

- to a formal *quid pro quo*, threw the letter back at Dobrynin and literally refused to receive it. The letter was later recovered for scholars from Russian archives. See May and Zelikow, *The Kennedy Tapes*, pp. 663–64 and nn. 1,2.
130. McNamara testimony to the House Armed Services Committee, 12 January 1963, in files of the Office of the Secretary of Defense.

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Model II: Organizational Behavior

For some purposes, governmental behavior can usefully be summarized as action chosen by a unitary, rational decision maker: centrally controlled, completely informed, and value maximizing. But a government is not an individual. It is not just the president and his entourage, nor even just the presidency and Congress. It is a vast conglomerate of loosely allied organizations, each with a substantial life of its own. Government leaders sit formally on top of this conglomerate. But governments perceive problems through organizational sensors. Governments define alternatives and estimate consequences as their component organizations process information; governments act as these organizations enact routines. Governmental behavior can therefore be understood, according to a second conceptual model, less as deliberate choices and more as *outputs* of large organizations functioning according to standard patterns of behavior.

To be responsive to a wide spectrum of problems, governments consist of large organizations, among which primary responsibility for particular tasks is divided. Each organization attends to a special set of problems and acts in quasi-independence on these problems. But few important issues fall exclusively within the domain of a single organization. Thus, government behavior relevant to any important problem reflects the independent output of several organizations, partially coordinated by government leaders. Government leaders can substantially disturb, but rarely precisely control, the specific behavior of these organizations.

To perform complex tasks, the behavior of large numbers of individuals must be coordinated. Coordination requires standard operating procedures: rules according to which things are done. Reliable performance of action that depends upon the behavior of hundreds of persons requires established “programs.” Indeed, if the eleven members of a football team are to perform adequately on any particular down, each player must not “do what he thinks needs to be done” or “do what the quarterback tells him to do.” Rather, each player must

perform the maneuvers specified by a previously established play, which the quarterback has simply called in this situation.

At any given time, a government consists of existing organizations, each with a fixed set of standard operating procedures and programs. The behavior of these organizations—and consequently of the government—relevant to an issue in any particular instance is, therefore, determined primarily by routines established prior to that instance. Explanation of a government action starts from this baseline, noting incremental deviations. But organizations do change. Learning occurs gradually, over time. Dramatic organizational change occurs in response to major disasters. Both learning and change are influenced by existing organizational capabilities and procedures.

Borrowed from studies of organizations, these loosely formulated propositions amount simply to *tendencies*. In particular instances, tendencies hold—more or less. In specific situations, the relevant question is: more or less? But this is as it should be. If knowledge of the tendency prompts the right question, attention is drawn to a variable that otherwise might be overlooked, whether that is the attention of a student, or the attention of a president of the United States.

In spite of this caveat, the characterization of government action as organizational behavior differs sharply from Model I. Attempts to understand problems of foreign affairs in this frame of reference should produce quite different explanations. About the missile crisis, the Model I analyst asks why “Khrushchev” deployed missiles to Cuba, or the “United States” responded with a blockade and ultimatum. Governments are anthropomorphized as if they were an individual person, animated by particular purposes. In Model II explanations, the subjects are never named individuals or entire governments. Rather, the subjects in Model II explanations are organizations, and their behavior is explained in terms of organizational purposes and practices common to the members of the organization, not those peculiar to one or another individual.

When the basic argument of this chapter was first presented, few in political science addressed major questions from the perspective of organization theory, almost none among students of international relations and foreign policy. In the interim, studies of organizations have evolved along a number of promising paths, and scores of important studies have examined issues from weapons acquisition, military doctrine, and budgeting, to deterrence, safety, and risks of war. In the light of these developments and further reflection, this presentation of Model II underlines five additional points.

First, why organization? Why organize? To paraphrase a dictionary, organizations are collections of human beings arranged systematically for harmonious or united action. Or again: “something comprising elements with varied functions that contribute to the whole and to collective functions; an organism.” While the spectrum from more formal to less formal organizations includes a grey zone, formal organizations are groups of individual human members assembled in regular ways, and established structures and procedures dividing and specializing labor, to perform a mission or achieve an objective.¹ This definition of organization thus does not include people brought together temporarily for a transient purpose. Consider the difference between an orchestra and improvisation; a football team and a sandlot game; an army and an uprising.

Second, and most importantly, organizations *create capabilities* for achieving humanly-chosen purposes and performing tasks that would otherwise be impossible. As Adam Smith noted insightfully in his analysis of a pin factory, by dividing labor, specializing according to function, and training members of the organization to perform in routine fashion, an organization harnesses the individual behavior of tens or hundreds or thousands to produce a uniform product in numbers unimaginably greater than what would be produced by each of these individuals working independently. As Smith explains, “a workman not educated to this business (which the division of labor has rendered a distinct trade) . . . could perhaps, with his utmost industry make one pin a day, and certainly could not make twenty.” But organized with appropriate division of labor and specialization, he goes on: “I have seen a small manufactory of this kind where ten men only were employed . . . but could, when they exerted themselves make among them . . . forty-eight thousand pins in a day.”²

Third, existing organizations and their existing programs and routines *constrain behavior* in the next case: namely, they address it already oriented toward doing whatever they do. Consider the example of the Chinese restaurant. There a customer can order dishes that he would not be able to enjoy had the restaurant not established a menu on the basis of recipes, ingredients, and practice in preparation. But at the Chinese restaurant, one cannot eat items that are not on the menu, for example, a hamburger or a pizza.

Fourth, *organizational culture* emerges to shape the behavior of individuals within the organization in ways that conform with informal as well as formal norms. The result becomes a distinctive entity with its own identity and momentum.

Fifth and finally, organizations are thus less analogous to individuals than to a technology or *bundle of technologies*. The Chinese restaurant's wok and stove and plates and chopsticks, or alternatively the airline's aircraft, guidance system, and engines with specific thrust that achieve a certain speed for a particular design and weight—these are the hardware that both creates capacities to serve up a specific dish or to transport passengers from one location to another. The standard operating procedures followed by chefs in preparing specific dishes, or by pilots, mechanics, air controllers, and others in operating an airline, constitute softer technologies critical to performance. Like the hardware and software of computers, they both create capabilities otherwise not imaginable, and simultaneously constrain performance that one may desire in the next case, or in the next year—for example the year 2000—for which they were not developed or organized.

Revisiting their classic work on organizations more than thirty years later, James March and Herbert Simon called attention to the difference between two different “logics of action,” a logic of “consequences” contrasted with a logic of “appropriateness.”

The first, an analytic rationality, is a logic of consequences. Actions are chosen by evaluating their probable consequences for the preferences of the actor. The logic of consequences is linked to conceptions of anticipations, analysis, and calculation. It operates principally through selective, heuristic search among alternatives, evaluating them for their satisfactoriness as they are found.

The second logic of action, a matching of rules to situations, rests on a logic of appropriateness. Actions are chosen by recognizing a situation as being of a familiar, frequently encountered, type, and matching the recognized situation to a set of rules. . . . The logic of appropriateness is linked to conceptions of experience, roles, intuition, and expert knowledge. It deals with calculation mainly as a means of retrieving experience preserved in the organization's files or individual memories.³

This distinction lies at the heart of the difference between Model I and Model II.⁴

You have probably had the frustrating experience of dealing with a representative of an organization who insists on following some “mindless” routine rather than thinking about what would be sensible, under your particular circumstances. While you may have been frustrated by some encounters with organizational logic described here as Model II, your life may also have been saved by others. The leaders of organizations operating an airline, or a hospital, or a nuclear power station would be badly frightened if a Model I explanation were required for successful performance of normal operations. A major purpose of organizing is to ensure that any of the

operators, whatever their unique preferences and gifts, can interchangeably and successfully perform normal tasks on any given day. If you need to know the name of the pilot to determine whether the flight will be safe, or even arrive at all, then the airline has failed (and will probably be shut down by regulators).

Modern society is accompanied by the creation of more and more complex organizations. Routines interact within the same organization. Or they interact between different organizations operating in a more crowded environment for providing services, sometimes redundantly, sometimes in different jurisdictions. These complex organizations also often handle very dangerous materials or perform operations that carry great inherent risks to human life. The basic operating systems, themselves quite elaborate, are reinforced by safety systems, all with their own “programs.” These systems and programs also interact, sometimes with surprising—and fatal—results.

In the following sections we examine developments in the study of organizations, noting the ways in which different scholars account for the peculiar attributes of organizations. Despite their differences, these explanations nonetheless converge in recognizing a separate form of organizational logic, quite distinct from that of the rational actor.

ORGANIZATIONAL LOGIC AND EFFICIENCY

Early theorists of organizations, such as Max Weber, viewed organizations as more effective, sometimes even dangerously effective, instruments of rational choice. Among the most remarkable features of current life is how much behavior of how many individuals is influenced by the controlling purposes of the organizations to which they belong. Modern consumer society, with mass production, distribution, and sales, represents the triumph of purposive organizations. McDonald's is a corporate organization with the purpose of maximizing profit by selling readily available meals, especially hamburgers. The corporation has developed standard products with standard operating procedures (SOPs) for obtaining the needed ingredients, storing them, transporting them to retail outlets around the world, holding them in the inventory of those outlets, cooking them for customers, serving them, and commenting to the customer to “enjoy” or “have a nice day.” By franchising outlets with handbooks that include SOPs for the design and approval of the facility, its appearance, the equipment to do the cooking, cleanliness, the way food is served, and

advertising, the corporation harnesses and harmonizes the behavior of tens of thousands of people to produce essentially homogeneous products (with wrinkles for special markets, if the corporation so chooses) on the scale of billions. Similar accounts can be offered for many other corporations in many countries. Such triumphs of organized purposiveness vastly increase the number, quality, and availability of products and the performance of both products and providers over any unorganized collection of individual amateurs.

