce subsequent rules or decisions. These ad hoc synthetic organizations can be highly effective in achieving complex or highly contingent tasks, but they are rarely efficient in resource terms. The overriding reason for this tension between effectiveness and efficiency is that the synthetic organization must simultaneously establish temporary structure and carry out nonroutine operations.

The assignment of vital tasks of disaster management to public authorities not well geared to negotiative interaction

(Galbraith 1973) or synthetic organizational responses goes undisputed in most countries. This is not to say that governmental task performance in disaster situations has been without criticism (Smart and Vertinsky 1977; Dror 1986; Britton 1990; Kouzmin and Jarman 1995). Unmistakably, there has been quite some discrepancy between public expectations, including those of disaster victims, and how public authorities and government agencies have met the standards set so easily in legal or functional terms (Kouzmin, Leivesley, and Carr 1996). The necessity for governmental decisions acquires special meaning in crises involving an outright and open threat to public authorities, such as during politically charged civil disturbances (Birrell 1993). Not only is there a direct clash between activists and government, it is likely that there will be discrepancies between the perceptions and actions of, for instance, local and national-level authorities. Government decisions may be necessary to counter the threat, but it is a matter of interpretation and dispute which government actor or agency should control the response.

Other crises seem to defy governmental intervention, such as corporate crises (Sipika and Smith 1993), or critical periods in putatively autonomous bodies (Richardson 1993) and financial institutions (Basu 1993). Government intervention is deemed necessary only when there is unambigious evidence that the organizations involved cannot cope with the threat, or if the implications of these crises begin to transcend the corporate and institutional context and are redefined as a cause for public concern. This is true for corporate takeovers and mergers in critical industries as well as for reorganizations and conflicts in hospitals and other medical and paramedical institutions and organizations that do not fall easily into the private-public distinction (Bozeman 1987).

STEP 4: Promptness of Decisions

The fourth heuristic step in understanding, even shaping, possible governmental crisis decision making involves the necessity for prompt decision making by government authorities. Urgency suggests an additional predicament of crisis decision making. On the one hand, prompt decision making is uncommon to public institutions. Democratic systems in particular have not been designed for this purpose (Rosenthal 1990). Rather, they are noted for their emphasis on formal consultation, deliberation, and sometimes-complex accountability procedures. The bureaucratic machinery derives both its strength and its weakness from a time-consuming modus operandi. It is designed to convert information into familiar and routine categories and is unable to respond at the very moment it is confronted with inputs that cannot be

treated in that way. On the other hand, critical situations often require a quick response. The longer that decision makers are engaged in searching for optimality or a synoptic rationalism (Ramos 1981), the larger the risk that events will run out of control. At the same time, decision makers cannot settle for incremental solutions either, muddling through being incompatible with a dramatic deterioration of the "normal" state of affairs (Dror 1964 and 1986; Kouzmin and Jarman 1989 and 1995). If government authorities and public agencies are not accustomed to the kind of setting created by crisis (Herek, Janis, and Huth 1987), they may have no alternative but to go for both prompt and risky decisions.

Under conditions of high uncertainty or complexity, government agencies and public organizations must respond to the problem to be solved while they at the same time assemble and interrelate functional activities without the benefit of established procedure, authority, or, often, known channels of communication. Such an administrative process has been characterized as a strategy of *concurrency* (Kingdon 1973, 160). This is a device used to shorten the time from policy formulation to implementation. In political crises it may mean the suspension of standing orders. However, because of errors, inadequate plans, and frequent but necessary changes, concurrency—or improvisation (Rosenthal 1984)—can be a very expensive means of implementation. When applied to innovative or complex situations, concurrency may save time in the long term, but in the short term it invariably proves costly.

Above all else, concurrency involves a high degree of collaboration across functional, coalitional, and organizational lines. Hence, what synthetic organizations might have, when compared with more traditional and formalized administrative responses to crises and adversity, is a basic consensus among key actors about the state of affairs to be achieved. This consensus is precarious and is associated with a greater freedom to acquire and deploy resources, since normal institutions of authority, property, or contract are not operating (Stretton 1976; Britton 1984). Central to these crisis situations is the question of time. The suspension of normal institutions of authority and contract, in light of an agreement about temporary or crisis goals, is not likely to endure if these emergent arrangements cut across important agency or bureaucratic jurisdictions.

