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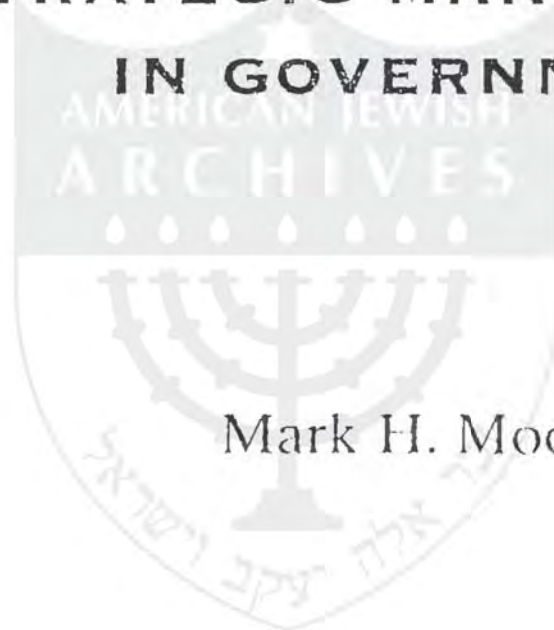
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CREATING PUBLIC VALUE

**STRATEGIC MANAGEMENT
IN GOVERNMENT**



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CHAPTER 1

MANAGERIAL IMAGINATION



The town librarian was concerned.¹ Each day, at about 3:00 p.m., eddies of schoolchildren washed into the library's reading rooms. At about 5:00 the tide of children began to ebb. By 6:00 the library was quiet once again. An informal survey revealed what was happening: the library was being used as a day-care center for latchkey children. How should the librarian respond?

THE TOWN LIBRARIAN AND THE LATCHKEY CHILDREN

Her first instinct was to discourage the emerging practice. After all, the influx disrupted the library. The reading rooms, quiet and spacious most of the day, became noisy and crowded. Books, particularly the fragile paperbacks, stacked after careless use in untidy heaps on library tables, slid to the floor with spines cracking. Tired assistants faced mountains of reshelving before they could leave for the day. The constant traffic to the bathrooms kept the janitor busy with special efforts to keep them neat, clean, and well stocked.

Besides, it just wasn't the town library's job to care for latchkey children. That task should be done by the parents, or perhaps other day-care providers, certainly not by the library. Perhaps a letter to the local newspaper reminding citizens about the proper use of a library would set things right. If that failed, new rules limiting children's access to the library would be necessary.

maining purposeful; (2) the necessity of recognizing "political management" as a key function in public sector management; and (3) the need to recast our images of operational management to focus more attention on stimulating innovations of various kinds. Yet, I have not been entirely rigorous in either the sampling effort or the data collection. I cannot claim the power that would come from that degree of rigor. In the less rigorous test I have relied for evidence on feedback from practicing public managers who have been exposed to these ideas. Their testimony has been favorable and encouraging.

Still, in the end, I do not think I have proven anything. What I have done is nominate, for further consideration and testing, a complex set of ideas about how public managers should orient themselves to their jobs, diagnose their situations, and design their interventions. The methods I present differ from those many public managers now employ and from ways they are taught and encouraged to think and act. This new approach is plausibly better adapted to the reality of the situations they confront than what they have relied on in the past. And it may help succeed in helping society by keeping their attention focused on the problem of defining and producing public value with the resources vested to them. That, at least, is my fervent hope.



an appropriate separation between the elderly people who used the library for reading and meeting and the children who used the library for the same purposes but more actively and noisily. The community spirit evident in such activities might overwhelm public concerns about the propriety of using the library to care for latchkey children and the complaints of some that public resources were being used to subsidize relatively narrow and unworthy interests.

Mobilizing a volunteer effort would be a complex undertaking, however. The librarian was unfamiliar with such enterprises. Indeed, all the things she had so far considered seemed difficult and unfamiliar since they involved her in outside political activity. Making a budget presentation to the town's Budget Committee and writing a letter about the problem to the newspaper were one thing; setting up a financially self-sustaining program and mobilizing a large group of volunteers were quite another.