Extend the point. Political leaders have created organizations, from navies to municipal water departments, that have proved to be remarkably efficient, effective instruments for achieving given goals—especially if one thinks of the alternative in the absence of such organizations. Hence the rise of organizations in public life. The focus of the new field of public administration, as it emerged in America between about 1880 and 1940, was to promote scientific management for greater efficiency, replacing amateur administrators with trained professionals.⁵ A Bell Telephone executive, Chester Barnard, argued in the 1930s and 1940s, with considerable effect, that organizations, combining talents and dividing labor, dramatically enhanced the rationality of public as well as private choice.⁶

From this perspective—which has variously been labeled rationalist or functionalist or instrumental—organizational logic might seem to be little more than a subset of the Model I logic of purposive action. After all, can we not explain the behavior of organizations and their members just by discovering the central purposes they were created to serve?

Not quite. Economists began with the proposition that organizations are solutions to problems of efficiency as actors pursue their preferences. The actors must arrange exchanges and make bargains. I pay taxes; you clear snow from my streets. So far the instrumental concept of organizations seems intact. But as some economists began to note, and warn, bureaucrats will produce more of *it* (whatever *it* is), and seek more resources to do it, than society may really need or can afford.⁷

Many economists and economic historians start from whatever institutional environment a society has developed for economic exchange and focus on how organizations develop in relation to these institutions. Organizations adapt and thrive if they deal effectively with the uncertainties inherent in economic exchanges and if they reduce transaction costs enough to offset the cost of the organization itself. Yet, as Douglass North has pointed out, societies and their organizations may become so dependent on a particular path toward

prosperity, the inertia and transaction costs of change becoming so high, that choices for future development become quite constrained. Having chosen their instruments in the circumstances of the past, they are confined by them as they encounter new circumstances in the future.⁸

Theorists have also pointed out that even an organization that was slavishly devoted to being an efficient instrument of its masters' plan can not simply mirror its creators' purposes. The masters have not confronted the problems the organization must address. The organizations must adapt to those new problems, acting in an environment surrounded by other organizations, private as well as public. This adaptation is another reason why, as they evolve, "policy preferences of organizations reflect mainly nonideological organizational imperatives."⁹ These imperatives are one (but only one) of the reasons why organizations tend to look alike, tend to experience what some theorists call "isomorphism," even if they are operating in very different fields of activity.¹⁰

These works tend to study private organizations and those in government. Yet government organizations are different from private firms. They are called into being by political processes; their goals—like their masters—are often diffuse. Government organizations are especially burdened by unique constraints; they cannot keep their profits; they have limited control over organization of production; they have limited control over their goals; they have external (as well as internal) rules governing their administrative procedures; and their outputs take a form that often defy easy evaluation of success or failure.¹¹ "American public bureaucracy is not designed to be effective."¹²

Historians of American public life thus offer a somewhat different picture for the rise of government bureaucracies and administrative power. A functionalist story for the rise of organizations in American governance reads roughly as follows: Problem arises in society; problem is recognized by powerful elites or interest groups; an organization is created, exploiting its superior capacities and efficiency, to address the problem. Yet, at least in the United States, the definition and existence of the problem has been a matter of political opinion; its recognition turns on the contingencies and structure of American political life at the time; organizations may be formed to address some distinctive definition of a "problem" long after (or even before) the problem seems manifest to many observers.¹³

Political scientists have also come to see organizations, once they are created, as something more than the agents of their masters, either

in the form of political leaders or interest groups. While it is true that organizations may be established as instruments of one or several purposes, scholars such as Philip Selznick and Terry Moe have illustrated how organizations become active players in defining just how various purposes will be realized in action.¹⁴ Deference to specialized expertise can also mean a surrender of effective control.¹⁵ A dominant political group that can impose its will on everyone may have a strategy for action but "almost surely lacks the knowledge to do it well. It does not know what to tell people to do. In part this is an expertise problem. . . . These knowledge problems are compounded by uncertainty about the future."¹⁶

Start with the notion of central purpose, as it takes form in an organization's mission. As received by the organization, these goals may be so banal that they can be conceived or framed as a mission for the organization in many different ways. Mark Moore gives the example of how the manager of the Environmental Protection Agency was given the goal of protecting the environment. He and his organization then defined that goal, distinctively, into a mission of stringent regulation of polluting industries. Moore also shows how the manager of a local department of youth services defined the goal of dealing with delinquent and troubled children into the mission of establishing community-based care and referral of children to the least restrictive setting for their rehabilitation.¹⁷

The drive toward efficiency, toward the optimal accomplishment of the mission, also obliges organizations to develop the special capacities for performance of what James Q. Wilson has called their "critical task," a task that forces the organization to formulate distinctive operational objectives. Wilson illustrated the concept:

For the German army [at the end of World War I], the problem was the killing power of dug-in machine guns and artillery. The critical task was finding the solution to this problem. There was a technological solution (the tank) and a tactical solution (infiltration). The Germans made use of both, principally the tactical solution. For the Texas Department of Corrections, the critical environmental problem was maintaining order among numerically superior, temperamentally impulsive, and habitually aggressive inmates. The critical task became the elaboration and enforcement of rules sufficiently precise, understandable, and inflexible that inmates would never acquire the opportunity for independent or collective action. For Carver High School the critical environmental problem was the fear, disorder, and low morale among students and teachers. The critical task was to carry out a highly visible, even dramatic attack on these feelings by a relentless program to clean the buildings, keep them safe, and motivate the students.¹⁸

Like the definition of the organization's mission, the specification of operational objectives is as malleable as the notion of efficiency itself, when applied to any large, public task.

None of this means that government organizations lack central purposes. The point is rather that organizations participate meaningfully in a process in which several purposes are possible and preferred by nominal masters in the executive, legislative, or judicial branches of government. The organizations influence the prioritization of purposes into a definition of their "mission" and are especially influential when the mission is translated, for a specific task, into more concrete, operational objectives. In that context, the organization may seek congruence between the operational objectives and its special capacities for efficient performance.

The sociologist Donald MacKenzie studied the arcane subject of nuclear missile guidance systems. His most powerful conclusion is that this technology did not evolve inevitably to take the form it has today. There were many possible paths. Particular organizations, such as the M.I.T. Instrumentation Laboratory which became the Draper Laboratory, Inc., converted broad defense goals into the mission of producing superior missile guidance systems. They then helped shape tasks and operational objectives that used these remarkable capacities, defying bureaucratic odds in fostering missile programs with the aid of specialized, like-minded subunits of both the Air Force and the Navy. In theory, national strategy should dictate which weapon systems are bought. "In actuality, nothing guarantees this. Quite different actors and considerations are involved at each level. 'Stated posture' is a matter primarily for those at the pinnacle of formal power. . . . Operational planning, on the other hand, is much more a military insiders' business. . . . Weapons system design, finally, involves a different constituency yet again. It often involves different branches of the armed services: the Strategic Air Command, central to operational planning, was quite deliberately excluded from the process of the design of early U.S. ICBMs."¹⁹ At each of these three levels, but especially the latter two, organizations had substantial scope to define their operational objectives in relation to the special capacities they already had, or wanted to have.

Once it is apparent that public organizations and their managers are not just neutral administrators of legislation, natural concerns arise in a democracy about whether the real masters are the unelected bureaucrats or informal coalitions formed among a few interested and powerful politicians, affected interest groups, and the bureau-

crats. Some political scientists have reacted to these fears by reemphasizing the controlling purposes, a "rational choice" viewpoint granting a significant measure of control to democratically elected leaders. A key argument in the literature involves just how much effective control is being retained, and how much "bureaucratic drift" political masters will allow.²⁰

To perform and to make regular judgments, organizations adopt rules, norms, or routines. Where satisficing is the rule—stopping with the first alternative that is good enough—the order in which alternatives are approached is critical. Organizations generate alternatives by relatively stable, sequential search processes. As a result, the menu of choice is severely limited and success is more likely to be defined simply as compliance with relevant rules.²¹

Organizations exhibit great reluctance to base actions on estimates of an uncertain future. Thus choice procedures that emphasize short-run feedback are developed. Like house thermostats, organizations, rely on relatively prompt corrective action to eliminate deviations between actual and a preset, desired temperature rather than on accurate prediction of next month's temperature. They develop routines for making many frequent adjustments in a variety of relationships with their operating environment.²²

"The whole pattern of programmed activity in an organization," March and Simon observed, "is a complicated mosaic of program executions, each initiated by its appropriate program-evoking step."²³ These programs constitute the range of effective choice in recurring situations. "As new situations arise, the construction of an entirely new program is rarely contemplated. In most cases, adaptation takes place through a recombination of lower-level programs that are already in existence."²⁴ A common understanding of these programs and development of the capacities to run them, including professional specialization, are powerful ingredients in shaping an organizational culture.²⁵

Set programs and rigid routines are easy to criticize, yet they are indispensable to efficient organizations. Their value is clearest to those who have actually had to get something done, as one practitioner, Gordon Chase, made clear in his essay, "Implementing a Human Services Program: How Hard Will It Be?"²⁶ The established routines reflect considered tradeoffs within the technological and social context of an organization. They create areas of freedom and autonomy for individual operators by setting limits on all of them. Often the real

problem is not the rule, but the premise behind it, or the system to which the rule is coupled.²⁷

ORGANIZATIONAL LOGIC AND ORGANIZATIONAL CULTURE

Efficiency is not the only impulse pushing organizations toward the "logic of appropriateness." Organizations often behave in ways that seem inconsistent with a purely functional account, even one that acknowledges the idiosyncratic ways an organization might pursue efficiency. "Administrators and politicians champion programs that are established but not implemented; managers gather information assiduously, but fail to analyze it; experts are hired not for advice but to signal legitimacy."²⁸ Analysts contributing to the "new institutionalism" have argued that organizations create purposes and routines that arise from within, and that are tied to what James March has called "the concept of identity. An identity is a conception of self organized into rules for matching action to situations." The rules both define and grow out of a distinctive organizational culture.²⁹ Organizational culture is thus the set of beliefs the members of an organization hold about their organization, beliefs they have inherited and pass on to their successors.