Consequently, while concurrency in crisis situations tends to be especially effective in overcoming technical and political uncertainties, such collaborative implementation strategies tend to collapse in the face of increasing political criticism or opportunity

(Rosenthal, 't Hart, and Kouzmin 1991) associated with increasing time, cost, or public expectation pressures. Time, then, is a crucial element in *maintaining*, rather than initially obtaining, the resources and support required to deal with complex obstacles (Peres 1968; Sapolsky 1972, 5; Clark 1985) or crisis-related uncertainties (Benini 1993).

The systems perspective relied upon thus far suggests that government authorities engage in prompt decision making in nearly all cases. Assuming specific responsibilities of government officials, the implication is that they intervene immediately and that every hour of nonactivity and procrastination has a considerable multiplier effect. Brusque decision making by public authorities is not always the case, however (Stallings and Quarantelli 1985, 93-100). The necessity for prompt decisions may be met by deliberate strategies of synthetic organization, concurrency, improvisation, temporary delay, avoidance, paralysis, delegation ('t Hart, Rosenthal, and Kouzmin 1993, 35), or, indeed, by an explicit conclusion that it might be better not to intervene. At the same time, any such inaction can lead to extreme time pressures at a later moment and, consequently, to ill-considered and counterproductive response decisions.

STEP 5: Government Authorities in Crisis Decision Making

The fifth stage involves the transition from an external observation of the necessity for government authorities to engage in crisis decision making to the authorities' perception that they should, indeed, make critical decisions at short notice. The *observer* and the *actor* perspectives coincide when political and bureaucratic authorities perceive a severe threat to the system, share the conviction that the system should not be put at risk, feel a commitment to make critical decisions in order to avert or contain a threat, and are aware that time is short.

GOVERNMENT-IN-ACTION: TOWARD A TYPOLOGY OF CRISIS RESPONSES

In this article, we have identified some key situational and process dimensions of crisis events, and we have presented a preliminary framework for identifying the nature and extent of possible government involvement in crisis management; it will now be a valuable exercise to outline in greater detail the dynamics of political-administrative crisis responses. Many inductivist lists have been built around propositions that involve crisis behavior (Hermann 1972; Holsti 1972; Janis 1972 and 1989; Smart and Vertinsky 1977; Brecher 1978 and 1980; George 1986; Drabek 1986 and 1990). These propositions bear

upon individual-, group-, and organizational-level responses to threat; distinguishing between different dimensions of response; organization and authority; information and communication processes; and psychological reactions to stress (Rosenthal, Charles, and 't Hart 1989). This literature generally has failed to produce a substantive theory of crisis decision making, which, in turn, would give rise to deductive hypotheses on different modes of governmental crisis responses (Kouzmin and Jarman 1989, 426-28; Jarman 1994).

Taking as a starting point four key dimensions of government intervention that emerge from the crisis literature, typology of governmental crisis responses is suggested. Such typological development might facilitate further hypotheses about governmental crisis decision making, which could also be tested.

Understanding the dynamics of governmental crisis responses involves an examination of at least four dimensions. First, the *administrative system* confronted with the threat: local, regional, national levels of government and even the transnational administrative structures involved need to be clarified. Major nuclear disasters (Chernobyl) may require bilateral and multilateral coordination between different national governments as well as international bodies. Environmental calamities may transcend national borders, such as the Sandoz fire in Basel, Switzerland, which triggered a wave of pollution throughout the Rhine and affected West Germany, the Netherlands, and France (Such 1987; see also exhibit 2). Natural or other disasters often call for major international assistance operations, including action by the United Nations Disaster Relief Organization (UNDRO), the International Red Cross, and similar agencies (Cuny 1983; Benini 1993).