Then, a last idea occurred to her: perhaps the problem could be solved by finding an answer within her own organization. A little rescheduling might ensure that there would be adequate staff to supervise the children, perhaps even to provide reading enrichment programs. Maybe some things could be rearranged in the library to create a special room for the program. Perhaps movies could sometimes be shown in this special room as part of the after-school program.

In fact, the more the librarian thought about it, the more it seemed that caring for these children in the library might be well within the current mission of her organization. It might give her and her assistant librarians a chance to encourage reading and a love for books that would last all the children's lives. Moreover, it seemed to her that the claims that these children and their parents made on the library were as proper as those made by the many others who used the library in different ways: the high school students who came in the evenings to complete research projects and gossip with one another, the elderly people who came to read newspapers and magazines during the day and to talk with their friends, even the do-it-yourselfers who came in to learn how to complete the project on which they had embarked without a clear plan.

As the librarian began to think about how her organization might respond to the new demands presented by the latchkey children, she also began seeing her organization in a new light.⁸ Her professional training and that of her staff had prepared them to view the library as a place where books were kept and made available to the public. To fulfill this function, an elaborate system of inventorying and recording the location of books had been developed. An equally elaborate system to monitor

Then, she had a more entrepreneurial idea: perhaps the latchkey children could be used to claim more funds for the library from the town's tight budget.² She could argue that the new demands from latchkey children required additional resources. Additional staff would be needed to keep the children from disrupting other library users. Overtime funds would be necessary to pay assistants and janitors for tidying the library at the end of the day. Perhaps the library itself would have to be redesigned to create elementary and junior high school reading rooms. Indeed, now that she thought of it, the reconstruction work might be used to justify repainting the interior of the entire library—an objective she had had for many years. But all this would cost money, and a statewide tax revolt had left the town with sharply limited funds.

As the forbidding prospect of seeking funds from the town's Budget Committee came clearly into view, the librarian had a different idea: perhaps a program for the latchkey children could be financed by charging their parents for the costs of the new program.³ Some practical problems loomed, however. For example, how much should she charge for the service?⁴ She could fairly easily record the direct costs associated with providing the program and find a price that would cover these direct costs, but she was unsure how to account for indirect costs such as the managerial costs of organizing the activity, the depreciation of the building, and so on. If she included too few of these indirect costs in the price of the program, then the public as a whole would be unwittingly subsidizing the working parents. If she included too many, the town would be unwittingly giving advantage of working parents to help support their library.

She also thought that the town's citizens and their representatives might have views about whether it was appropriate for her to use the facilities of the library for a program of this type, and she could not be sure what those views would be. If she set up a fee-for-service program, would the town's residents admire her entrepreneurial energies or worry that she was becoming too independent?⁵ Similarly, would they see saving the latchkey children as a worthy cause or as a service to a rowdy and not particularly deserving group? She would clearly have to go back to the Town Meeting for guidance.⁶

Given the difficulties of charging clients for the service, the librarian had still another idea: perhaps the new service could be "financed" through volunteer effort.⁷ Maybe the parents of the children could be organized to assume some of the responsibilities of supervising and picking up after the children. Maybe they could even be enticed to help the librarian make the changes in the physical configuration of the library—to accommodate the new function more easily and to maintain

The doctrine has been designed primarily to limit the prospect of self-interested or misguided bureaucrats aggrandizing themselves or leading the society toward some idiosyncratic or ill-considered conception of the public interest. It aims at keeping public sector managers firmly under democratic control.¹¹

In this doctrine the purposes of a public enterprise such as a library are assumed to have been set out clearly in statutes enacted by legislative bodies or in formal policy declarations signed by elected chief executives.¹² As the hard-won results of sustained democratic debates, these formal mandates legitimate public enterprises: they authoritatively declare that the particular enterprises so established are in the public interest and can therefore properly claim social resources.¹³ They also offer concrete operational guidance to managers by indicating what particular purposes are to be advanced by the particular public enterprises and what particular means may be used.¹⁴ Taken together, the mandated purposes and means define the terms in which managers will be held accountable.¹⁵

