

THE FORUM

Managing Crises in the Twenty-First Century

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Editor's Note: *As we near the midpoint in the first decade of the new century, more citizens as well as leaders are becoming aware of the changing nature and constant presence of crises in our midst, be they at the local, national, transnational, or international levels. Last summer (August 6–10, 2003), three institutes engaged in the study of how crises are managed—the Crisis Management Research and Training (CRISMART) program located in the Swedish National Defence College, the Crisis Research Center at Leiden University, and the Transboundary Crisis Management Working Group at Syracuse University—held a conference at the Minnowbrook Conference Center in the Adirondack Mountains, bringing together twenty-eight scholars and practitioners from Europe, the United States, and Australia who are considered to be among the leading experts in examining the wide variety of situations that currently threaten national, societal, and human security. These participants are currently involved in translating theory into practice and practice into theory regarding crisis management. The meeting was funded in part by the European Commission. The essays in this forum are representative of the discussions that took place at the meeting. Much debate focused around the nature of crisis, whether we are seeing a change in what is considered a crisis, and just who gets to define a crisis. In addition, the participants looked at factors that we should be observing in trying to understand crisis management and what we know after forty years of research on the topic. The disciplines represented at the meeting were business, communications, economics, history, management, political science, psychology, and public administration. The pieces that follow suggest that a shared language to use in talking about crises and crisis management has begun to emerge, even though a consensus does not exist about a particular way of conceptualizing or examining crises—and, indeed, disagreement exists over whether or not such a consensus should be a goal.*

Lessons from Crisis Research

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As national governments slowly—very slowly—become aware that an institutionalized crisis management capacity is critically important, new forms of crisis appear on the horizon: cyberterrorism, genetic engineering and health scares, the proliferation of weapons of mass destruction, infrastructural collapses, and changing weather patterns, to name but a few. At issue is whether our governments are prepared to deal with modern crises in close cooperation with international partners. Moreover, can the wide variety of academic research traditions be

brought together to assist policymakers and politicians in increasing their crisis management capacity?

We see frequent evidence of how crises outstrip the coping capacity of national governments. The modern crisis does not recognize or respect national borders; it thrives on fragmentation and variety. Its complexity defies governmental efforts to understand its causes, pathways, and potential remedies. The modern crisis does not confine itself to a particular policy area (say health or energy); it jumps from one field to the other, unearthing issues and recombining them into unforeseen megathreats. The modern crisis is not boxed in by set dates that mark a clear beginning and ending; it is an embedded vulnerability that emerges, fades, mutates, and strikes again (see 't Hart and Boin 2001). The currency of the modern crisis is not solely, or even primarily, expressed in the number of dead and wounded; it also attacks the legitimacy of the state, undermining its crisis management capacity.

The modern crisis is, thus, a clear challenge to national governments ('t Hart, Heyse, and Boin 2001; Rosenthal, Boin, and Comfort 2001). Yet, their capacity to deal with crises—modern or classic—has been undermined by a prolonged phase of environmental flux. The combination of extended ambitions and economic hardship has driven Western governments toward radical reform programs that have not necessarily improved the effectiveness of government interventions. The proverbial gap separating government from its citizens has widened, further sapping government capacity. Losing ground to both the local and international levels of governance, the national government has been characterized by some as “hollowed out.”

International governance, however, hardly holds the answers for the problems facing national governments. Recent experiences in the European Union with such internal threats as Mad Cow Disease (Grönvall 2001) and such external threats as Yugoslavia and Iraq do not bode well. European governments do not seem inclined to delegate crisis management authority to Brussels. The European Commission recognizes this deficiency and is working to improve European crisis management capacity, but it is concentrating on external threats (Duke 2002). International organizations such as NATO (North Atlantic Treaty Organization) and the OSCE (Organization for Security and Cooperation in Europe) have articulated similar ambitions, but they also focus on classic external threats (warfare and humanitarian crises). The relation between the United States and “old” Europe has experienced hardship as well.

The purpose of this piece as well as this forum is to ask what crisis researchers can (and perhaps should) contribute to European and US efforts to prepare for future crises. As researchers from a variety of backgrounds increasingly meet and become acquainted under the crisis banner, the question generally arises as to just what the state of the art is in this field of research. Do we possess the analytic tools to understand the causes, patterns, and effects of the various types of crisis? Do our findings give rise to meaningful prescription? In an attempt to wrestle with these important queries, this contribution to the forum will offer a definition of crisis that can encompass a variety of theoretical perspectives, take stock of the key insights we currently have concerning crisis management, and discuss some barriers to building a capacity to facilitate the diffusion of (academic and practical) knowledge.

Crisis as a Unifying Concept: Toward a Shared Perspective

Crisis is a popular—some say “sexy”—term. It has instant appeal and as a result is used frequently and in a wide variety of contexts. However easily the term is applied, though, a common interpretation is lacking. This statement should not be surprising given that many researchers studying crisis phenomena do not consider

themselves crisis researchers. The crisis field is ill-defined, resembling a hodgepodge quilt of specialist academics that are scattered over many disciplines—for example, disaster sociology, public administration, political science and international relations, political and organizational psychology, as well as technical specialties such as epidemiology and information technology. Who is in and who is out depends on the person defining the nature of the field; some well-known crisis experts probably do not consider themselves as such.

The term “crisis” is typically used as a catchall concept encompassing a variety of “un-ness” events (see Hewitt 1983). It applies to situations that are unwanted, unexpected, unprecedented, and almost unmanageable and that cause widespread disbelief and uncertainty (Rosenthal, Boin, and Comfort 2001; Stern and Sundelius 2002). But crisis can be, and has been, defined more precisely as “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, Charles, and ‘t Hart 1989:10). The great advantage of this definition is that it applies to all types of disruption: ecotreats, information technology (IT) crashes, and economic adversity can be joined by intrastate conflicts, prison riots, regional wars, exploding factories, and natural disasters. (For even more examples of types of crises that can fall under this definition, see Stern and Sundelius 2002.) This characteristic alone calls for a multidisciplinary approach to understanding crisis.

Crisis thus defined invites us to explore two broad types of perspectives, each with a dominant research locus: the *operational* perspective that concentrates on the management of the crisis itself and the *political-symbolic* perspective that tries to map out how crisis managers and the rest of us make sense of the crisis. Both perspectives see crises as subjectively defined phenomena. In other words, we can only speak of a crisis if the actors in question perceive the situation as such. This subjective notion of crisis makes it impossible to neatly demarcate a beginning and an end to these events because different actors perceive they are in a crisis at different points in time (‘t Hart and Boin 2001). This discontinuity explains why the political-symbolic perspective is so important: we have to understand why people perceive some events as crises even though they routinely accept and live with seemingly worse events (Bovens and ‘t Hart 1996).

The subjective notion of crisis is dominant in the field even though it creates analytic problems. If we say that individuals or groups must perceive a situation to involve the so-called crisis characteristics (threat, urgency, uncertainty) to be classified as such, it automatically means that we will miss certain events or processes that many of us might consider a crisis simply because the authorities did not recognize the situation as a crisis. As long as the authorities in question remain oblivious, analysts cannot treat the situation as a crisis.

We can ask if it might be more rewarding to consider a more objective notion of crisis that would require academics to objectify the subjective processes presently considered to define crisis. Taking such a tack, we could conceptualize crisis as a period of discontinuity, marking the breaking point in a patterned process of linearity. This definition builds on classic lines of inquiry in sociology and political science (see, for example, Crozier 1964; Almond, Flanagan, and Mundt 1973; Linz and Stepan 1978; Stinchcombe 1997). This type of definition, however, is inherently suspect in the eyes of contemporary social scientists as it smacks of structural-functional analysis. But if we sidestep this ancient battlefield, we can see that this kind of definition helps us remedy the shortcomings of a definition that is more “decisionistic.”

What if we then define crisis as a state of flux during which the institutional structures in a social system become uprooted. In such a definition, the main

currency of crisis is legitimacy. A crisis occurs when the institutional structure of a social system experiences a relatively strong decline in legitimacy as its central service functions are impaired or suffer from overload. Within a relatively short time, political and societal trust will diminish regarding how well the social system is operating. At the heart of the crisis is an unremitting discrepancy between external expectations and perceived performance of the system. A combination of internal and external factors causes and sustains this gap. External stakeholders suddenly consider routines and outcomes that used to be satisfactory, unacceptable or inappropriate even as internal deficiencies blind authorities to these new realities. This mismatch prevents timely adaptation, in turn eroding the legitimacy of sustaining structures. If we take shifts in legitimacy as a key indicator of disruption, it can be argued that any kind of rapid decline in the legitimacy of institutional structures that were previously widely valued helps us identify a systemic crisis. True, legitimacy cannot be precisely measured, but it is possible to gauge and document downward shifts by studying media reporting, political activity, and other signs of societal mobilization (see Alink, Boin, and 't Hart 2001).