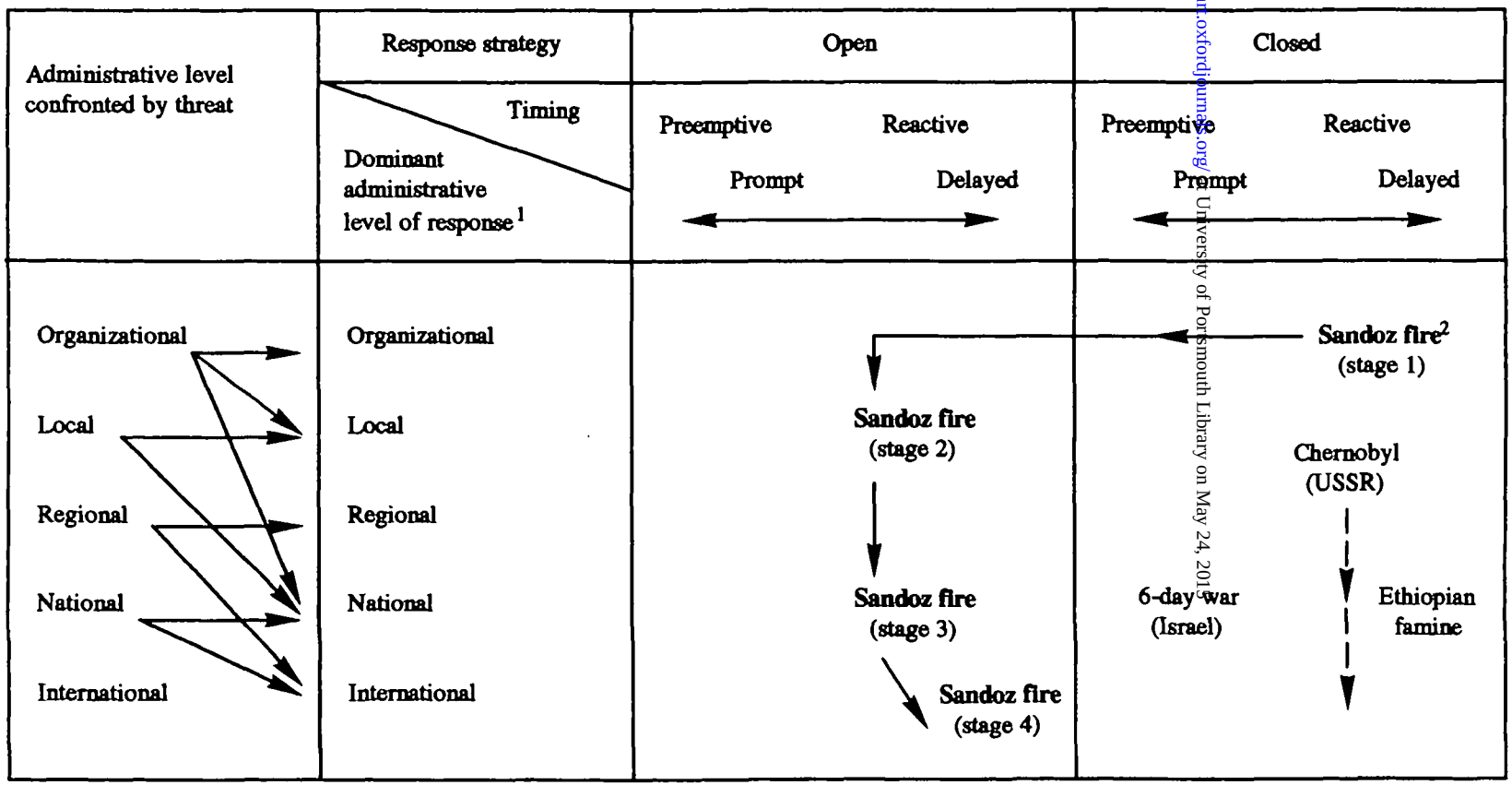
Second, the administrative *level* (local, regional, national, international) that eventually takes decisive action and controls the emergency response is important. The levels of government potentially involved in crisis response do not always coincide. Locally confined crises can give rise to regional or national-level interventions. Many factors have an impact on the possibility of discrepancies between administrative levels that are *affected* and those that actually *respond*: lower- versus higher-level authorities' resources, capabilities, and support to deal with the situation; the structure and culture of the political system emphasizing centralization or decentralization; federal primacy in emergency management; the political risk assessment made by various authorities; and experience with earlier crises.

Third, the dimension of the *speed* of government intervention—which varies between the extremes of preemptive and delayed—needs to be understood. Some crises are not immediately perceived by dominant governmental actors as needing government intervention. Decision makers do deliberately choose a wait-and-see attitude, hoping to stay clear of any involvement. Government inaction in the face of a certain threat also may be the outcome of a strategy of resignation, a decision to allow for devastation or deterioration in certain specific circumstances or territories. This seems to have been the case with major disasters in the Soviet Union during the 1950s when stricken areas were simply abandoned (Feshbach and Friendly 1992). Finally, tardy intervention may be the product of a political strategy to use a crisis to weaken or annihilate political opposition. Famine crises in Biafra and Ethiopia are cases in point where the regime actually obstructed relief efforts (Khondker 1993).