This approach to understanding organizational behavior sees organizations and bureaucrats as more autonomous, with great scope to define their critical tasks in a way that serves preferences that arise out of the organization itself and its managers. While Selznick, Moe, and others had acknowledged that managers could exert a good deal of leverage in defining what they would do, the "new institutionalists" think they do not go far enough in seeing the organization, and its needs, at the very center of stories about public action.

Some of this difference is little more than a matter of narrative perspective. Told from the point of view of Congress, administrators may seem constrained. Told from the point of view of more activist administrators, the constraints are just one of many background circumstances in an environment in which they still make the key decisions. John DiIulio has argued, for example, that the quality of life in American prisons depends more on management practices than on any other variable. It is not society, not politicians, but above all bureaucrats and their choice of procedures that will determine how

prisons work and how prisoners live.³⁰ A recent wave of works by scholars giving advice to public managers may not venture into the theoretical debates of the “new institutionalists” but, by setting up bureaucrats as protagonists with considerable discretion for important choices, they join in putting the organization and its own desires at the center of the story.³¹

The early milestone along this road was set by the book, *A Behavioral Theory of the Firm*, by Richard Cyert and James March. In contrast to mainstream economic theories that explain the firm’s behavior in terms of market factors, Cyert and March focused on the effect of organizational structure and conventional practice upon the development of goals, the formulation of expectations, and the execution of choice. This product of the “Carnegie School” of organization theory represented an extension of Herbert Simon’s concern with problem-solving under conditions of bounded rationality. Following Barnard, Cyert and March view the organization as a coalition of participants (some of whom are not necessarily on its payroll, e.g., suppliers and customers) with disparate demands, changing focuses of attention, and limited ability to attend to all problems simultaneously. Bargaining among potential coalition members produces a series of *de facto* agreements that impose constraints on the organization but construct a unique identity.³²

The development of operational objectives to perform a specific task also influences the organization’s culture. Later March, working with Johan Olsen, argues that organizations actually define themselves in taking action. Inchoate circumstances are crystallized in a way that galvanizes the participants and clarifies how they see themselves. The visitor strolling the halls of the Pentagon will see scores of paintings and photographs depicting scenes and events of past actions, some mundane and some heroic. Each represents a decision; the decisions now provide powerful tokens of identity and rules for future action. For an organization, March and Olsen noticed, decision-making “provides an occasion for other things: an occasion for executing SOPs and fulfilling role expectations, duties or earlier commitments; an occasion for defining virtue and truth, during which the organization discovers or interprets what has happened to it, what it has been doing, and what it is doing; an occasion for glory or blame; for discovering self and group interests; and a good time.”³³

The argument that operational activity shapes organizational culture is strongly reinforced by evidence about how key judgments and information are concentrated at the bottom of an organization, not the top. If “street-level bureaucracy” and its “field-based learning”

define operational objectives, then the organization’s beliefs about itself will come from within, not without.³⁴

Operational experiences in the field reinforce certain capacities and routines, even endow the capacities and routines with a ceremonial power that provides legitimation internally or in dealings with the outside world. The resulting culture is powerfully reinforced by the professionalization of key operators in the organization. Professionals try to distinguish the nature of their work from non-professionals. They set norms of appropriate behavior (down to style of dress and manner of speaking) and create incentives for organizations in certain sectors to conform to a common ideal—isomorphism again. In a famous phrase, Rosabeth Moss Kanter called this the “homosexual reproduction of management.” In his book *The Right Stuff*, Tom Wolfe shows how the Mercury astronauts were all molded by the common professional and organizational norms of military test pilots. Sometimes the cultural routines clash with criteria of efficiency. Efficiency often loses.³⁵

While individuals can also rely on a “logic of appropriateness,” organizations reinforce this tendency. They provide *models* for defining identity, classifying a situation, and applying the appropriate rule. They provide *cues* and prompts by assigning labels and casting people into prescribed roles. They provide *experiences* that reinforce behavior or produce learning, adaptation, and the development of new rules.³⁶

Though the results may be the same, there are important distinctions between explanations of organizational behavior rooted in “efficiency” or in constructs of “culture,” between the old and “new” institutionalism. We spotlight four of them, relying upon but extending the work of Paul DiMaggio and Walter Powell.

1. *Where do organizations derive their preferences?* Those who emphasize efficiency see organizations as aggregations of interests where problems of cooperation and collective action are solved. There is a cost to solving these problems by building large organizations with their surrounding distractions, but organizations succeed where the friction or transaction costs of doing without them would be even greater. They stress principal-agent relationships as a key to understanding organizations.³⁷ Those who emphasize culture concede some of this. But they tend to see the interests as a social construction, varying with the institutional setting in which an organization is placed. They see the choices about those interests being made more through the “logic of appropriateness” rather than the

"logic of consequence." Those who emphasize culture also focus, with March and Olsen and others, on a theory of action, on the street-level bureaucracy, where interests are actually derived from decisions rather than the other way around. Actions are occasions when organizations define what they really want and will do. These desires are often endogenous to the organization, not exogenous.³⁸

2. *Why does organizational behavior constrain "rationality"?* Those who emphasize efficiency point more to rules that necessarily constrain optimal choice in order to achieve the efficiencies of established routines. They also point out that these rules may reflect negotiated bargains within the organization and with those it serves, preserving the organization's net ability to achieve desired results. Finally they may observe that bureaucrats are reluctant instruments, shrewdly circumventing one master to obey another or simply being unresponsive, producing unforeseen consequences. On the other hand, those who emphasize culture do not see the operators as instruments of an external actor, effective or defective. Instead, they stress how organizations strive for legitimacy and status, ideals that may matter much more to those inside the organization or an organizational field than to those outside of it. To the extent they obey the purposes or values assigned by others, these are simply circumstances that the organization's operators take into account. "Not norms and values but taken-for-granted scripts, rules, and classifications are the stuff of which [organizations] are made."³⁹
3. *Why are organizational structures sometimes so peculiar?* Those who emphasize efficiency concentrate on how interest groups foster cliques or patterns of interaction that create informal structures, structures that may subvert the formal structure put in place by the organization's original creators in order to accomplish the goals desired by new, less obvious masters. Those who emphasize culture look more to "irrationality in the formal structure itself, attributing the diffusion of certain departments and operating procedures to interorganizational influences, conformity, and the pervasiveness of cultural accounts, rather than to the functions they are intended to perform."⁴⁰
4. *How do organizations relate to their environment?* Those who emphasize efficiency pay more attention to the place where the organization operates, including the needs of the area and the interest groups working to co-opt the agency's efforts. Those

who emphasize culture tend to focus instead on the organization's relationship to a sector or field, rather than a particular geographic location. They would try to explain the behavior of the Houston Police Department more by looking at the way police officers generally perceive themselves and their duties, rather than concentrating on particular conditions in Texas. From this perspective, key routines may develop throughout an organizational field and become shared by all the organizations in that field, overriding local diversity, rather than responding to the unique demands of one or another workplace.⁴¹ In other words, a cop in Houston may have more in common with a cop in Chicago than either of them have in common with ordinary citizens in their city.

We do not ask the reader to choose between the paradigm of efficiency and the paradigm of culture. For our purposes, the more important point is the extent to which both approaches agree on certain basics: a mission, the creation of special capacities linked to operational objectives oriented toward performance of specific tasks, and reliance on associated routines. Both acknowledge in different ways that organizational behavior has a distinctive pattern of its own, with considerable autonomy not only in defining specific objectives but in defining how to measure performance.⁴² A number of scholars of international relations, especially Robert Keohane and Stephen Krasner, have shown how these patterns are significant for understanding governmental actions. Keohane *succinctly* explained that "institutions do not merely reflect the preferences and power of the units constituting them; the institutions themselves shape those preferences and that power."⁴³

Studying the effect of routines for going to war in 1914, Jack Levy concluded that the routines were not alone responsible for the catastrophes that attended their use. Yet, as he notes, the reliance on the routines "cannot be explained by a rational strategic calculus." The routines, and the organizational logic that shaped them, were a powerful, independent variable in a complex interaction of influences on key officials, pulling them toward a logic of appropriateness, of programmed responses, and away from the logic of consequences.⁴⁴ Moving from the beginning of the century to its last decade, Barry Posen showed how the U.S. military's late Cold War plans for waging a purely conventional war against a Soviet adversary had led to capacities, operational objectives, and routines that were difficult to understand outside of the organization's own logic, especially since they

opened up several dangerous pathways for inadvertent escalation to nuclear war.⁴⁵ Fortunately, unlike the 1914 case, Posen's hypothesis was never tested.

Elizabeth Kier's book, *Imagining War*, asks why Britain and France developed defensive, rather than offensive, military doctrines in the years before World War II. She stresses the relationship between a military's organizational culture and the scope granted to the organization by the areas of controversy and consensus in the domestic political environment. But she also emphasizes the malleability of organizational culture. "We should not assume that similarly situated groups in different national settings have similar preferences." Not all militaries want offensive doctrines. Even within the same military, the Air Force and Army may pursue radically different doctrines, and the differences persist among subunits that have their own special capacities and culture. Throughout, "military preferences cannot be deduced from the functional needs of military organizations,"⁴⁶ or at least these functional needs are particular mixtures of objective reality, political context, and the beliefs the organization's senior operators hold about themselves and their common tasks.