What we have been discussing may seem an overly abstract approach to classifying crises. However, if we want to integrate the insights from the multiple fields (psychology, organization theory, political science, public administration, international relations theory, disaster sociology) that appear to comprise this area of inquiry, consideration of such a definition seems necessary.

Managing Crises: What Do We Know?

Crisis management is often used as the shorthand phrase for all management practices concerned with nonroutine phenomena and developments. Crisis management is most easily associated with the hectic moments of crisis decision making, but it also covers the managerial areas of prevention and preparation, and, following the immediate crisis response, the sensitive domain of recovery and change (Comfort 1988). In outline form, the main operational challenges in each crisis management phase appear to be:

Preparation:

How can an organization or society prepare for the unknown?
How can crisis managers acquire support and resources for activities that—even when successful—do not generate tangible “wins” for the leaders?

Coping with crisis:

How can crisis managers make the right decisions under circumstances of uncertainty, time pressure, and extreme threat?
How can crisis managers ensure rapid and effective implementation of their decisions?

Back to normal (the aftermath):

How can crisis managers bring a shocked system back to normalcy?
How can they learn and implement the right lessons in order to prevent similar crises from happening again?

In what follows we will take stock of the key insights that have emerged across the various domains of crisis research that might prove helpful to public managers and political leaders in dealing with crisis preparation, mitigation, and aftermath management.

Crisis Are Inevitable: Preparing for the Unknown

Crises have been and will always be with us. This observation follows from two lines of reasoning. The first argument, based on extensive empirical research, tells us that crises are the normal outcome of a coincidental mix of widely available ingredients. Indeed, accidents, environmental hazards, and sloppy management are themselves “normal.” The second line of reasoning, which builds on conventional wisdom in the fields of public administration, policy studies, and political science, reminds us that governments do not like to invest in safety for a variety of reasons. What we do know is that crises occur when the normal processes in a given social system are disturbed. Crisis researchers of many kinds have identified a range of factors that can cause such disruptions, often categorizing them by the level of the system at which they occur.

Individual factors are generally categorized at the micro-level. In most—if not all—crises, human errors appear to play a crucial role. Humans err, and they do so in many ways (Reason 1990). Researchers continue to develop remedies for human error and may well succeed in limiting the impacts of blunders and mistakes, but it seems unlikely that such error can be eliminated altogether. If human error is inevitable, we should ask under what conditions it will cause a crisis.

At the meso-level of inquiry, the focus is on organizational factors and processes that may play a role in causing crises. The crucial question here is whether organizations can compensate for both the human limitations and environmental factors that facilitate crises. We can distinguish, on one side of this issue, a group of researchers who argue that most organizations are unable to prevent human errors or alleviate the consequences of human failure. Quite the contrary, they argue that organizations tend to bring crisis-enhancing processes to the fore (see Perrow 1986; Wisner 2001). Through a combination of sloppy management and an inherent blind spot for recognizing when significant changes are happening (for better or worse), organizations contribute to crises in the making (Turner and Pidgeon 1997). In effect, as Barry Turner (1992) has taught us, the rationally organized bureaucracy—that prominent feature of modern society—can quite efficiently translate human errors into crisis outcomes. This combination of normal human errors and normal organizational forms makes for “normal” crises.

At the macro-level of analysis, theorists argue for other powerful causes that seem to make crises more or less inevitable and unavoidable features of modern society (Beck 1992; Turner and Pidgeon 1997). One of the most persuasive authors in this vein, Charles Perrow (1999), contends that large technical systems will sooner or later produce a disaster as the result of sheer potential (for instance, nuclear energy), technical complexity (few people can understand what goes on inside a nuclear power plant), and tight coupling (one malfunction leads to another). Others (Sagan 1993) emphasize that environmental pressures lead organizations to emphasize efficiency and output targets over safety goals.

The so-called high reliability theorists present us with a more optimistic school of thought (Rochlin 1996). This group of researchers maintains that smartly designed and well-maintained organizations are capable of absorbing human errors and external pressures while they prevent common organizational pathologies. Through a mixture of strategies, organizational leaders can turn their high-risk systems into high-reliability organizations. This line of research finds support in the literature on institutions, which strongly suggests that the right kind of administrative architecture will lead to effective organizations (Selznick 1957).

But even if the optimists are right, it should be remembered that preventive and preparatory policies are often difficult to pursue. The tendency to underestimate hazards, risks, and the probability of crisis remains widespread. Indeed, it is a

human trait to think away bad news and to close our eyes to impending dangers. Moreover, it simply does not pay, in a political sense, to invest in long-term prevention schemes. The nonoccurrence of crisis does not gain votes for politicians.

In the unlikely event that everybody would agree on the importance of crisis prevention, the question remains whether we should put our money on prevention. The so-called vulnerability paradox tells us that crisis prevention is essentially impossible. This paradox draws attention to the negative side effects of near-perfect service delivery in modern society: the more perfectionist the preventive schemes and safety measures, the more dramatic are the effects of relatively minor disturbances, which will always occur. Although people in some developing countries should probably worry about the continued functioning of their basic public utilities, a one-hour electricity blackout in a Dutch town dominates the headlines of the local newspaper.

Aaron Wildavsky (1988:77) contrasts prevention (or anticipation) with resilience: "Anticipation is a mode of control by a central mind; efforts are made to predict and prevent potential dangers before damage is done. . . . Resilience is the capacity to cope with unanticipated dangers after they have become manifest, learning to bounce back." Stressing the notion of opportunity benefits following the introduction of new technologies, he focuses on the positive effects of risky options. Complaints about the risks inherent in high technology easily make people forget how much new technologies have contributed, directly or indirectly, to our well-being. If "net benefit" instead of "no harm" is accepted as the yardstick for risk assessment, anticipation gives way to trial and error, learning by using, and an increase in resilience (see Hills 2000 for a critical discussion of resilience). Of course, the chances that routine crises will occur can and should be minimized growing out of the lessons derived from previous crises. But an overreliance on prevention leaves social and political systems exposed to the consequences of new forms of crisis. Balancing prevention and resilience, therefore, is the real challenge for crisis managers.

For crisis researchers, the dilemma becomes moving beyond the static perspectives described above. Most crises flow from unique configurations of individual errors, organizational failure, and environmental flux. This process can take the form of linear escalation, as we have observed in the domains of IT and public utilities, moving from threshold to threshold and cumulating in severity (Hills 1998). Blackouts or breakdowns rarely remain limited to their place of origin. Often they take the form of the creeping crisis: "reinforced feedback loops" that gradually or slowly propel the system toward calamity (Ellis 1998:146).

Because different types of crisis follow different critical paths, crisis researchers need a methodology that allows them to reconstruct and compare each and every crisis process. What is needed is some form of critical path analysis that identifies turning points within trends and key opportunities for policy intervention (Kouzmin and Jarman 1989). We may be ready for new theoretical perspectives—the evolving field of complexity studies and the revived interest in evolutionary perspectives come to mind—that will help us connect the various factors operating at the different levels of analysis.

Crisis Management Is an Impossible Job

Crisis managers experience a crisis as a situation in which a threat to the system's basic structures or values must be dealt with urgently and under conditions of uncertainty or, as Yehezkel Dror says, of inconceivability (Rosenthal, Boin, and Comfort 2001:7). The threat of crisis can be the threat of death or damage, but it also often refers to invisible and intangible perils that can destroy a community

(Erikson 1994). A crisis brings uncertainty with regard to the specific nature of the threat, peoples' responses, the dynamics of the situation, possible solutions, and future consequences. Crises usually induce a sense of urgency among those with the responsibility for managing them (Brecher and Wilkenfeld 1997; Stern 1999). It is, of course, the perceptions of decision makers, rather than some set of predefined conditions, that count.

Responding to crisis is a serious challenge because a crisis demands critical decisions that must be made in awkward circumstances (Janis 1989). Moreover, crises generate barriers to high-quality decision-making processes. Indeed, common problems multiply exponentially. Crisis managers must solve complex dilemmas without the information they require, in fluctuating organizational settings marked by bureaucratism, and under conditions of severe stress. If we consider the dilemmas that emerge during crises, crisis management may well be considered an impossible job (Boin and 't Hart 2003).

For instance, crisis managers must decide during the initial phase of a crisis whether they are dealing with "the real thing" or with a signal of crises to come. From limited and fragmented information, they have to consider whether they are dealing with the full story or only the beginning of the story. This dilemma has consequences for the allocation of resources: Should all resources be committed to what appears to be the crisis or should we wait until we have a more complete picture of the situation? This dilemma becomes even sharper during wars and incidents of terrorism that are marked by disinformation campaigns, surprise attacks, and a variety of venues (Kam 1988).

The complexity of contemporary crises makes it harder for crisis managers to determine the exact nature of the crisis: Is it type X or type Y? Moreover, crisis management is hampered by the sheer substantive complexity of the conditions and characteristics of the unfolding crisis and by the resulting uncertainties. Uncertainties as to just how to respond may arise, according to Turner (1992:10), "because of an initial lack of information or a faulty initial classification or because of changes in the nature of the incident as it develops." The resulting discrepancy between the definition of the situation and its actual characteristics undermines the crisis response. Crisis managers think they are resolving the crisis when a careful analysis of the situation would suggest they are not. It usually takes them quite some time to adapt their definition of the situation.