For their parts, public managers are expected to be faithful agents of these mandates. Their duty is to achieve the mandated purposes as efficiently and as effectively as possible.¹⁶ They are assumed to have substantive expertise in the field in which they work—to know the principal operational programs that can be used to produce desired results and to know what constitutes quality and effectiveness in their operations.¹⁷ They are also expected to be administratively competent—to be skilled in devising the organizational structures and arrangements that can guide the organization to perform efficiently and effectively and in accounting for the financial and human resources entrusted to them so that it can be proven that public resources are not being stolen, wasted, or misused.¹⁸

This doctrine produces a characteristic mindset among public sector managers: the mindset of administrators or bureaucrats rather than of entrepreneurs, leaders, or executives.¹⁹ Their orientation is *downward*, toward the reliable control of organizational operations rather than either *outward*, toward the achievement of valuable results, or *upward*, toward renegotiated policy mandates. Instead of viewing their task as initiating or facilitating change, they tend to see it as maintaining a long-term institutional perspective in the face of fickle political whims. Their principal managerial objective is to perfect their organizations' operations in traditional roles, not to search for innovations that can change their role or increase their value to the polity.

It is this view of public sector management that produces the librarian's first instinctive response to the latchkey children: a resound-

which citizens had borrowed which books, and to impose fines on those who kept books too long, had also been built. This was the core function of the library and the task with which the professional staff identified most strongly.

Over time, however, the functions of the library seemed to expand in response to citizen needs and the capacities of the library itself. Once the library had a system for inventorying books, it seemed entirely appropriate to use that system to manage a collection of records, compact discs, and videotapes as well. (Of course, the lending system for videos had to be changed a little to avoid competing with local commercial ventures.) The physical facility in which the books were kept had been enlarged and made more attractive to encourage reading at the library as well as at home. Heat was provided in the winter, and air conditioning in the summer, for the comfort of the staff and those who wished to use the library. Study carrels had been built for students. A children's room had been created with books and toys for toddlers. Increasingly, the library was being used to hold amateur chamber music concerts and meetings of craft societies as well as book review clubs.

As a result, the library had become something more than simply a place where books were kept. It was now a kind of indoor park used by many citizens for varied purposes. Who was to say that care for latchkey children was not a proper or valuable function for the library to provide if the librarian could think of a way to do so economically, effectively, and fairly, and with little cost to other functions of the library that had the sanction of tradition?

PUBLIC MANAGERS AND PUBLIC MANAGEMENT

The town librarian is a public manager. What makes her such is that a bundle of public assets has been entrusted to her stewardship. She is responsible for deploying those assets for the benefit of the town and its citizens. Presumably, one of her tasks as a manager is to find the most valuable use of those resources.⁹ The particular question before her is whether it would be valuable to respond to the new demands being made on her organization to care for the latchkey children and, if so, how.

An Important Doctrine

In the United States public administrators have relied on a traditional doctrine describing how they ought to think about and do their jobs.¹⁰

manager is a professional civil servant rather than an elected or appointed political executive.²² Citizens take a particularly dim view of initiatives undertaken by bureaucrats because they suspect civil servants of being self-serving or of pursuing their own idiosyncratic ideas of the public interest.²³ They also resent the fact that civil service systems insulate the bureaucrats to some degree from direct public accountability. Because citizens can hold elected and appointed public officials accountable at the ballot box, they ordinarily grant these officials wider leeway to initiate new public enterprises. But citizens view the initiatives of even elected and appointed officials with a jaundiced eye, for their entrepreneurship often seems focused on winning votes by satisfying special interests rather than on finding and producing something publicly valuable.²⁴

To the extent these observations are true, they underscore an obvious but often overlooked social fact: society has much different expectations of its public than of its private managers. We are inclined to view imagination and initiative among (unelected) public sector executives as dangerous and contrary to the public interest, while we perceive exactly the same qualities among private sector executives as not only tolerable but ultimately conducive to society's economic welfare.