INTERACTIVE COMPLEXITY

Organizations develop special capacities and routines for implementation. Once these are recognized, the next step is to notice how they interact with each other. The interactions of programs or routines occur in several different ways. One large organization may have many suborganizations, each with overlapping routines for performing related functions. Some cabinet departments in the executive branch resemble holding companies for a variety of organizations. The structure of the Department of Defense was radically reformed in 1986, in part because of widespread alarm about problems stemming from the inconsistent, even clashing, procedures for command and control of operations that had been worked out by each of the various services housed within the Pentagon.

Damaging interactions can also occur within one agency when new, unfamiliar tasks are superimposed onto old routines. A splendid performance record was compromised in the Social Security Administration when, because it handled old age pensions so well, it took on new responsibilities for Medicare payments.⁴⁷

Many different organizations now involved in major public activities interact to create new levels of complexity in trying to get any-

thing done. Jeffrey Pressman and Aaron Wildavsky in their book, *Implementation*, tell the story of how a federal agency tried to create jobs in Oakland, California. Pressman and Wildavsky studied the intersecting responsibilities of the federal, state, county, local, and private organizations concerned, and the interaction of their various rules and routines. The phenomenal "complexity of joint action" they found is common to most modern endeavors of government.⁴⁸ Simplification is hard, not just because different jurisdictions have different interests, but because there are sometimes good arguments for having redundant attention to a problem from several organizations.⁴⁹

Charles Perrow's book, *Normal Accidents*, broke new ground by showing how ever-increasing numbers of routines interact as large organizations are entrusted with ever more complex and risky operations. High risk spawns many new routines designed to guarantee reliable, safe performance, but the new routines also interact. The result, Perrow argues, is that the interactions defy ready understanding and can magnify the consequences of small failures, which are inevitable. When the failures arising in the environment of interactive complexity also occur in a system where operations are tightly coupled, for example, in a nuclear power reactor, hazards loom. For many systems, "neither better organization nor technological innovations appear to make them any less prone to system accidents. In fact, these systems require organizational structures that have large internal contradictions, and technological fixes that only increase interactive complexity and tighten the coupling. They become still more prone to certain kinds of accidents," hence Perrow's title.⁵⁰

Our review of the drives for efficiency and identity in organizational logic highlights instances when this logic of appropriateness produces behavior at odds with actions states should rationally have chosen in moments of crisis. As Sagan has argued, instances in which organizations dominate in state behavior may be correlated with behavior that is "dysfunctional in a competitive international system."⁵¹ In every case, analysts, managers, and political leaders should be acutely aware of the gravitational pull exerted by organizational propensities. Success in policy management requires of leaders extraordinary efforts to create a balance between their purposes and the accumulated weight of the organization's predispositions.

Our conclusion is not that organizations invariably tend to produce dysfunctional behavior that must then be checked by political leaders. In general, organizations not only enhance capability but also provide superior capacity for coping with new strategic circum-

stances.⁵² Nonetheless, the potential for dangerous dysfunctionality exists, and must be managed by sustained thought and attention to operational details.

NASA: HERO AND GOAT

The National Aeronautics and Space Administration (NASA) embodies many of the strengths and weaknesses of organizations, their logic, and the power of their culture. *Apollo 13* was the first movie to win an Academy Award for best picture in which the hero was an organization. While the movie certainly had protagonists, especially astronaut Jim Lovell, played by actor Tom Hanks, neither in life nor in fiction did Lovell play the lead part in saving his own life, or the lives of his crew, after an oxygen tank in his spacecraft exploded while the craft was 200,000 miles away from earth, speeding to the moon.

In 1970, NASA had the mission of transporting human beings to the moon, landing them there, enabling some exploration of the lunar surface, and then bringing the astronauts safely home. To accomplish this mission, NASA had acquired, at great cost, a host of unique capacities, most revolving around the operation of extraordinary and risky aeronautical systems and founded on the assembled ability to solve practically unique sets of engineering problems. Elaborate procedures and routines were established to mobilize this talent on a regular basis in a work environment that combined nearly zero tolerances for errors with a frequent need to improvise technical solutions to inevitable minor problems that threatened those tolerances.

The explosion on *Apollo 13* was the product of three events: the mistaken installation of a 28-volt thermostat rather than a 65-volt thermostat when an oxygen tank was built in Colorado in 1968; the misalignment of a drain tube in the tank when it was dropped two inches in a factory in early 1970; and the judgment, less than two days before launch, to heat the tanks to force oxygen out of them after discovery of the misaligned drain tube. That last judgment, taken with care and approved by Lovell, would have been inconsequential if not for the faulty thermostat, which fused shut and neither turned off the heaters nor indicated the rising heat in the tank. Three groups of technicians had, following procedures, reviewed the quality of the original tank construction two years earlier; none had noticed that it had the wrong thermostat.⁵³

The tank exploded during a routine flight operation and, within two hours, the spacecraft was "drifting and dead," most of its oxygen

gone along with most of the control jets that could be used for manual control. Already new routines had come into play. The power on the ship had been shut down in dozens of steps according to emergency procedures detailed in a book stuck with Velcro strips to the interior of the craft. The astronauts used "the pink pages, emergency pages one through five," as instructed by Mission Control in Houston. Then, as the crew retreated into the still intact lunar lander, attached to the command capsule, the controller for electrical and environmental systems dusted off procedures for using the lander as a "lifeboat." NASA already had "LEM [lunar excursion module] lifeboat procedures" that had been tested in a problem simulation months earlier.

Then engineers plotted a way to fire the spacecraft's main engine so that it would propel the craft on a perfect trajectory back to Earth. There were no routines for this, but a 15-person team of top-notch controllers from each major specialty was collected, called the "Tiger team," and tackled the various problems. They had experience, special training, established analytical methods, technical support, and routines for implementing their plans. Simulators were activated, with other astronauts, to test ideas and prepare them for implementation. There were a series of questions about how to supply enough oxygen and electrical power to keep the crew alive during the more than four days it would take for them to return. Procedures were then improvised to guide the crew on each of the scores of steps that would be required to put each plan into action. Options were identified, each with their own risk-benefit tradeoffs, and discussed in detail among the engineers, astronauts, flight directors, and NASA administrators.⁵⁴

The teams succeeded. To explain their success it is meaningless to examine the obvious wishes of President Nixon or the U.S. government. At no point did relevant guidance come to NASA from political officials. Even NASA's top administrators, in accordance with the organization's procedures, were relatively powerless in comparison to the flight directors and controller/engineers. The *Apollo 13* story is, in many ways, a supreme tribute to a "pure" technical culture imbued with a "can do" ethos.⁵⁵

On January 28, 1986, NASA launched Space Transportation System Mission 51-L, which was the latest in nearly five years of successful flights of what was known as the space shuttle. This launch, of the shuttle *Challenger*, went catastrophically awry. After little more than a minute, the system exploded on national television. All seven crew members, including a school teacher invited to participate as an inspirational passenger, were killed.

The subsequent investigations, led by a presidential commission (the Rogers Commission), established that certain long-standing concerns with the solid rocket boosters that powered the shuttle into orbit had been overridden in favor of launch. The Rogers Commission blamed a flawed decision-making process and other critics blamed political pressure driving NASA to avoid the launch delays that had plagued the space shuttle program.

An extensive investigation by sociologist Diane Vaughan instead found little that was abnormal in the lengthy deliberations that had immediately preceded the *Challenger* launch. For years, the organization had slowly evolved as "each time a launch decision had to be made, the technical experts snatched certainty from the jaws of uncertainty, pulling together a coherent technical analysis. . . . Over time, the work group developed a scientific paradigm that incrementally expanded to include recurring anomalies, becoming more stable in the process."⁵⁶

Vaughan conclusively shows that there was no particular political pressure to launch *Challenger*. The "decision making here consisted of a repeating choice about the same technical object in a highly regulated, open decision process." The case, she argues, cannot be understood through a conventional rational choice model, in which launch decision makers calculated cost and benefit. Nor were the decision makers apparently afflicted by group think, in the usual sense of a cohesive small group trying to protect itself and support each other. The judgments involved dozens of people and several organizational subunits. They followed rigorous norms and rules for such technical discussions, appropriate within the engineering culture that dominated the organization. While pressures to launch and scarce resources were in the background, those pressures had long ago been internalized by the organization, and only formed part of the "taken-for-granted assumptions, predispositions, scripts, conventions, and classification schemes" that made the launch decision sensible to those who participated in it. Outsiders, viewing the event later with the logic of consequences, saw the judgments as deviant. Insiders, viewing the event at the time with their logic of cumulative appropriateness, found them acceptable. There is individual rationality, of course, but in this case it was "irretrievably intertwined with position in a structure." No single person's calculation can be blamed for the *Challenger* launch decision. The event can only be comprehended as an organizational output.⁵⁷

Vaughan points out that the conditions of the *Challenger* launch decision were unprecedented. But no one recognized that, in an orga-

nizational sense. Confronting uncertainty, they followed the usual rules and routines of their engineering culture. Instead of innovating they conformed. Conformity, not deviance, was responsible for the outcome.

The NASA experience is far from unique. In April 1994, two U.S. Air Force F-15 fighters, aided by the most advanced system of airborne flight control in the world, shot down two U.S. Army Black Hawk helicopters flying in clear skies over northern Iraq, killing 26 peacekeepers. Two years of inquiry followed but, despite widespread assumptions of pilot or controller error, Scott Snook found, after very close scrutiny, that the event can only be explained "as the result of normal people behaving in normal ways in normal organizations." Each link in the tragic chain had done what was appropriate, given the information and the program for responding to it.