Crisis managers must also balance the perceived "necessity to know" what is happening with the "need to stay in control." Even though crises are characterized by an explosion of information, the lack of accurate information can plague decision makers. They may receive lots of information, only to discover that vital pieces of data are missing. The information stream cannot mitigate the uncertainty of crises. Contradictory definitions of the situation exist; perceptions change. Continuing uncertainty creates room for rumors, which in hindsight rarely prove to be true (Shibutani 1966). Indeed, crisis management often becomes rumor and media management. The combination of uncertainty and the demand for information can propel experts and advisers into taking particular positions during the decision-making process (Rosenthal and 't Hart 1991; Grönvall 2001). Their expertise provides them with a monopoly on uncertainty reduction. But what if the experts themselves disagree? Expert advice may then increase rather than decrease the level of uncertainty.

Furthermore, crisis managers must wrestle with the organization of crisis decision making. Crises exert upward pressure on routine decision-making structures. Through centralization in the hands of a small group of people, formal and often arduously slow decision-making routines may be effectively circumvented (Crozier 1964). Typical examples are found in the democratic countries that provide

government leaders with far-reaching powers in case of crisis (Finn 1991). Even though centralization has proven to be an enduring feature of most crises, situations do occur during every crisis in which forms of decentralization are allowed or even encouraged ('t Hart, Rosenthal, and Kouzmin 1993). It may be necessary to let lower-level authorities decide; the functional authority of fire chiefs serves as a good example. There may be strategic considerations behind the (temporary) delegation of decision-making authority. However, the iron law of crisis holds central authorities responsible for the outcome regardless of how hard they may try to shift blame to lower levels.

Who should be involved? All too often crisis management is assumed to be the exclusive domain of government officials. Yet, as experience has demonstrated, in many crises, government officials and their agencies stand little chance of dealing with the situation without the help of intermediary organizations. In the acute crisis response phase, emergent groups can make up for the lack of leadership from official sources. For the legitimization and implementation of hard choices, crisis decision makers often need the support of voluntary associations. The resource base of private corporations can be a vital supplement to that available to public agencies.

Crises present decision makers with psychological challenges as well. These critical situations often cause stress that, in turn, may impair the judgment and rational capacity of individuals (Stern 1999). In small groups, crises are known to enhance a tendency toward forced conformity. Such "groupthink" speeds up the decision-making process, yet undermines the critical mass required for sound decisions (Janis 1982; 't Hart 1994). Crisis managers also can succumb to reasoning by analogy, drawing lessons from past experiences (Neustadt and May 1986). Another well-documented regularity of crisis decision making is obsession with dominant goal-means schemata: decision makers focus on one goal and one particular way of achieving that goal. The psychology of crisis may nurture hypervigilance, a collective sense of invulnerability, or excessive optimism about the intended course of action ('t Hart 1994).

Crisis managers often vacillate between immediate action and long-term effectiveness. Traditional crisis management repertoires are marked by a preoccupation with the "here and now": they must deal with the acute threat. The consequences of initial decisions tend to fade into the background in the immediacy of the moment. The modern crisis, however, is a long-term process rather than a single event. Long after the onset of a crisis, managers can be confronted with problems that take the form of the "crisis after the crisis." For instance, in the wake of a relatively minor disaster—such as an oil spill or a leaking gas station—the long-term effects on a community may prove to be much harder to manage (Erikson 1994). Such crises do not fit traditional crisis repertoires.

Crisis Management as Public Governance

Crises mark the transition from one stable pattern into one of many possible alternative futures. Actions taken during the crisis process become defining elements for the temporary resolution of that crisis, but, at the same time, they may become steps toward the creation of the next crisis. The actual choices that crisis managers make either reduce or exacerbate the evolving crisis. In effect, what happens during the crisis affects the trajectory toward one of the many alternative futures.

The crisis aftermath—when a crisis gives way to a new future—is one of the most interesting and understudied phases of the crisis process. Of course, crisis managers must deal with a number of technical issues in order to restore a sense

of normality to what is occurring—including relocation, payment of insurance, grief counseling, and reconstruction. Disaster and crisis research show that these challenges are often underestimated in practice. The worst challenges can, indeed, happen after the initial crisis has already occurred (Boin, van Duin, and Heyse 2001). The crisis aftermath is also the phase in which the first evaluative notions begin to emerge concerning the performance of the crisis managers. As the crisis process is still in a dynamic phase, the decisions and perceived actions of crisis managers feed back into the sense-making process that evaluates whether this crisis will be forgotten soon or will go down in history as a disaster.

The consequences of crisis are often—understandably so—viewed as dysfunctional, undesirable, if not evil. This tendency is empirically grounded. People have to deal with material and immaterial damages. Houses must be repaired or rebuilt, the infrastructure restored, the dead must be buried, and the wounded tended. In that sense, there is an understandable need for stability, stocktaking, a new equilibrium, or a temporary status quo. This inclination toward normalcy is supported by administrative reflexes.

But crises also present opportunities. A massive earthquake that kills thousands of people may bring government failure to light and subsequently force incompetent politicians and administrators out of office—opening the gate toward much-needed change (Cuny 1983). Thus, in the long term, crises may set the stage for fundamental and drastic reform of the system, tension release, open conflict, or accelerated circulation of elites. We know that crises can function as policy windows (Kingdon 1984), helping to reconstruct the policy or social agenda.

It is a mistake, however, to assume that a crisis is automatically followed by reform of some kind. Much depends on the actions of crisis managers as well as the evaluations of these actions and of the causes of the crisis among politicians, the media, and the public. This process of evaluation and assessment is political in nature and driven by various factors, such as the framing of the impacts of the crisis, processes of accountability, and blame allocation ('t Hart and Boin 2001).

An interesting question for further research concerns how these political processes relate to conventional questions regarding learning and prevention. Organizations often appear to fail to learn (Lagadec 1997), refuse to learn (Perrow 1999), learn only in symbolic ways (Clarke 1999), or learn in very slow ways. The challenge for crisis researchers is to identify the conditions that facilitate effective learning and improvement in future performance.

Another critical dilemma for both crisis researchers and managers revolves around recognizing the dynamic nature of crisis and identifying the occasions for decision—the turning points—that can enhance or reduce the likelihood of a desirable outcome. Such turning points present themselves at many instances in the complex interactions among individuals, organizations, and public agencies that characterize a crisis. Mapping this pattern of interaction—which is continuously evolving—is an important function of crisis management.

Accomplishing this task is easier said than done. A series of analytic steps is needed to arrive at what, at first glance, may seem to be a self-evident assessment of the situation. To begin with, the seriousness of the situation must be determined. Major disasters are easy to spot, but it is not always clear how other kinds of crises relate to the basic structures or fundamental values of the system that is under threat. Any input, however destructive, must first be defined as critical to the future of the system. Crisis recognition is not automatically followed by crisis management. Government institutions are not used to high-speed decision making. Moreover, the accepted mode for decision making is generally incremental and oriented toward the status quo.

If we could devise something like an effectiveness test for politicians and administrators facing stressful circumstances, it should certainly include a question concerning to what extent, and in what ways, elites are able to turn a severe threat into a grandiose opportunity. Such a query is not intended to be read as a desire for more Machiavellianism in crisis management. On the contrary, the active manipulation of such a crisis capability by administrative or political elites could have unintended consequences of its own (Boin and Otten 1996). But it does underscore the need for crisis managers to understand that crises need to be taken seriously because they can provide indications that change is just around the corner and that, rather than attempting restoration and a return to old times, they would be better off anticipating what they would like that social and political change to be.

In effect, crisis management is inherently political. The evolving nature of crisis makes mapping what is happening subject to continuing discussion. The arena in which such discussions take place continues to shift and widen. Even if critical turning points can be recognized, the question remains whether crisis managers will be able to pursue the right kind of action or strategy. In a sense, crisis management can be understood as a particular way of handling adversity (Dror 1986). The real challenge may be, therefore, to interweave crisis management into the daily practice of politics and administration in such a way that crisis management becomes a routine form of public governance.

Toward Improving the Diffusion of Knowledge on Crisis Management

The obvious problem facing those studying crisis is to bridge the gap between the worlds of research and of resource-strapped practitioners. Academics have, of course, made inroads into the community of crisis managers at all levels in the public and private sectors, though these remain mostly individual efforts and have not resulted in recognizable ways of thinking in either government or in private organizations. Most, if not every, analysis of a crisis seems to unearth well-known—and, what is worse, preventable—pathologies that arguably worsened rather than dampened the crisis. At issue is whether crisis researchers can build a community of scholars and practitioners who can catalogue what we currently know as well as develop training programs to transmit this knowledge to those who are likely to become crisis managers. To achieve such an end, much must happen, including dealing with the following three challenges:

Toward one language of crisis: Understanding present day crises requires a multidisciplinary approach but one that must be based on a common definition of key concepts.