Finally, the *scope* and strategy of government intervention—closed versus open response modes—need to be considered. A closed strategy entails a confined approach that minimizes the degree of external involvement, media attention, and public initiatives. In an open crisis, government takes the contrary position and actively encourages the mobilization of a variety of forces. It should be clear that the choice between a restricted and an open strategy is not always left open. More often than not, proactive media coverage or the sheer momentum of events results in active outside participation. Moreover, during different stages of a major crisis, different actors and agencies may actually pursue different courses of action. It is obvious that this diversity in perceptions, priorities, strategies, and criticism provides for complex interagency and intergovernmental relations (Peres 1968). With crisis-response situations, competing conceptions about the most appropriate means of implementation do generate controversies among different professional and bureaucratic groups (Kouzmin 1979, 144-48 and 1983, 262-265). These implementation conflicts—especially when expressed under media scrutiny—do with time influence a crisis agency's ability to maintain the resources and support required during prolonged periods of implementing crisis responses (Jarman and Kouzmin 1990).

Exhibit 2 provides an overview of the four dimensions of government response briefly identified here. The typology allows for a differentiated analysis of variations in possible governmental crisis-management patterns.

Exhibit 2
A Heuristic Typology of Governmental Crisis Response Patterns



[1]The horixontal arrows indicate the regular pattern in which crisis is dealt with at the administrative level that is most directly threatened; the diagonal arrows indicate discrepancies that need explanation.

[2]The Sandoz case (Such 1987) provides useful illustration of how this scheme can be used to trace the evolution of a multilevel crisis response pattern as events develop over time.

CONCLUSIONS

The principal aim of this article has been to show that it may be useful to adopt a crisis management perspective on unscheduled events and to take the analysis of such events beyond the established parameters of disaster studies. Our conclusions also might be read as priorities in a developing research agenda.

First, it is often said that by their very nature, crises do not lend themselves to the usual examination of regularities of behavior and management. As this article argues, social scientists need to look beneath the surface of total surprise and uncertainty in search of routine patterns of crisis behavior and management. They may be successful in formulating empirical propositions and generalizations that can stand the test of further empirical scrutiny.

Second, conventional wisdom has it that crises occur within a brief time period and are marked by a clear-cut beginning and a strictly demarcated end. By now, there is much to be said in favor of a *processual* notion of crisis and crisis management. Crises, contrary to being clear-cut episodes or events, may turn out to be protracted and exhaustive, with stress cumulating over time or they may be considered in terms of circular processes involving mitigation and preparation, response as well as recovery and rehabilitation.

Third, all too often, particular actors are assumed to adopt particular roles in a crisis. For instance, normative conceptions of the roles of public officials and agencies explicate their formal contributions, if not exclusive responsibilities, in preventing and controlling crises. It should be acknowledged that under some circumstances specific contributions by actors, including governmental officials and agencies, may only involve creating or heightening the fervor associated with a particular crisis.

Whilst crises may appear to be unpleasant situations (Hewitt 1983, 10), or, put in the technical terms of social science vocabulary, while the focus in much analysis tends to be on the *dysfunctionality* of crisis situations, closer inspection shows that crises may well be functional in several respects. They may generate social and political change (Nijkamp 1994); they may reactivate the core values and norms of a social and political order (Wildavsky 1988); they may put social and political elites to the test (Sagan 1993; Rosenthal and Kouzmin 1994).

Fourth, social scientists might be inclined to respond to crises as concrete situations. In reality, multiple definitions of the situation may be found in the social and political realms of crisis decision making. Divergent perceptions, interpretations, and interests bear upon the processes of crisis management and may cause serious trouble in light of the need for resolute and effective responses to severe threat. Serious doubt now exists about the widespread notion that the main pattern of government crisis management is best depicted as consistent, monocentric, and centralized responses. There is a growing awareness of polycentric processes of crisis management and crisis response in particular. Increasing evidence on situation-based discretionary behavior by local officials or operational-level actors who face critical predicaments also needs reconciliation with centralizing assumptions in government crisis decision making.

Finally, a popular way of thinking about crises and crisis management centers around the desirability and effectiveness of immediate, tough measures to terminate serious challenges to social or political order. What we know now from a great variety of crisis situations seems to be at odds with the call for tough and immediately effective action. In a great many situations, decisional restraint, prudence, media conciousness and media management, open communications, and a long-term policy perspective appear to be more effective in actual crisis management and in sensitizing decision makers to the rich understanding that now exists in critically nonroutine administration.

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