The crew of the Airborne Warning and Control Systems (AWACS) aircraft did not attempt any possible, nonroutine actions that might have averted the tragedy. The AWACS crew had been confused about who was supposed to make key judgments; the result was inaction. The Air Force had foreseen such problems and had adopted policies encouraging crew cohesion, "hard crews" who constantly fly together, though these policies were often not followed in practice because the organization was adapting to other imperatives. As one officer put it, "with the ops [operations] tempo and the manning we had, it was near impossible to make it happen. So it was one of those things that you go okay, we'll fly hard crews, but everybody knows that the percentages of flying with a real hard crew is very difficult."⁵⁸

The redundancy in responsibility that was intended to prevent failure also diffused responsibility and thereby, paradoxically, made failure possible. Many routines interacted. "The Army never got the word on Mode I IFF [identification friend or foe] codes; the F-15 pilots weren't alerted to the helicopters' mission that day; the Black Hawks entered the no-fly zone prior to it being swept; and fighters and helicopters were talking on different radio frequencies." Even routines to integrate the routines will, as one theorist observed, soon "unravel if they are left unattended."⁵⁹

ORGANIZATIONAL BEHAVIOR PARADIGM

This capsule review of organizational theory provides a context within which to outline an organization behavior paradigm relevant to foreign policy and international politics. What is now known about

the behavior of organizations is enough to suggest significant limits and essential supplements to Model I for explaining and predicting governmental behavior.

I. *Basic Unit of Analysis: Governmental Action as Organizational Output.* The happenings of international politics are outputs of organizational processes in three critical senses. First, actual occurrences are organizational outputs. For example, consider American military intervention in the Persian Gulf War (Operations Desert Shield and Desert Storm). American soldiers were stationed on the Saudi Arabian border with Kuwait in August 1990 and American aircraft destroyed targets throughout Iraq in January 1991. Those were organizational actions: the action of soldiers in platoons, which form companies, which in turn comprise battalions, brigades, divisions, corps, and form part of a unified theater command, responding as privates to lieutenants who are responsible to captains and so on to the commanding general, moving into Kuwait and Iraq, advancing against enemy troops, and firing according to fixed routines of the U.S. armed forces. The decisions of government leaders trigger organizational routines. Government leaders can trim the edges of this output and can exercise some choice in combining outputs. But most of the behavior is determined by previously established procedures.

Second, existing organizational capacities for employing present physical assets constitute the range of effective choice open to government leaders confronted with any problem. Only the existence of men and women who were equipped and trained as fighting units and capable of being transported thousands of miles to the Persian Gulf made entry into the Gulf War a live option for the American leaders. The fact that the fixed programs (equipment, personnel, and routines that exist at the particular time) exhaust the range of buttons that leaders can push is not always perceived by the leaders. But in every case it is critical for an understanding of what is actually done.

Third, organizational outputs structure the situation within the narrow constraints of which leaders must make their decisions about an issue. Outputs raise the problem, provide the information, and take the initial steps that color the face of the issue that is turned to the leaders. As Theodore Sorensen has

observed, "Presidents rarely, if ever, make decisions—particularly in foreign affairs—in the sense of writing their conclusions on a clean slate. . . . The basic decisions, which confine their choices, have all too often been previously made."⁶⁰ To one who understands the structure of the situation and the face of the issue—both shaped by the organizational outputs—the formal choice of the leaders is frequently anticlimactic.

Innovation: Leaders may try to undertake a new activity, where there is no established organizational capacity or set routines. If they comprehend the effort required to create the preconditions for effective organizational output, they will understand that the payoffs will be for a future crisis rather than for the one at hand.⁶¹ Often they do not understand or they have no choice. During the Gulf War the United States came under tremendous pressure to find and destroy the mobile Iraqi launchers that were firing SCUD missiles at Israel and at Saudi Arabia. From the perspective of General Norman Schwarzkopf, running the theater campaign at the U.S. Central Command headquarters (CENTCOM), the task was vexing. From his organization's perspective, the missiles were not inflicting any serious military damage. His command had not established a proven capacity and routines for locating, targeting, and destroying the SCUDs. A "SCUD-hunt" for the mobile launchers over thousands of square miles of western Iraq would consume enormous resources, and CENTCOM thought the threat could be neutralized more efficiently by using the resources in the existing plan to knock Iraq out of the war. CENTCOM was overruled. Dick Cheney exclaimed that, "As long as I am secretary of defense, the Defense Department will do as I tell them. The number one priority is to keep Israel out of the war." CENTCOM was directed to respond vigorously, and be seen to respond, to the missiles that were bombarding Israeli cities. The hunt was on, though Schwarzkopf complained about interference and continued to fend off proposals for more radical disruptions of the ongoing strike plans. CENTCOM also resisted rival proposals offered to tackle the problem from another military organization, the Special Operations Command, arguing that the rival plans would disturb CENTCOM's own established plans and routines for effectively conducting the war. When the war ended, the political leaders were satisfied (barely) that Israel

had stayed out. The military results of CENTCOM's reluctant, improvised hunt were disappointingly modest.⁶²

If the unit of analysis is governmental action as organizational output, then analysis of formal governmental choice centers on the information provided and the options defined by organizations, the existing organizational capabilities that constitute the effective choices open to the leaders, and the outputs of relevant organizations that fix the location of pieces on the chess board and shade the appearance of the issue. Analysis of actual government behavior focuses on executable outputs of individual organizations as well as on organizational capabilities and organizational positioning of the pieces on the chess board.

II. Organizing Concepts

- A. *Organizational Actors.* The actor is not a monolithic nation or government but rather a constellation of loosely allied organizations on top of which government leaders sit. This constellation acts only when component organizations perform routines. In the U.S. government, the departments or agencies—for example, the Air Force, the Department of State, the Office of the U.S. Trade Representative—are typically the principal agents. Or the actors may be subunits of large organizations, such as submariners in the Navy or elite forces in any organization that typically have distinctive norms and routines of their own.
- B. *Factored Problems and Fractionated Power.* Surveillance of the multiple facets of foreign affairs requires that problems be cut up and parceled out to various organizations. Within the U.S. government, the Department of State has primary responsibility for diplomacy, the Department of Defense for military security, the Treasury for economic affairs, and the CIA for intelligence estimates.

To avoid paralysis, primary power must accompany primary responsibility. The Defense Department purchases weapons required for national security; the CIA gathers relevant clandestine intelligence. Where organizations are permitted to do anything, a large part of what they do will be determined within the organization. Thus, each organization perceives problems, processes information, and performs a range of actions with considerable autonomy (within broad guidelines of national policy and numerous constraints).

The overriding fact about large organizations is that their size prevents any single central authority from making all important decisions or directing all important activities. Factored problems and fractionated power are two edges of the same sword. Factoring permits more specialized attention to particular facets of problems than would be possible if government leaders tried to cope with the problems by themselves. But that additional attention must be paid for in the coin of discretion for *what* an organization attends to and *how* organizational responses are programmed.

- C. *Organizational Missions.* Whether missions are stated more formally or more vaguely, many organizations, especially businesses, have an explicit, brief mission statement that seeks to define for their members and customers what businesses they are in and what they seek to accomplish. Many government organizations have formal charters that specify their authorities, the arenas in which they are directed to operate, and activities that are forbidden. Organizations interpret mandates into their own terms. This is especially true when the broad goals conflict or offer little operational guidance. Morton Halperin thus adds the concept of organizational essence, defined as "the view held by the dominant group in the organization of what the missions and capabilities should be."⁶³
- D. *Operational Objectives, Special Capacities, and Culture.* Primary responsibility for a narrow set of problems combines with the gritty, everyday requirements for action to produce distinctive sets of beliefs about how a mission should be implemented and what capacities are needed or wanted to perform it. The beliefs create an organizational culture, marked and accentuated by: (1) the way the organization has defined success in operational terms; (2) selective information available to the organization; (3) special systems or technologies operated by the organization in performing its task; (4) professional norms for recruitment and tenure of personnel in the organization; (5) the experience of making "street-level" decisions; and (6) distribution of rewards by the organization. Clients (e.g., interest groups), government allies (e.g., congressional committees), and extranational counterparts (e.g., the British Ministry of Defense for the Defense Department's Office of the Secretary of Defense or

the British Foreign Office for the State Department's Bureau of European and Canadian Affairs) galvanize this parochialism. Thus organizations develop relatively stable propensities concerning priorities, operational objectives, perceptions, and issues. For example, the military services are manned by careerists on a structured ladder. Promotion to higher rungs is dependent on years of demonstrated, distinguished devotion to a service's mission. Work routines, patterns of association, and information channels combine with external pressures from organized groups and friends in Congress to make quite predictable a service's continual search for new hardware consistent with currently assigned roles and missions—for instance, the Air Force's pursuit of a new manned strike aircraft.

E. *Action as Organizational Output.* The preeminent feature of organizational activity is its programmed character: the extent to which behavior in any particular case is an enactment of preestablished routines. In producing outputs, the activity of each organization is characterized by:

1. *Objectives: Compliance Defining Acceptable Performance.*

The operational objectives of an organization are seldom revealed by formal mandates. Rather, each organization's operational objectives emerge as a set of targets, flanked by constraints, that define performance of the critical task. Operators then are obliged to comply with the targets and constraints. For them, successful compliance is successful performance. These may be quantified: numbers of clients interviewed, percentage of aircraft ready to fly on an hour's notice, or hours flown without an accident. They may be procedural: lesson plan filed, procurement rules followed. But they tend to allow operators to follow the more "cybernetic" logic of appropriateness. The requirements for compliance emerge from a mix of the expectations and demands of other organizations and professionals in the field or in the government, statutory authority, demands from citizens and special interest groups, and bargaining within the organization. The targets and constraints represent a quasi-resolution of conflict—the requirements are relatively stable, so there is some degree of resolution; however, they may not always be compatible over time, hence it is only a quasi-resolution. Typically, the constraints are formulated as impera-

tives to avoid roughly specified discomforts and disasters. For example, the behavior of each of the U.S. military services (Army, Navy, and Air Force) seems to be characterized by effective imperatives to avoid: (1) a decrease in dollars budgeted, (2) a decrease in manpower, (3) a decrease in the number of key specialists (e.g., for the Air Force, pilots), (4) reduction in the percentage of the military budget allocated to that service, (5) encroachment of other services on that service's roles and missions, and (6) inferiority to an enemy weapon of any class.