Creating opportunities for discourse: The many disciplines in which crisis insights are generated have their own journals and conferences; the crisis field needs its own journals and, more crucially, its own conferences and professional association.

Creating centers of excellence: The upshot of this type of effort would be the formation of centers of excellence (such as CRISMART at the Swedish National Defence College, the Leiden University Crisis Research Center; and the Disaster Research Center at the University of Delaware) at which a group record of publications, teaching programs, and consultancy experience is built. Such centers, then, could come together to form consortia like the European Crisis Management Academy through which the information from the various centers of excellence would be collected, debated, and broadly disseminated.

Crises as Ill-Structured Messes

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The field of crisis management has been seriously impeded by its failure to develop appropriate frameworks for the study of crises. This state of affairs is due at the very least to two major issues: (1) outmoded and invalid views of the nature of crises, and (2) the widespread use of outmoded and inappropriate concepts of inquiry.

It is our contention that crisis management deals with problems that are inherently ill-structured. The eminent social systems philosopher and scientist, Russell Ackoff (1999), has coined the term “mess” to describe such problems. A mess is a system of problems that are highly interactive (that is, strongly coupled), but it is not the sum of the separate problems themselves. A mess is the *product* of the *interactions* among the problems that constitute it.

A crisis, then, is an ill-structured mess—a highly interactive set of problems, each of which is ill-structured. The problems that constitute a crisis are themselves complex systems, which, in turn, are members of other complex systems and so on and so forth. The end-result is that the field of crisis management is itself inherently ill-structured or a mess (Mitroff and Linstone 1992; Mitroff 2003). Moreover, the failure of crisis management experts to realize and to accept these ideas is responsible for much of the confusion and lack of progress in the field. Like Arjen Boin in the previous piece in this forum, we call for a serious reconsideration of the concepts that form the basis for the study of crisis management. Although, as the reader will soon see, we disagree with his emphasis on arriving at a common definition of key concepts.

Crucial Differences between Well-Structured and Ill-Structured Problems

By definition, well-structured problems are the only kinds of problems about which stakeholders—both those who affect and those who are affected by them—can attain widespread agreement regarding what is happening prior to inquiry (Freeman 1984). In contrast to well-structured problems, stakeholders generally define ill-structured problems differently—often radically differently—depending on their values, interests, education, personal history, and the organizations for which they work. For this and many other reasons, ill-structured problems are inherently controversial. As a result, we would not expect any two stakeholders to define an ill-structured problem in exactly the same way.

Stakeholders differ in the assumptions they make about the world. When these differences surface, they provide us with a very important resource to use in defining problems. In effect, the differences between stakeholders—not the agreement among them—can give us insights into the nature of the problems facing us. In this sense, what stakeholders disagree about is often much more important to know than those issues about which they agree. Thus, we need to understand the variation in the different stakeholders’ formulations of problems.

Analogously, we would not expect two or more crisis management experts to have the same definition of “crisis.” The repeated call for agreement on a basic definition of what is a “disaster” versus what is a “crisis” ignores the basic character

of ill-structured problems. Such problems are those for which fundamental and strongly felt differences not only exist but predominate. Intense disagreement over what is happening, who should be in charge, and what needs to be done is a major feature of ill-structured problems. To insist, therefore, on agreement as a precondition for studying ill-structured problems is to ignore and to deny their basic nature. It is to misrepresent them ontologically. When crisis management experts call for agreement on the definition of basic terms, in effect, they are committing the same kind of error that we accuse practitioners of making when they ignore the complexity of crises.

Definitions Are Tools

Definitions are tools that serve a purpose, nothing more, nothing less. And, the purpose of a definition depends on the purposes of the investigator and the nature of the investigation. Therefore, the idea that there could ever be a common, universal definition of anything is wrong just because there would, then, have to be a universal purpose that was common to all investigations. Instead, the varying definitions are themselves valuable information about the motives and purposes of different investigators. The systems philosopher, C. West Churchman (personal communication), has made this statement even more strongly: "Something is a problem if and only if it is a member of the set of all other problems." In contrast, something is not a problem, but is, instead, an academic exercise if it can be defined precisely and independently of other complex problems.

In sum, if we could obtain prior agreement on the definition or nature of ill-structured problems, then they would not be ill-structured. To the contrary, they would be well-structured. In effect, disagreement regarding the definition of the problem is one of the fundamental characteristics of ill-structured problems. Moreover, such disagreements will not go away with better, more extensive, or more precise analyses. Better analyses will only reveal further disagreements. Thus, we have to learn to study or to inquire into ill-structured problems as a phenomenon in and of themselves.

Inquiry Systems

The purpose of an inquiry system is to specify the conditions under which one can study or have knowledge about a problem or issue (see Singer 1959). Inquiry systems differ radically with regard to their recognition of "mess management" as an important area for inquiry and as an important component of inquiry. In a series of publications, Ackoff, Churchman, and one of the authors (Mitroff) have explicated the nature of distinctively different archetypal systems for conducting inquiry given that these inquiry systems appear repeatedly throughout the course of human history. One of the most valuable outcomes of these comparative studies of inquiry systems is the finding that some are inherently better suited for studying well-structured problems whereas others are better suited for studying ill-structured problems (see, for example, Mitroff and Linstone 1992). Those inquiry systems that are better suited for exploring ill-structured problems regard the intense conflict between stakeholders as a necessary precondition for inquiry, not as an impediment to it. They use the conflict that may arise among stakeholders in defining the nature of a problem to surface and expose different assumptions about the world. In effect, differing assumptions and definitions are themselves fundamental parts of the mess. As such, they cannot be ignored or wished away.

A Systems Model of Crisis Management

The Diamond Model

In 1974, Francisco Sagasti and Mitroff published a general systems model of scientific inquiry that they called “the diamond model” (see Mitroff and Kilmann 1978). Its purpose was to show how the major features of scientific inquiry lay in relation to one another as well as how and why they were mutually interdependent.

The diamond model (see Figure 1.1) shows that scientific inquiry typically starts with the “felt recognition or sensing” of a problem. We say “typically” because one of the purposes of the model is to show that an inquiry can start at any point. Also, one can proceed through the model in a number of directions, paths, or ways. These different paths are characteristic of different modes or styles of inquiry.

We often think we know where problems come from, but as soon as we try to describe and to justify our knowledge systematically, it quickly becomes complex and murky or, in the terms being used here, messy and ill-structured. For our purposes, problems are *relatively structured messes* that have been extracted from potentially highly *unstructured messes* for the purpose of *better managing* current and future messes. Furthermore, the process of extraction is itself an ill-structured problem. Notice that by uttering the immediately preceding sentence we have turned the model for thinking about problems back on itself (Singer 1959). Thus, every aspect of this definition is, and is meant to be, tortuous and problematic. For instance, what do “extraction,” “management,” and “better” mean?

“Extraction” is a key activity and concept because problems are not given. They are instead “taken” from reality (Singer 1959). Some problems are “given” in the sense that they are extensions of the previously predefined problems of one’s field, discipline, or profession. Even in such cases, however, the situation is not

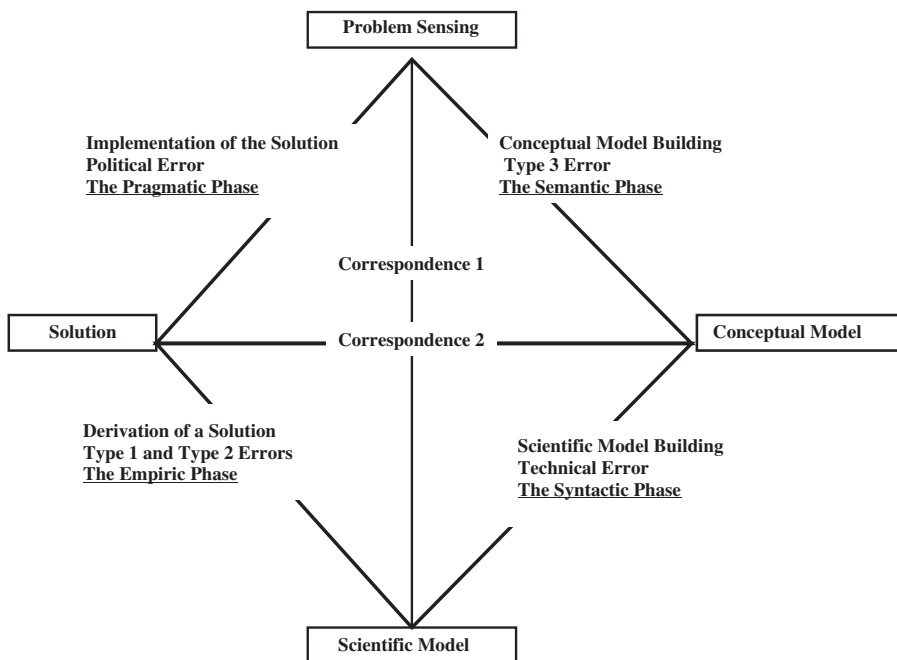


FIGURE 1.1. Diamond Model of Scientific Inquiry: *Transdisciplinary Systems Thinking*

completely clear, for one has to explain how “extensions” are arrived at and why some extensions are better than others. In fact, most problems do not drop from the sky preformed and already structured. Instead, they are the result of intensely human activities of which extraction and shaping are merely two. John Dewey regarded problem sensing as inherently ethical; many problems, especially in the public realm, originate in “moral outrage.” For instance, consider the question “how could they—Enron, Martha Stewart, the governor of the State of California, Saddam Hussein, Osama bin Laden, and so on—do or have failed to do such and such?” Certainly, many crises arise out of moral outrage and, in this sense, possess features that are undeniably ethical (Alpaslan and Mitroff 2003).