2. *Sequential Attention to Objectives.* The existence of conflict among operational targets and constraints is resolved by the device of sequential attention. As a problem arises, the subunits of the organization most concerned with that problem deal with it in terms of the targets and constraints they take to be most important. When the next problem arises, another cluster of subunits deals with it, focusing on a different set of targets and constraints.

3. *Standard Operating Procedures.* Reliable performance of critical tasks, and associated compliance with targets and constraints, requires standard operating procedures (SOPs). Rules of thumb permit concerted action by large numbers of individuals, each responding to basic cues. The rules are usually simple enough to facilitate easy learning and unambiguous application. Since procedures are "standard" they do not change quickly or easily.

On the evening of November 9, 1989, the East German government announced, at a press conference, a change in the rules on how their citizens could apply for travel to the West. Some of the language, which was poorly worded and easily misunderstood, encouraged tens of thousands of East Germans to go to the Berlin Wall during the night and attempt to cross into West Berlin. The border guards were caught unaware, unsure of what their government had announced, without any SOPs for handling the crush of people or for answering their questions. Confused and off balance, they quickly faced the choice of shooting masses of people or stepping out of their way. They stepped. So fell the Berlin Wall.⁶⁴

Without standard operating procedures, it would not be possible to perform certain concerted tasks. But because of them, organizational behavior in particular instances

appears unduly formalized, sluggish, or inappropriate. Some SOPs are simply conventions that make possible regular or coordinated activity. But most important SOPs are grounded in the incentive structure of the organization or even in the norms of the organization or the basic attitudes, professional culture, and operating style of its members. The deeper the grounding, the more resistant SOPs are to change.

4. *Programs and Repertoires.* Organizations must be capable of performing actions in which the behavior of hundreds of individuals is precisely coordinated. Special capacities require sets of rehearsed SOPs for producing specific actions, e.g., fighting enemy units or answering an embassy's cable. Each cluster comprises a "program" (in the language of drama and computers) that the organization has available for dealing with a situation. The list of programs relevant to a type of activity, e.g., fighting, constitutes an organizational repertoire. The number of programs in a repertoire is always quite limited. When properly triggered, organizations execute programs; programs cannot be substantially changed in a particular situation. The more complex the action and the greater the number of individuals involved, the more important are programs and repertoires as determinants of organizational behavior.
5. *Uncertainty Avoidance.* Organizations do not attempt to estimate the probability distribution of future occurrences. Rather, organizations avoid uncertainty. By arranging a *negotiated environment*, organizations try to maximize autonomy and regularize the reactions of other actors with whom they must deal. When Melvin Laird became Secretary of Defense in 1969, he supervised large cuts in defense spending but gave the services great autonomy in deciding how to spend their money. He was a very popular secretary. As Halperin explained, bureaucracies often prefer "less money with greater control than more money with less control."⁶⁵ Where autonomy is not possible, the primary environment (relations with other organizations comprising the government) is stabilized by such arrangements as agreed budgetary splits, accepted areas of responsibility, and established practices. The secondary environment (relations with the international world) is

stabilized between allies by the establishment of contracts (alliances, formal and informal) and "club relations" (U.S. State Department and British Foreign Office or U.S. Treasury and British Treasury).

Where the international environment cannot be negotiated, organizations deal with remaining uncertainties by establishing a set of *standard scenarios* that constitute the contingencies for which they prepare. For example, the U.S. Army in the 1960s prepared for large-scale ground operations that would emphasize American advantages in firepower. When, after some initial engagements, these scenarios did not materialize in Vietnam, the Army found it agonizingly difficult to adapt.⁶⁶

6. *Problem-directed Search.* Where situations cannot be construed as standard, organizations engage in search. The style of search and its stopping point are largely determined by existing routines. Organizational search for alternative courses of action is problem-oriented: it focuses on the atypical discomfort that must be avoided. It is simple-minded: the neighborhood of the symptom is searched first, then the neighborhood of the current alternative. Patterns of search reveal biases that reflect factors such as specialized training, experience of various parts of the organization, and patterns of communication within the organization. The American army in Vietnam, unable to force the enemy into large-scale battles, tried to leverage its existing assets and routines with massive search and destroy plans centered around firepower and helicopter-borne mobility.
7. *Organizational Learning and Change.* The parameters of organizational behavior mostly persist. In response to nonstandard problems, organizations search and routines evolve, assimilating new situations with considerable skill but within the world view of the organization's culture. Such learning and change follow in large part from existing procedures, but marked changes in organizations do sometimes occur. Conditions in which dramatic changes are more probable include:
 - a. *Budgetary Feast.* Typically, organizations devour budgetary feasts by proceeding down the existing shopping list. Nevertheless, government leaders who control the budget and are committed to change can use extra

funds to buy new organizational capacities that can perform a radically redefined critical task. In the mid-1970s, the British government, waging an internal war in Northern Ireland, chose to abandon reliance on the army and martial law and turn instead to "police primacy," trying to restore true civil authority and deal with terrorism as a problem of criminal justice. The police force, the Royal Ulster Constabulary, was rebuilt at lavish expense, with new capacities, new norms, and new routines.⁶⁷

- b. *Prolonged Budgetary Famine.* Though a single year's famine typically results in few fundamental changes in organizational structure and procedures, it often causes a loss of effectiveness in performing certain programs. Prolonged famine, however, forces major retrenchment. The Department of State, after several years of being starved for funds to support its diplomatic establishment, closed many posts and created a new Special Embassy Program to provide new, lower cost forms of diplomatic representation in some smaller countries.
- c. *Dramatic Performance Failures.* Dramatic change occurs usually in response to major disasters. In these circumstances the organization's culture can be so shocked or discredited that mission, operational objectives, special capacities are all redefined, creating a new culture. The U.S. Army, in particular, was deeply marked by the experience of the Vietnam War. Confronted with an undeniable failure of procedures and repertoires, authorities outside the organization may demand change; existing personnel are less resistant to change; and key members of the organization are replaced by individuals committed to change.
- F. *Central Coordination and Control.* Governmental action requires decentralization of responsibility and power. But problems do not fit neatly into separable domains. Each organization's performance of its job has major consequences for other departments. Important problems lap over the jurisdictions of several organizations. Thus the necessity for decentralization runs headlong into the requirement for coordination. (Those who advocate one horn or other of this

dilemma—responsive action which entails decentralized power versus coordinated action which requires central control—account for a considerable part of the demand for government reorganization.)

The necessity for coordination and the centrality of foreign policy to the welfare of the nation guarantee the involvement of government leaders in the processes of the organizations that share power. Each organization's propensities and routines can be affected by the intervention of government leaders. Sustained central direction of operations and persistent control of organizational activity, however, is not possible. The result is a renewed emphasis on fixing targets or enacting constraints. Constraints, however, are crude instruments of control. Specification of relevant operational criteria, compliance targets, for the activities of most government organizations is surprisingly difficult. The criteria can be evaluated most readily for what James Q. Wilson calls "production" organizations (like one that mails checks). But in "procedural," "craft," or "coping" agencies, the outputs cannot be observed, the policy outcomes cannot be observed, or neither outputs nor outcomes can be monitored effectively.⁶⁸

Intervention by government leaders does sometimes change the activity of an organization in an intended direction, but instances are fewer than might be expected. These machines are not turned on or off just by pulling a switch. In 1970, Richard Nixon and Henry Kissinger forced a reluctant CIA to take covert action against the government of Chile on two tracks, one involving diplomatic and economic pressure and a second, more secret, effort to organize a military coup. After a coup attempt supported half-heartedly by the CIA failed, an annoyed Nixon recalled that he instructed CIA "to abandon the operation." The CIA operatives later testified that Kissinger told them to stop only the first track and keep the second track alive; Kissinger testified he told them to stop it. Amid the confusion about the two tracks and little follow-up to be sure what had happened, the second track lurched onward, and CIA was aware of (though not a party to) the planning for the successful coup that overthrew Chile's democracy in 1973. In other words,

Nixon had trouble getting the agency to do what he wanted, yet, by his and Kissinger's account, he then also had trouble getting the agency to stop doing it.⁶⁹

Politicians are also usually frustrated if they burrow into an organization and try to change its basic programs or SOPs. As Franklin Roosevelt, the master manipulator of government organizations, remarked:

The Treasury is so large and far-flung and ingrained in its practices that I find it is almost impossible to get the action and results I want. . . . But the Treasury is not to be compared with the State Department. You should go through the experience of trying to get any changes in the thinking, policy, and action of the career diplomats and then you'd know what a real problem was. But the Treasury and the State Department put together are nothing as compared with the Na-a-vy. . . . To change anything in the Na-a-vy is like punching a feather bed. You punch it with your right and you punch it with your left until you are finally exhausted, and then you find the damn bed just as it was before you started punching.⁷⁰

G. *Decisions of Government Leaders.* Organizational persistence does not preclude shifts in governmental behavior. Government leaders sit atop the conglomerate of organizations. In spite of the limits of the leadership's ability to control changes in a particular organization's goals or SOPs, many important issues of governmental action require that these leaders decide what organizations will play out which programs where. Thus some kinds of important shifts in the behavior of governments can take place with little change in a particular organization's parochialism and SOPs. The degree of these shifts is limited by the range of existing organizational programs.

The leadership's options for shifting governmental behavior at any point include: (1) triggering program A rather than program B within a repertoire; (2) triggering existing organizational routines in a new context; and (3) triggering several different organizations' programs simultaneously. Additional leeway can be won by assigning an issue to one component of an organization rather than another, for example, raising a strategic issue in budgetary guise or vice versa. Over the longer run, leaders can create new organizations. Occasionally, they may even effect deliberate change in organizations by manipulating the factors that support existing

organizational tendencies. Even in making these various choices, leaders rely for the most part on information provided by, estimates generated by, and alternatives specified by organizational programs.

III. *Dominant Inference Pattern.* If a nation performs an action of a certain type today, its organizational components must yesterday have been performing (or have had established routines for performing) an action only marginally different from today's action. At any specific point in time, t , a government consists of an established conglomerate of organizations, each with existing notions of critical tasks, special capacities, programs, and repertoires. The characteristics of a government's action in any instance follows from those established routines, and from the choice made by government leaders—on the basis of information and estimates provided by existing routines—among established programs. The best explanation of an organization's behavior at t is $t - 1$; the best prediction of what will happen at $t + 1$ is t . Model II's explanatory power is achieved by uncovering the special capacities, repertoires, and organizational routines that produced the outputs that comprise the puzzling occurrence. On the other hand, if an analyst observes behavior by members of an organization that is consistent with the organization's established routines, that behavior per se provides zero evidence about any specific intentions of state leaders in the particular case.

This inference pattern is illustrated clearly by the various studies of the Japanese surprise attack against the U.S. Pacific Fleet in Pearl Harbor, Hawaii, on December 7, 1941.⁷¹ A question that is always addressed is why America slept. That is, how could the United States have failed to anticipate the Japanese attack on Pearl Harbor, given the extraordinary amount and quality of intelligence available, especially from breaking the codes used for Japanese diplomatic messages? The Rational Actor Model would seem to supply the answer: confusion or conspiracy (usually painted as a conspiracy by Franklin Roosevelt to embroil America in the war), incompetence or design.

By December 7, Admiral Kimmel, the Pacific Fleet Commander, had received the following information: (1) a warning from the Navy that "surprise aggressive movements in any direction including attack on the Philippines or Guam is a possibility"; (2) several subsequent warnings from Washington that diplomatic talks had broken down and war could break

out at any moment, probably beginning in Southeast Asia; (3) an unusual change in Japanese naval codes coupled with a change in radio call signs for Japanese aircraft carriers and a suspicious lack of information about their whereabouts; (4) ample information about Japanese ship and troop movements preparatory to attacks at various locations in Southeast Asia; (5) messages deciphered ordering Japanese embassies to destroy secret papers and their code machines; and (6) FBI notice that the local Japanese consul in Honolulu was burning papers. Washington's code breakers had also intercepted and decoded Japanese messages between its Honolulu consulate and Tokyo that displayed an exceptionally acute interest in mapping and tracking the positions of ships in Pearl Harbor.

Assuming honesty and competence, a Model I analyst would be led to predict: (1) Kimmel's headquarters would be given or told about the Honolulu-Tokyo intercepts; (2) the fleet would be out of the harbor or taking all defensive measures, such as screening anchored ships with antitorpedo nets, in anticipation of possible attack; (3) the island would be air patrolled to the limit of available resources; (4) the aircraft warning service would be staffed, with maximum use of available radar; and (5) the Army would have been notified under the existing contingency plan (the Joint Coastal Frontier Defense Plan) and, having received some of the same warnings, would have distributed antiaircraft ammunition and taken other defensive precautions. But each of these predictions would have proved incorrect. Instead, the Navy's activity on December 7 was identical to its behavior on December 6, which differed imperceptibly from its behavior on December 5, and so on. Gordon Prange observes that "in the face of a clear warning, alert measures [for air patrol] bowed to routine." Prange adds: "The predictable movements of fleet units enabled Japanese agents to report to Tokyo that major vessels were invariably in port over the weekends. This information was a foundation stone of Japanese planning." The relevant organizations continued to function in accordance with established routines.⁷²

IV. General Propositions

A. Existing Organized Capabilities Influence Government Choice.

The existence of an organization with special capacities for doing something increases the probability that its output/action/option will be chosen by the leadership of the

organization and the government. Such an option is clearly conceivable, available at lower costs than would be true without the organization since the costs of creating the capability have already been paid. It is easier to find the political will to choose such an option since it exists as something that is realistic or feasible as opposed to hypothetical or imagined. The organizations created to provide an option also generate information and estimates that are tailored to make the exercise of that option more likely. In doing this, the organizations, or subunits, are not dissembling. They more often see their reason for being as advocating a point of view. They assume other organizations are also playing parts expected from them by decision makers, who in turn are cast as judges.

B. Organizational Priorities Shape Organizational Implementation.

When confronted with conflicting goals or orders, organizations prioritize them and define the tradeoff.

1. Organizations will tend to emphasize, in practice, the objectives most congruent to their special capacities and to the hierarchies of beliefs in the organization's culture. After World War II, both the American and Soviet armed forces were haunted by the memory of devastating surprise attacks they had suffered in 1941. Senior military leaders had been court-martialed. Careers were ruined; in the USSR, the penalty for some was death. The experience was a particularly searing memory for the U.S. Navy and Air Force and for the Soviet Army and Air Force. In the postwar era, these organizations constantly stressed the virtue of high readiness. In crisis situations these organizations faced conflicting imperatives: for readiness or for safety, for central control of nuclear weapons or for decentralized readiness to use nuclear weapons. In practice, the organizations chose to behave in crisis situations in accord with the goal they considered most important to their well being and conceptions of duty—the readiness to act, to be confident their forces would not be caught unawares.

2. If conflicting goals both accord with the organization's capacities and culture, the incompatible constraints tend to be addressed sequentially, the organization satisfying one while deferring or neglecting another.⁷³

The aerial arm of the U.S. Navy stationed in Hawaii had two imperatives: (1) to train pilots for an attack on

Japanese-controlled islands in the central Pacific (mainly the Marshall islands) and (2) to carry out distant reconnaissance of enemy activities. Given the available aircraft, it was not possible to satisfy both imperatives, so the Navy concentrated on the first. In order to conserve resources for the primary mission (attack on the Japanese base areas), aircraft were returned to base on weekends, including Friday, for maintenance. Had a limited number of aircraft been attending to the second imperative on Sunday, December 7, the base would have had an hour's warning. But attention to that imperative had been neglected for concentration on preparations for the fleet war plan.

C. Implementation Reflects Previously Established Routines.

Activity according to standard operating procedures and programs does not constitute far sighted, flexible adaptation to "the issue" (as it is conceived by the analyst). Detail and nuance of actions by organizations are determined chiefly by organizational routines, not government leaders' directions. Model I's attempt to use these details to distinguish among alternative hypotheses about leaders' subtle plans is thus misguided.

1. *SOPs.* SOPs constitute routines for dealing with *standard* situations. Routines allow large numbers of ordinary individuals to deal with numerous instances, day after day, without much thought. Shrewdly devised routines may even account for prodigious organizational successes, such as the code breaking achievements of America and Britain during World War II. But this regularized capacity for adequate performance is purchased at the price of standardization. If the SOPs are appropriate, average performance—i.e., performance averaged over the range of cases—is better than it would be if each instance were approached individually (given fixed talent, timing, and resource constraints). But specific instances, particularly critical instances that typically do not have "standard" characteristics, are often handled sluggishly or inappropriately.
2. *Programs.* A program, i.e., a complex cluster of SOPs, is rarely tailored to the specific situation in which it is executed. Rather, the program is (at best) the most appropriate of the programs in the existing repertoire.
3. *Repertoires.* Since repertoires are developed by parochial organizations for standard scenarios that the organization

has defined, programs available for dealing with a particular situation are often ill suited to it.

On December 7, 1941, what was Army Intelligence in Hawaii prepared to do? The Army commander, after receiving a war warning from Washington, decided (as his message had hinted) that the real danger of attack was in Southeast Asia. He chose from three programs for alerts, and he chose alert level 1, precautions against sabotage. Planes were grouped together to make them easier to guard; ammunition for antiaircraft guns was kept locked up in bunkers. This program, however, lacked flexibility. While thwarting saboteurs it actually increased vulnerability to a possible attack from the air.

- D. Leaders Neglect Calculations of Administrative Feasibility at their Peril.** Blueprints for action provide one set of opportunities and constraints. Actual implementation of the blueprint provides yet another set. Adequate explanation, analysis, and prediction must address administrative feasibility as a major dimension. A considerable gap frequently separates what leaders choose and what organizations implement. In the months before Pearl Harbor the American willingness to court a confrontation with Japan was linked to American deterrence of a Japanese attack. The major organizational option for providing this deterrence relied on the threatened use of relatively small forces of untried B-17 bombers, principally stationed in the Philippines. The war quickly revealed a vast gulf between how political leaders thought of this bomber option (in part because of how the military had portrayed this option to them) and the reality that, in the harsh glare of combat operations, soon cut the option down to a nearly negligible size. In considering administrative feasibility, leaders should recall that: (1) organizations are blunt instruments; (2) projects that demand that existing organizational units depart from their established programs to perform unprogrammed tasks are rarely accomplished in their designed form; (3) projects that require coordination of the programs of several organizations are rarely accomplished as designed; (4) projects that bring together programs of several organizations will feature an interaction of routines, producing unforeseen and possibly dangerous consequences; (5) where an assigned piece of a

problem is contrary to existing organizational goals, resistance will be encountered; (6) government leaders can expect that each organization will "do its part" in terms of what the organization knows how to do; and (7) government leaders can expect incomplete, even distorted, information (from the leaders' perspective) from each organization about its part of the problem.