Once a problem is sensed and a fuzzy recognition of what is happening emerges, we move to develop a conceptual model of the problem. Such a model represents the *semantic* or the *problem formulation* phase of scientific problem solving because at this point we are concerned primarily with the general and broad meanings of a problem. This phase involves the choice of an initial and even tentative discipline, disciplines, or languages in which to present the basic meaning or definition of the problem. That is, we are primarily concerned with a verbal statement or a symbolic picture of the problem.

Notice that defining is part of the *process* of inquiry. Defining is not a “thing” per se that exists apart from or prior to inquiry. Instead, defining is a tool that either enables or constrains the process of inquiry. As such, it cannot be artificially ripped from its moorings. Defining neither exists nor functions apart from the system of which it is a part. We cannot understand it in isolation.

In contrast to the type I and type II errors in statistics, the error that pertains to this phase of the scientific problem-solving process is known as the type III error, or E3 for short. The E3 is defined as the error of solving the “wrong” problem precisely and as the probability of solving the “wrong” problem when one should have solved the “right” problem. “Right” and “wrong” are obviously relative. If we knew for sure that we were solving the “wrong” problem, then we would not be committing an E3. More importantly, the initial problem would already be well-structured, and there would be no need for problem formulation or problem structuring in the first place. Even in this case, however, there could still possibly be significant dispute as to whether we were indeed solving the “right” problem. Thus, every well-structured problem can in principle be turned into an ill-structured problem. Whether we do this or not depends on the degree and the level of agreement regarding the underlying assumptions we are making.

This phase of scientific problem solving is meant to call attention to the fact that the determination of an E3 can only be made if we produce *at least two very different representations* of a problem. At a minimum, the process of “rational” scientific problem solving calls for the use of dialectical inquiry or dialectical inquiry systems. Dialectical inquiry necessitates at least two conceptual models be carried through the inquiry process. Following this procedure is merely one of the ways that scientific inquiry calls for inquiry systems other than those that are currently in widespread use. Conventional inquiry systems are mainly for well-structured problems, not for ill-structured ones.

Although the conceptual model we arrive at lays out the main variables and the broad, general features of the problem, it is not yet an exact scientific model of the problem. The purpose of the next phase in the inquiry system is to construct a precise representation or exact model of the problem, using the tools of mathematics, flowcharts, and the knowledge of physical, social, and historical processes. Science is replete with numerous examples of outstanding exact models. One of the best is Einstein’s transformation of his highly intuitive thought experiments and notions regarding space, time, mass, and gravity into complex

mathematical equations so that precise and novel implications could be derived from them. This phase is known as the syntactic phase of scientific problem solving. It necessitates detailed knowledge of the rules for building exact models from conceptual models and the ability to execute the rules so as to produce such a scientific model.

The correspondence between the initial “felt sense” of a problem and its “exact” scientific representation should not be interpreted as the correspondence between an objective, external reality and a subjective, internal idea. This notion is wrong, plain wrong. The commonly accepted distinction between “objective” and “subjective” ought to be completely purged from our language. It is a carryover from an earlier philosophical period and hinders knowledge and inquiry more than it helps. Modern philosophers have completely rejected the notion that our minds are blank tablets and do not participate actively in our experience of the world (see Rorty 1982). John Dewey, for one, rejected this notion completely by referring to it as the “spectator theory of knowledge.”

Whatever “reality” is, it is as much a “representation” produced by our minds and culture as anything. Human experiences and perceptions mediate the “felt sense or existence” of a problem. By making this point, we are not denying the existence of external objects or external reality, but we are saying that whatever external reality is, it is not known and experienced independently of our minds and culture. In effect, scientific inquiry and definitions are heavily dependent on human experience. Indeed, science is an intensely human enterprise through and through (Mitroff 1984).

Once we have developed an exact scientific model, the next phase consists of deriving a solution to the model or, more generally, testing a scientific hypothesis empirically. This phase is the empiric phase of scientific problem solving. It is concerned with the traditional type I and type II errors of statistics. Notice that the solution to the model is not necessarily the same as the solution to the initial problem. Instead, it is the solution to the scientific model of the problem, which is, in turn, dependent on the conceptual model. Thus, the solution is at least twice removed from the initial problem.

The last phase—implementation—is the pragmatic phase of scientific problem solving. It is concerned with the sociopolitical process of getting a solution accepted and adopted in a complex organization in order to deal with the initial problem. Thus, implementation tests whether a problem can be removed or managed in practice, not merely in theory. More often than not, implementation involves not only making important changes but, even more formidably, overcoming resistance to change (Hultman 1998). Implementation also examines whether putting the solution into practice creates new problems or necessitates new formulations of the model; the inquiry process is iterative.

The model need not run in any particular direction or start at a particular point. Indeed, different forms of inquiry can take different paths through the model. The essential idea is that scientific inquiry is a tightly coupled and a highly interactive system whose various parts neither exist nor function independently of one another. For instance, one can assert that if the implementation of the solution is not considered in the formulation of the initial problem, then the wrong problem is being solved from the very beginning of the problem-solving process. That is to say, implementation ought to be involved from the very beginning.

The process of defining anything, but especially defining something scientifically, is equivalent to the process of inquiry just outlined. The initial felt sense of a problem is equivalent to a working definition of a problem. Its purpose is to get the process of inquiry moving and to keep it moving. Thus, the definition of a problem is more the outcome of inquiry rather than its beginning.

We are now in a position to discuss the differences between well-structured and ill-structured problems. Well-structured problems are problems for which a relatively few iterations of the model are sufficient for the definition and the solution to a problem to converge. The implementation phase also tends to remove the initial problem. In other words, the mess generally lessens over time. In contrast, ill-structured problems misbehave across time, generally getting worse in the sense that the mess or messes with which they are associated grow, sometimes uncontrollably. In today's complex world, problems are increasingly intertwined as inseparable parts of messes.

Finally, it is important to note that evaluations of problem-solving performance are systemic as well; that is, overall performance is multiplicative. One does not make up for poor performance in one phase of the model with an outstanding performance in other phases. For example, an outstanding performance in the empiric phase of the inquiry does not make up for a poor performance in the conceptual phase. "One" times "zero" remains "zero."

A Diamond Model of Crisis Management

As Boin observed in the earlier piece in this forum, crisis management consists of at least three broad phases—before, during, and after. We would add that it also involves four broad clusters of variables—crisis types, crisis mechanisms, crisis systems, and crisis stakeholders (see Mitroff and Anagnos 2000).

The *before* phase in crisis management revolves around a crisis audit, which includes auditing an organization's crisis strengths, weaknesses, and vulnerabilities. This phase also consists of developing the actual skills necessary to manage a crisis. It is the proactive phase of crisis management. The *during* phase is one in which an organization uses its capabilities to contain the damage occurring during the crisis and to recover with as little effect as possible on human life, property, and the environment. This phase is the reactive phase in crisis management. The *after* phase is the preactive phase. It can be thought of as the proactive phase prior to the next proactive or *before* phase and revolves around examining and learning from what one did right as well as wrong in past crises in order to improve the system for dealing with future crises.

The four clusters of variables that play an important role in crisis management can be characterized as follows. "Crisis types" refer to kinds of crises ranging from informational to environmental to criminal to fiscal to political (see Mitroff, Pauchant, and Shrivastava 1988). A crisis portfolio consists of the range of crises that an organization even considers, let alone prepares to contain. "Crisis mechanisms" are developed to detect the early warning signals of a crisis in advance of their actual occurrence. If appropriate signal detection mechanisms are set up and can pick up such signals, then some—if not all—crises can be averted before they happen (Clair 1993). Similarly, damage containment mechanisms and procedures also need to be put in place in advance of crises if they are to function properly (Pearson et al. 1997). Very rarely can such mechanisms be created on the spot. "Crisis systems" indicate that crises are embedded in and are the result of complex systems (Perrow 1984). For instance, the layers and the reward systems of complex organizations affect both the causes and the effects of crises. And, "crisis stakeholders" are those innumerable people, organizations, and agencies that affect and are affected by crises. Stakeholders can include customers, suppliers, the competition, employees, middle management, top leadership, unions, government agencies, the media, the natural environment, and even future generations.