- E. *Limited Flexibility and Incremental Change.* Major lines of organizational action are straight—i.e., behavior at one time, t , is marginally different from behavior at $t - 1$. Straightforward predictions are a good bet: behavior at $t + 1$ will be marginally different from behavior at the present time.
1. *Organizational budgets change incrementally*—both with respect to totals and with respect to intra-organizational splits. Organizations could divide the money available each year by carving up the pie anew (in the light of objectives or changes in the environment), but, in fact, organizations take last year's budget as a base and adjust incrementally. Predictions that assume large budgetary shifts in a single year between organizations or between units within an organization should be hedged.
 2. *Organizational culture, priorities, and perceptions are relatively stable.* The topic of cultural change has received a good deal of attention in the private sector. Craig Lundberg notes that, "The complexity of the phenomena of organizational culture, the inherent difficulty of impacting deep levels of cultural meaning, the vision required for designing a new, more relevant culture, and the complexity of designing and sequencing the multiple interventions needed suggests that managing culture change is not often likely, even if it is possible."⁷⁴
 3. *Organizational procedures and repertoires change incrementally.*
 4. *New activities typically consist of marginal adaptations of existing programs and activities.*
 5. *A program, once undertaken, is not dropped at the point where objective costs outweigh benefits.* Organizational momentum carries it easily beyond the loss point.
- F. *Long-range Planning.* The existence of long-range planning units in the foreign policy departments of the U.S. government—e.g., the Policy Planning Staff in the Department of State—might seem to support Model I's implication that gov-

ernments deal with the uncertain future by devising long-run plans. Model II's proposition, however, concerns the effective contribution of such units to the policy output. Long-range planning tends to become institutionalized (in order to provide a proper gesture in that direction) and then disregarded.

The idea of a surprise Japanese attack against Pearl Harbor had long been a subject for military planning. In January 1941, the Navy's War Plans Division prepared an excellent summary of the Pearl Harbor defense problem, approved by the Secretary of the Navy and the Chief of Naval Operations and widely distributed, that described the surprise air attack danger with precision and concluded that "the inherent possibilities of a major disaster to the fleet . . . warrant taking every step, as rapidly as can be done, that will increase the joint readiness of the Army and Navy to withstand a raid of the character mentioned above." Five recommendations were made, and the only one fully implemented was the suggestion for more planning. In March 1941, the top Army and Navy air officers in Hawaii prepared a superb and prescient report on planning to defend the island against attack. Washington admired the plan. The patrol aircraft to provide the protection called for in the plan were not in Hawaii, however, and they were not there nine months later—though the plan was still in effect.⁷⁵

- G. *Imperialism.* Most organizations define the central goal of "health" as synonymous with "autonomy." They therefore seek growth in their budget, personnel, and appealing new territory. Thus issues that arise in areas where boundaries are ambiguous and changing, or issues that constitute profitable new territories, are dominated by colonizing activity.⁷⁶

When a breakthrough cracked the Japanese diplomatic codes, the question in the Navy of "What do these messages mean?" often gave way to "Who would perform the task of serious evaluation of enemy intentions?" This issue pitted the Office of Naval Intelligence against the War Plans Division. Though it lacked Japanese linguists and specialists, the powerful War Plans Division, led by a formidable and abrasive admiral, fought and won the right to "interpret and evaluate all information concerning possible hostile nations from whatever source received." The results for the U.S. government were not good.⁷⁷

- H. *Directed Change.* Existing organizational orientations and routines are not impervious to directed change. Careful tar-

getting of major factors that support routines—such as personnel, rewards, information, and budgets—can effect major changes over time. But the terms and conditions of most political leadership jobs—short tenure and responsiveness to hot issues—make effective, directed change uncommon.

V. Specific Propositions

A. *Deterrence.* The probability of nuclear attack is less sensitive to balance and imbalance or stability and instability (as these concepts are employed by Model I strategists) than it is to a number of organizational factors. Except for the special case in which one or another power acquires an obvious and credible capability to strike an enemy without fear of receiving a devastating blow in return, superiority or inferiority may affect the probability of a nuclear attack less than a number of organizational facts that may trigger various logics of appropriateness.

The organizational behavior paradigm suggests that the scenarios that dominate the existing strategic literature are considerably less interesting than a range of additional scenarios that arise irrespective of conditions of balance and imbalance. First, if the undesired event occurs, it will be as a consequence of organizational activity: the firing of missiles by a member of a missile unit. This raises a central question: What is the enemy's *control* system? If the physical mechanisms and the SOPs permit multiple centers at which a choice can be made to launch nuclear weapons against the United States, the probability of the undesired event rises considerably higher than it would over most conceivable ranges of imbalance and instability. Examination of this issue might suggest that an enemy be given information about mechanical devices for maximizing central control over nuclear launches.

Second, what patterns of regularized behavior has the enemy developed for bringing his strategic capabilities to *alert status*? If these routines are loose, an accident may occur. If the procedures are so unregulated that the forces have never been brought to alert status, this is a critical piece of information about the dimension of risk and the difficulty of de-escalation. Prior to the outbreak of World War I, if the Russian czar had understood the consequences—in terms of

organizational processes—of his order for full mobilization, he might have known that he had chosen war.

Third, organizational processes fix the range of effective choices open to enemy leaders. What plans and procedures will the leaders face when the showdown comes? The menu of choice made available to the Russian czar in 1914 included only full mobilization and no mobilization. Partial mobilization was not an option offered by the organization.

Fourth, outputs of routine organizational procedures set the chessboard and the rules for moving pieces when government leaders confront problems of choice. How are the enemy troops trained, and how are nuclear weapons deployed?

Fifth, how likely are organizational processes to produce accidental firing? Reduction of American losses and protection against responding irrevocably to false alarms are also values for which the system must be designed. These values require some reduction in the deterrence of the rational enemy (with which standard deterrence theory is concerned) in order to encourage the organization controlling the strategic capability to develop safety systems.

Many aspects of these issues have arisen in the context of arms control. The most sophisticated deterrence theorists, especially Schelling and the Wohlstetters, and more recently Bruce Blair and Scott Sagan, have contributed significantly to thought about these issues. But the discussion of deterrence by students, the military, and many policymakers persists within a framework in which stability and balance are the focus, without full integration of these further considerations.⁷⁸

B. *Force Posture.* Force posture (i.e., the fact that certain weapons, rather than others, are produced and deployed) is determined by organizational factors such as the goals and procedures of existing military services and of research and design labs. Government leaders' choices determine budgetary totals and influence some major procurement decisions, but the bulk of the force posture emerges from the routine functioning of organizational units.

The weakness of the Soviet Air Force within the Soviet military establishment, dominated by the ground forces and their definition of the critical task for theater war fighting, seems to have been a crucial element in the Soviet failure to

acquire a large bomber force in the 1950s (thereby faulting American intelligence predictions of a "bomber gap") and in the lethargy that surrounded any effort even to design an intercontinental range bomber. The Soviet strategic program was dominated by powerful organizations and the political leaders, in practice, were "heavily dependent on the technical judgments of their military advisers." The governing Politburo had to "operate within the context of these [organizational] forces, and not only take them into account, but often—perhaps for lack of effectively formulated alternatives—approve what they advise." Force posture was accurately projected, in U.S. intelligence estimates, as influenced by organizational imperatives "toward working deliberately along established lines" with solutions "devised more by building on proven approaches than by vigorously pushing the state of the art."⁷⁹

Among the most fateful force posture decisions of the Soviet government, before its collapse, was the decision to deploy large numbers of highly accurate, multiple warhead, SS-20 intermediate-range missiles in the late 1970s, targeting Western Europe. Using Model I logic, the West saw this move as a highly threatening effort to change the military balance in Europe. From what we know now, the Soviet deployment decisions were driven more by Model II processes, in which the military organizations were replacing older missiles with newer ones in accordance with fixed requirements to cover the complete set of European targets. The decision, Raymond Garthoff observes, was "natural and almost inevitable . . . a normal modernization program [that] could be accommodated within the overall budgetary and more specific construction limitations of the established military fiscal allocation."⁸⁰ The Soviet government did no political analysis, did not consider the consequences of its actions for the West, was surprised by the vehement Western response, and for years refused to admit that its actions had caused the Western theater missile deployments that became the focal point for a wrenching crisis in Western Europe and East-West relations in the early 1980s.⁸¹

Given the way its government worked during the last few decades of the Cold War, the case of Soviet force posture is highlighted as an exceptionally strong one for applying Model II explanations. Model I and III factors reemerge in

the mid-1980s, as Gorbachev endeavored to change the fundamental scale of resource distribution to all of the military organizations.⁸² Yet American strategic force posture can also be explained, to a substantial degree, with Model II. As McGeorge Bundy noted "The strategic targeting of SAC, from Eisenhower's time through Johnson's, was governed by the standards inherited by strategic air commanders from World War II." The decision to place multiple warheads on strategic missiles also "was always appealing to military commanders who measured their preferences more by what they could deliver than by what the Soviets might later possess." The controversial configuration of America's response to the SS-20 deployment was again strongly influenced by organizational repertoires and programs.⁸³

VI. *Evidence.* This paradigm's stark statement of organizational tendencies constitutes a marked shift of perspective. Examination of government action in terms of these roughly formulated concepts and propositions can be fruitful. For example, with a minimum of information about the organizations that constitute a government and their routines and SOPs, an analyst can significantly improve some expectations generated by the Rational Actor Model. But in order for the paradigm to get a strong grip on a specific case, the bare bones of this generalized statement must be fleshed out by information about the characteristics of the organizations involved.

NOTES

1. Organizations, in this definition, are entities that exist within "institutions," a different concept referring to the formal and informal rules and practices that may define the structure of a society, polity, or political economy. "Formal organizations are generally understood to be systems of coordinated and controlled activities that arise when work is embedded in complex networks of technical relations and boundary-spanning exchanges. But in modern societies, formal organizational structures arise in highly institutionalized contexts." John W. Meyer and Brian Rowan, "Institutionalized Organizations: Formal Structure as Myth and Ceremony," in Walter W. Powell and Paul J. DiMaggio, *The New Institutionalism in Organizational Analysis* (Chicago: University of Chicago Press, 1991), p. 41.
2. Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* [1776], ed. Edwin Cannan (New York: Modern Library, 1994), Book One, chapter one.