Figure 1.2 puts these various phases and clusters of variables into a parallel, or complementary, form to the diamond model of scientific inquiry displayed in

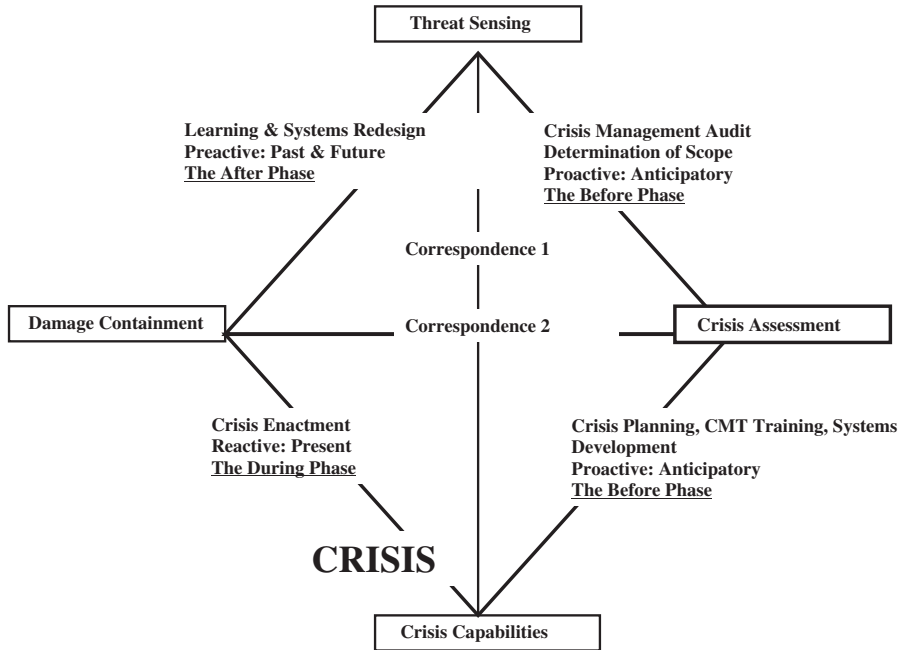


FIGURE 1.2. Diamond Model of Crisis Management: *Interactive Systems Thinking*

Figure 1.1. In effect, it is a model to help us understand crisis management. The model begins with the “felt sense or recognition” of a potential threat or threats, internal or external to an organization. At this point, the full nature of any threat is not necessarily known, merely the sense that something is potentially amiss. A conceptual, or initial, model of the threats is then developed in response to this feeling of urgency and preparations are made to conduct a crisis audit or, in other words, a systematic assessment of the threats, risks, and so on facing the organization.

The audit and assessment tools build on previous research. Thus, crisis management is not separable from scientific problem solving; indeed, crisis management presupposes it. But this interdependence means that if we use defective methods and models of scientific inquiry, then crisis management will suffer accordingly. The initial assessment of an organization’s resources for dealing with crises sets the tone for all future efforts. It constitutes a crucial part of the before phase of crisis management and needs to be revised as one learns more. And, as before, a critical E3 error can result. If the “wrong” audit tool or assessment framework is used, everything else suffers.

The next phase consists of using the initial assessment to develop the organizational capabilities to manage an actual crisis, which generally includes the development of crisis plans and training of a cross-functional crisis management team (CMT) (Mitroff and Alpaslan 2003). It also includes the design of signal detection and damage containment mechanisms, the development of strong relationships with a broad set of stakeholders, and the use of appropriate crisis simulations.

Most crisis experts agree that in today’s world a major crisis is virtually guaranteed to happen to even the best prepared organization. Thus, ensuring that an organization has crisis plans, preparations, and the capabilities to deal with such

an event is critical for effective management. At this point, we are in the “during” or reactive phase of crisis management and engaged in damage control. Finally, learning, relearning, and even unlearning are the real tests of an organization’s ability and willingness to implement crisis management (Kovoor-Misra and Nathan 2000; Nathan and Kovoor-Misra 2002).

Notice that the definition of what is a crisis can change, often dramatically, as we move around this diamond model of crisis management. In other words, the definition of what is and what is not a crisis cannot be fully decoupled from a systems model of crises. In the language of systems, the definition of critical terms and events is not separable from the entire process of diagnosing and treating them.

In Conclusion

We have argued here that our understanding of crises has suffered from the use of outmoded and invalid notions regarding the nature of inquiry and knowledge and will continue to suffer unless we seriously revise our underlying concepts of inquiry. We have distinguished between well-structured and ill-structured problems and have argued that studying ill-structured problems using inquiry systems that are suited for well-structured problems can make these problems even worse. To deal with this problem, in this forum we have called for a systematic rethinking of what is involved in crisis management and crisis management research. We propose that a systems model of scientific inquiry is well suited to helping us improve crises management research because it correctly conceptualizes crises as ill-structured problems. We have developed and presented a model of crisis management based on the diamond model; but the reader should remember that this model is merely meant to outline a comparatively inclusive framework for studying crises. We do not view it as *the framework* for studying crisis management. Instead, we encourage crisis management experts to conduct serious inquiry into every aspect of this framework.

Policy Advice as Crisis: A Political Redefinition of Crisis Management

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The ability of governments to discern and solve different types of crisis situations is a topic of long-standing academic interest (see, for example, Pal 1985; Pollit et al. 1990; Dimock 1991; Micklethwait and Wooldridge 1996; Roe 2001). In particular, we have the protracted debates surrounding Graham Allison’s (1971) analysis of the Cuban Missile crisis (see also Allison and Zelikow 1999). In conceptual terms, Allison’s (1971) original monograph provided theoreticians not only with general

typological categories (Models I, II, and III) but also with connections between what had been up until that time disparate ideas. In this contribution to the forum, Allison's schema is instructive in three ways. First, it treats the Missile Crisis as a *committee* process—a topic well-known to management scholars, academics, and practitioners alike. Second, it provides an excellent starting point for students of comparative government to explore how cabinet governments work—an issue sometimes overlooked or minimized by scholars of Western parliamentary systems (Jarman and Kouzmin 1993). Third, it gives us insights regarding how the various players involved in cabinets and committees interact in crisis situations.

The intention here is not to intrude presumptively into the intriguing and long-standing Cuban Missile Crisis debate. The objective is much less ambitious but perhaps more relevant: to study “crisis management” as a multifaceted topic in which crises are acknowledged as critical to a system's survival as well as in which crises are contrived so as to gain strategic or tactical advantage, or both (Korac-Kakabadse, Kouzmin, and Kakabadse 2002). Moreover, we are more interested here in exploring policy advice as political process than with administrative output or social outcomes, and we are more concerned with model building (as contingency theory) than with historic irony, paradox, nuance, or policymaking success at the top echelons of cabinet governments.

Policy Advice to Governments: An Organizational Theory Approach

Of interest in this consideration of crisis management in the twenty-first century is who is involved in the cabinets and committees at the top echelons of government during crisis situations. Who is doing the advice giving, how do they advise, where, when, with whom, and why? These are not easy questions to answer when we are considering day-to-day governance. Certainly in the past decade this whole arena has become a center of attention for the public media and “snapshot” investigative reporters who seek out information regarding the intentions and behavior of contemporary “rulers” and “rulership” (Perry 1990; Sanford 1999). Our intent here is decidedly more theoretical: to build on theories of the political executive and analyze the behavior of those involved (so far as it can be known) from a contingency theory perspective. Most of the focus to date has been on exploring how policy advice works among corporate executives rather than on what occurs in political settings at the highest levels (Nacos 1990).

In a number of earlier studies (Kouzmin and Jarman 1989; Jarman and Kouzmin 1994; Jarman 1994), we have developed various types of contingency schema to study crisis events. Conceding that the task of designing a conceptual framework to describe crises is formidable enough, optimistically we believe that a contingency framework can be used to perform this analytical task. And we should note that it is not a wholly new challenge in this context (see Stone 1992).

We are going to focus here on the work of four authors who have brought lasting insights into the study of policy advice: Richard Walton (1972), Gary Brewer and Peter de Leon (1983), Yehezkel Dror (1983), and Nelson Polsby (1984). The ideas of this set of authors can be arrayed along a continuum denoting differences regarding how policy advice is used. This continuum is displayed in Figure 2.1. As the diagram shows, this continuum consists of a wide-ranging set of concepts. The two extremes can be said to represent the researchable limits of the continuum. As shown on the left, the policy analyst needs to be aware of ongoing research concerning the skills of the rhetorician—language, logic, logistics (Chrystal 2002), through which linguistics, semantics, and argumentation become the basis for political behavior (Corcoran 1979). In contemporary language, presidential “spin

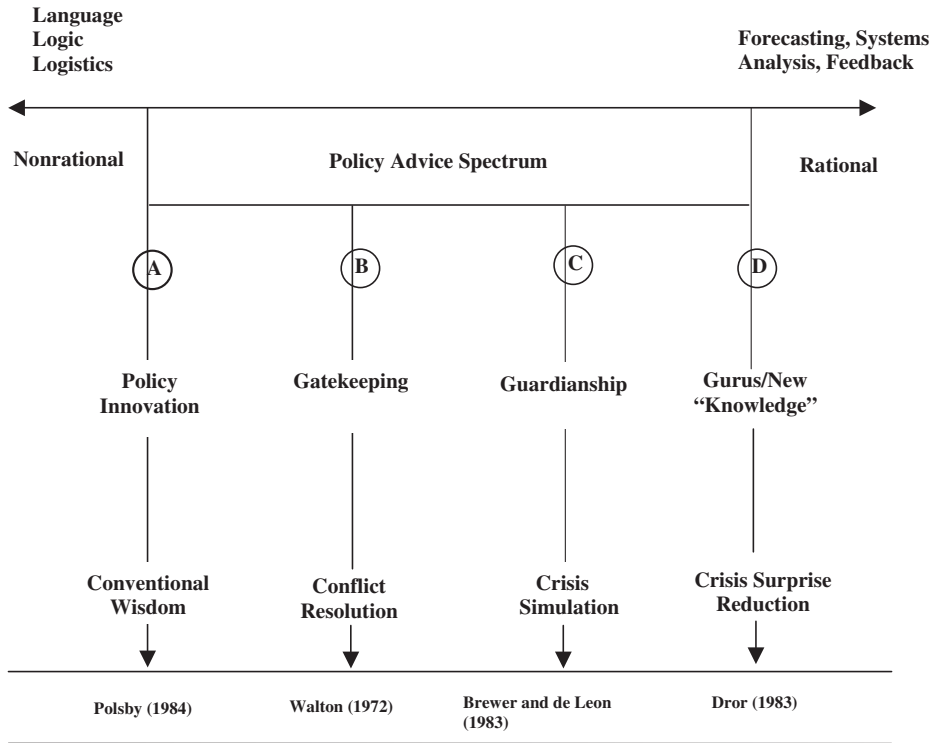


FIGURE 2.1. Policy Advice as Crisis Management: A Contingency Framework

doctors” who “manage the media” are central to this end of the continuum (Garnett 1992; Sanford 1999; Baum 2002).

At the other end—right side—of the spectrum, the policy analyst needs skills concerning etiology and methodology. In this case, it is not the art of the sophist that is of concern but the science of the quantum (Wheatley 1992; Bradley 1999). Of interest here are the concepts of “complexity” and “uncertainty” and the ways in which we can learn to deal with each (Simon 1965; La Porte 1975; Weaver 1989). Figure 2.1 implies that a *range* of policy advice activities exist in the daily world of *real politik*. But given that the Polsby to Dror continuum is not necessarily immediately obvious, let us describe in more detail the boundaries of this continuum and the progression shown in Figure 2.1 from left to right.

Starting with Polsby (1984), our reading of his work is that political innovation in the United States (and perhaps elsewhere) is rarely that of a wholly rational, planned, sequential set of decisions leading to compliant bureaucratic implementation. Specifically, from Polsby’s case study data, we learn that policy advice is informed in two basic ways: either “acutely” by the events of the moment or through “incubation.” As such, timing, definition of the problem, framing, and partisan conflict become salient and usually affect the kind of policy advice that is either sought or proffered at any particular moment in time. In other words, in contradistinction to the rationalist presumptions of policymaking, the gratuitous, fortuitous, and spurious may all prove to be important elements of public policymaking. In Dror’s (1983) thinking, which is located on the other side of the continuum, few such factors are admissible. “Fuzzy gambling” with history

(Dror 1993) is something that must be confronted. Indeed, for Dror, planning is the key to reducing randomness in the political environment.

Having established the two ends of the policy advice continuum (from Polsby's "policy innovators" to Dror's "fuzzy gamblers"), we need to define the two intermediate steps and theories that enrich the policy advice array. We propose that the work of Walton (1972) and Brewer and de Leon (1983) advance possible midpoints on this continuum: Walton's ideas closer to those of Polsby and the nonrational or argumentative type of advice; Brewer and de Leon's closer to the rational, planning-oriented notions of Dror.

The idea of "agenda-setting" in government, especially within the bureaucracy, is as old as the ancients—or at least Machiavelli (Jay 1970). The more contemporary literature on this topic is less arrogant than the ancients in the sense that self-serving *faits accomplis* are rarely expected at cabinet levels of government, although many may try. Instead, the agenda-setters, as a policy advisory genre, are more involved in "conflict resolving" their way to compromises while, at the same time, keeping "control" of the agenda (Walton 1972).

The policy sciences approach advocated by Brewer and de Leon (1983) completes the intermediate range of the advisory spectrum. As both these authors are former staff members of the RAND Corporation, it comes as little surprise that their schema represents an escalation of earlier work on operations research and systems analysis (Quade 1985). However, in accreting the "scientific" onto the "systems" framework, they have produced a novel, if not unique, framework for advisory analysis. Their progression from the mundaneness of operations research to the subtleties and nuances of the policy sciences imputes a humanitarian nature to systems thinking (Checkland 1981).

It is now time to summarize the briefly stated schema shown as a continuum in Figure 2.1. We are asserting here that the two leading trends in studies of advice giving are concerned with the use of linguistics and argumentation versus advanced physics analogies. A more circumscribed policy advice spectrum posits a progression from the policy innovators of Polsby to the gurus or fuzzy gamblers of Dror. At intermediate locations lie (nearest to Polsby) the agenda-setters or gatekeepers and farther away come the policy scientists or the guardians of good governance. Collectively, these four schema represent a formidable array of models that we will now consider, albeit briefly, in their "crisis" context.

Crisis-Related Management and Policy Advice

Figure 2.1 presents the barebones outline of a contingency model describing how policy advice may participate in crisis management. It is now important to consider the strengths, weaknesses, opportunities, and threats of each type of advice giving, just like practical politicians and administrators do in the real world. As we have already observed, Figure 2.1 posits four key policy advice tactics. In the following discussion, we will presume that Polsby's innovators represent the "conventional wisdom" of day-to-day politicking at the cabinet level whereas the agenda-setters, policy scientists, and gurus are rarer species in the policy advice ecology.

Contingency Type A: The Policy Innovator

Contingency Type A is what others have called the "public innovator" (Polsby 1984). In day-to-day matters, these people are often classic bureaucrats but, on occasion, they will seek to justify a big-ticket project (a Concorde or a Space Station). Their great skill is in presenting their solution to solving a crisis that they have contrived. Indeed, they are often crisis creators, in part to rationalize their need to

increase their resources. Their main weakness is their often-blatant overstatement of benefits (public interests) and understatement of costs (both capital and recurrent). Such behavior can get them into trouble when someone calls for accountability and transparency.

Policy innovators are also opportunists. Crises that they have not contrived can still be used to increase their own or their agency's benefits. Even if they are the actual cause of the crisis, they will deny or shed blame by pleading that they are "under-resourced" and have to return to government with a new "plan" to expand their existing resource base. In this regard, they dislike audits of accountability. The threat here is already implicit: enhanced legislative calls for transparency and project justifications followed by increased accountability. The policy innovators will seek to weaken such parliamentary mechanisms in so far as they can (within the law) by making it difficult to find and deal with appropriate officers and by obfuscating demands for budgets and accounts (Bellone 1992; Jarman 1999). The astute policy innovators should never be underestimated; they are consummate players!

In effect, for these participants in the policy process, crises are a *social product* to be managed (Polsby 1984:168). It is important to utilize unforeseen events in program initiation and, if necessary, to create crises that can, in turn, create the potential for other initiatives. These are the leaders who go "garbage canning," seeking out collections of solutions looking for problems, ideologies searching soapboxes, and pet projects trying to find supporters (March and Olsen 1976; March and Weissinger-Baylon 1986).

Contingency Type B: The Gatekeeper

Contingency Type B refers to Walton's agenda-setters or, perhaps more aptly, gatekeepers. These individuals are likely to participate in less risky political settings. Here, the apparent strengths are more mundane but nevertheless adroit. The gatekeeper's concern is with winning day-to-day bureaucratic battles or "turf wars" (Walton 1972). This winning occurs through the astute internal management of committee "games," essentially, as some practitioners would have it, writing the meeting's minutes (in draft) before the meeting is actually convened. Unfortunately, their key weakness follows in this same vein; astute observers can forecast with some accuracy the outcome of the meeting (and minutes) by recognizing who is not attending. This behavior might be called *fait accompli* management. Such skills are widely practiced in committee-dependent bureaus.

The opportunities to win when one can set the agenda are widespread. Gatekeepers, in effect, can resolve crises almost before they begin, if not avoid them altogether; basic values are rarely challenged and rarely provoke fundamental decisions (Wildavsky 1966; Etzioni 1967). The key threat for the gatekeeper is that without focusing on strategic decisions, one can lose a sense of direction, as in Vietnam, and disjointedly "incrementalize" (Hirschman and Lindblom 1962) the government "into a quagmire." This situation typifies the Alice in Wonderland discussion about where does this road lead? Today, it is more often, under the conditions of greater environmental uncertainty that characterize the post-Cold War world, government in "blunderland." *Fait accompli* management often wins turf battles but what of the war?

Contingency Type C: The Guardian

For Contingency Type C people, crises are much more futuristic and, indeed, moralistic; they invoke the demand for a guardian. This term is derived from

Socrates: the state is led by “Magnanimous Man.” Brewer and de Leon (1983), citing Lasswell (1971), have added the need for human dignity as a central tenet of good governance. “Good,” in this more metaphysical sense, implies the ethical and oversight role that guardians play as rulers. Such an interpretation goes well beyond the earlier roots of these researchers, which were in systems analysis and cost-benefit studies. Nevertheless, it still indicates the relevance of leaders engaging in scenario and simulation development to facilitate planning and crisis management.

The big question becomes: who guards the guardians? Americans might say “the Constitution and the separation of powers.” But, then, what happens within all the parliamentary systems around the world? Prime ministerial forms of cabinet government are, increasingly, being accused of failing tests of transparency, accountability, participation, and service delivery. Moreover, contrition is rarely a word that springs to mind as a means of coping with such circumstances.

In terms of dealing with opportunities, the guardians as the embodiment of the “Good” are more likely to be altruistic than opportunistic in their public choices. This altruism often takes the form of “access and equity” or, on a less-sectoral scale, seeking to enhance the wealth of the entire community by presenting long-term ideas and plans. Such “rising boats” schemes, however, are difficult to maintain for sustained periods of time. In the post-Cold War world, too many environmental uncertainties intrude. And plans that could be proposed as expedient panaceas are viewed by the guardians as too unethical and cynical. Plans must provide a sense of direction away from what we observed as the putative “drift” of the previous group, the gatekeepers.

Contingency Type D: The Guru

Contingency Type D is, in many ways, closely related conceptually to Type C with one major difference: the guardians are just that, a group of knowledgeable people who seek to advise the rulers as to what they perceive are ethical and effective policy options and choices. Type D policymakers are more fundamentalist, intuitive, and, indeed, guru-centered. For example, in the United Kingdom during Thatcher’s time as prime minister, one or two key advisers conveyed the essence of the government’s *modus operandi*, if not strategic direction—the Third Way in Prime Minister Blair’s language (Prabhakar 2002). Opponents, even within the government (right versus left factional ideologues), seek to discredit such gurus. Their tactics will vary from alleging personality problems to charging “serious flaws in logic,” but the battle will be called—eventually. In effect, it is not astute to attack “an idea in good currency” (Schon 1971). Gurus can, of course, self-destruct, though often not soon enough for some.

Again, altruism may exceed opportunism but “gurus” are likely to become opportunistic faster than the guardians of Type C. The reason? Individual gurus thrive on legitimacy and power, whereas guardians prefer advisory influence to political power. Type D is one version of Dror’s (1993) idea of “fuzzy gambling.” Risk-taking in uncertain environments is inevitable and, therefore, reduces “surprises.” Guardians do this by developing simulations, the guru by making utopian predictions. The main threat for the guru is not the future but “the present.” If what actually happens shows the vision to be wrong-headed (counter-productive or counterintuitive) and, even worse, unachievable, both the guru and his or her advisers may lose legitimacy at such a fast rate they self-destruct together.

A Call for Reconceptualizing Crisis Management

Current presidents and prime ministers operate in all four of these policymaking modes. And leaders exhibiting all four kinds of policy advice can initiate or

capitalize on crisis situations as the occasion dictates. As a consequence, “institution building” can become a victim with transparency turning more opaque; accountability less honest; and participation more “stage-managed” to obfuscate poorer service quality. What should we do? Can we differentiate between contrived and real crises and how those experiencing the situation define threat and opportunity? Can we assess the crisis-related vulnerabilities of the government, its sociopolitical ideology, and the role constraints that might favor a particular type of policymaking (see Cutting and Kouzmin 2000)?

The contemporary literature exploring man-made and natural disasters and crisis events does so by assuming that they are driven by human error or because we are interested in studying their policy implications. Crisis events, supposedly, feature severe threat or an unfavorable, destructive, and often life-threatening change to the victim’s environment (Raphael 1986); a high degree of uncertainty; and the need for prompt (urgent), yet critical and potentially irreversible, decisions (Brecher 1979). Extensive case studies have been carried out examining technological mishaps (for example, Perrow 1984; Wagenaar 1990; Jarman and Kouzmin 1991), political conflicts and terrorism (for example, Rosenthal, Charles, and ‘t Hart 1989; Rosenthal, ‘t Hart, and Kouzmin 1991) and public sector contingencies (for example, George 1991; Collingridge 1992; Meadows, Meadows, and Randers 1992; Korac-Boisvert and Kouzmin 1994). There is also an emerging literature dealing with what have been called “soft-core” crises (Korac-Boisvert and Kouzmin 1994) such as product and development failure; management failure; dramatic market shifts; boycotts and embargoes; technology transfers and dependencies. However, notwithstanding the “hard” and “soft” core crisis categories, both appear to use the accepted yardstick concerning what crises are: crises involve a severe threat (destructive environmental change), a high degree of uncertainty (degree of impact), and time pressure (Rosenthal and Kouzmin 1993:1). Indeed, this definition appears to underpin contemporary thought on crises and crisis management (Drabek et al. 1981; Perrow 1984; Raphael 1986; Kouzmin and Jarman 1989; Rosenthal, ‘t Hart, and Kouzmin 1991).

Immediately problems arise with defining and assessing the characteristics of crisis. For instance, uncertainty, ambiguity, and risk are inherent characteristics of “tough” decisions (Nutt 1989) and generally operational in the context of change and innovation (Korac-Kakabadse and Kouzmin 1996). Moreover, threat, uncertainty, and urgency are concepts that are highly susceptible to the perceptions of stakeholders and constituencies. Not every threat creates a crisis situation. As such, the current crisis model provides a working platform for managerial problems of a general nature, but not with regard to the specificity of crisis events. A more *specific* and *operational* definition of crisis situations is needed.

Because events become crises as a result of being perceived as nonroutine, unstable, less-understood, and time-urgent, they require discretionary decision making (Kakabadse 1991), which is a leadership activity. Crisis situations call for improvisation in a nonroutine manner and resource (re)allocation that has not always been anticipated (Drabek et al. 1981). As such, crisis conditions are distinct from general management problems. In highly conflictive and dynamic crisis situations, the differential abilities of leaders to perceive what is happening, define the nature of the problem, and respond effectively while, at the same time, evidencing a willingness to learn, relearn, show wisdom, and manifest robustness become crucial to understand (Kouzmin and Korac-Kakababse 1999). What we can learn about how leaders engage with the policymaking process from contingency frameworks like that exemplified in Figure 2.1 can provide us with insights into how crises are likely to be managed.

In effect, what we are proposing here is that crisis management be redefined using a “discretionary management” perspective (Kakabadse 1991; Rosenthal and Kouzmin 1997). Developing a vision for how the government is going to deal with crisis prevention, crisis management, and recovery from crisis is a leadership activity. Moreover, strategic choice, so fundamental to crisis management, is open to the discretion of policymakers and, as such, is also a leadership activity. Indeed, the choice of the strategies to be pursued in crisis situations often depend more on what an organization’s leadership is like than on the nature of its structural arrangements (Byrt 1981; Kakabadse 1991, 1993). Although an appropriate organizational structure is desirable in crisis situations, effective management and quality leadership can make almost any organization work. Said in another way, the best-designed organization is unlikely to function effectively in a crisis if those guiding it have insufficient management skills and exhibit poor leadership. Indeed, complex organizations often create the crisis they face in the sense “that the kinds of early warning, prevention, damage limitation, recovery, and learning mechanisms they institute are the most important factors affecting what kinds of crises will occur” (Mitroff 1988:20). Because leaders adjust their perceptions of environmental uncertainties to match their own level of tolerance for ambiguity, mildly discrepant information can be incorporated into their perceptions (McCasky 1974).

Unless an organization’s leadership adopts action plans that anticipate the antecedents of creeping and latent crises, they are unlikely to perceive the beginning of possible decline. In crisis situations, leaders will attempt to learn and adjust to return to the original state of operation—single loop learning—instead of learning how to prevent critical incidents from precipitating crisis processes that take into account generative or double loop learning (Argyris 1982). Vulnerability audits and proactive crisis management sensitivities require sophisticated policy logics and institutional leadership rather than managerial or executive action.

In sum, leadership behavior in both constructing and reacting to crisis situations requires more detailed investigation given the arguments made here. Certainly in the context of the widening debates about governance and leaders’ roles (Cutting and Kouzmin 1999, 2000), examining leadership capabilities under fire should take into account what is happening at the cabinet and prime minister/president level of policymaking as well as the nature of the political system and organization.

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