No doubt, many reasons exist for these contrary expectations. Because the political mechanisms that oversee public enterprises are arguably more vulnerable to managerial influence and deception than the financial mechanisms that control private sector enterprises, public managers may have to be reined in more tightly than private sector managers.²⁵ Because the decisions of public managers bind all citizens, their initiatives must be reviewed far more closely than the decisions of private sector managers, whose decisions are taken for the benefit of only a few (voluntary) principals.²⁶ Because the results of managerial decisions are more subjective and (often) slower to appear in the public sector than in the private, the public sector cannot rely as heavily as the private sector does on holding managers accountable after the fact for their performance.²⁷ And so on.

But these different expectations have an important consequence not widely acknowledged or discussed. By discouraging thoughts such as those the librarian is having, and the actions that could follow from her thoughts, society denies its public sector the key ingredient on which its private sector specifically relies to remain responsive, dynamic, and value creating: namely, the adaptability and efficiency that come from using the imaginations of people called managers to combine what they can sense of public demands with access to resources and control over operational capacity to produce value.

ing, bureaucratic “no.” Indeed, viewed from the traditional perspective, her clear duty is not to respond to this new demand but to do the opposite: to do what she can to resist the new, unauthorized abuse of the public library.

Moreover, many of her staff, influenced by their past professional training to think about libraries in particular terms, would agree with this conclusion. So would many citizens who see the library through the same traditional lenses and would quickly conclude that the library should be quiet and not used for babysitting by negligent parents.

A Modest Challenge to the Prevailing Doctrine

What is interesting and important about this town librarian, however, is that she goes beyond this instinctive reaction. Her second reaction—to use the issue of the latchkey children to gain additional financing for the library—reflects a common, if often covert, response of public managers.²⁰ (Indeed, it is precisely this response that makes taxpayers so determined to keep the managers under tight control.)

Reflecting the winds of change in managerial thought now sweeping over the public as well as the private sector, the librarian’s managerial imagination strays beyond her traditional mandate and beyond her instinct for bureaucratic entrepreneurship.²¹ She steps outside the conventional restrictions on her job in imagining what could be done.

Instead of viewing the new demands being made on the library as a problem, she sees them as an opportunity. She senses that there may be some value to be created for at least some of the town’s citizens by allowing, or even encouraging, the latchkey children to use the library. She begins thinking about how the achievement of that value might be financed, authorized, and produced.

In these respects the public librarian begins thinking as society expects private sector executives to think. She focuses on the question of whether the bundle of assets and capabilities represented by the library can be used to create additional value for the town. She does not assume that her resources are immutably fixed, or that her mission is narrowly and inflexibly inscribed in stone, or that her organization is capable of producing only what it is now producing. Instead, she uses her imagination to think of how she might reposition and adapt her organization to accommodate the new demands of the latchkey children. In short, she is thinking like a leader or entrepreneur.

To many, such thoughts in the minds of public managers are troublesome and ought to be discouraged, particularly if, as in this case, the

taining a rigorous distinction between policy and administration was both theoretically and practically impossible.³² In theory, the orthodox view discouraged bureaucrats from exercising much imagination about the proper purposes of government and prevented them from taking any responsibility for defining them. In practice, the doctrines could not prevent unelected public managers from doing both. Resourceful public officials, with agendas of their own, routinely found covert ways to shape the government's conceptions of the public interest.³³ Moreover, the covert nature of their influence turned out to be particularly pernicious because it frustrated accountability and turned those involved into corrupted cynics.³⁴

An alternative approach to controlling managerial influence would be to recognize its potential utility, as well as inevitability, and to provide more formal channels through which managerial ideas about opportunities to create public value could be properly expressed. It would also be important to teach public managers how to search for and define public value more properly and effectively than they now do. Such efforts would help society make a virtue of necessity. They would allow society to have the benefit of the experience and imagination of public sector managers without having to yield to their particular conceptions of the public interest. And it is this piece of work that has not yet been done. Having forever undermined the traditional doctrines of public administration, we have not yet carefully constructed an alternative idea about how public managers should think and act.

AN ALTERNATIVE APPROACH TO PUBLIC ADMINISTRATION

That is the basic purpose of this book: to work out a conception of how public managers like the town librarian could become more helpful to society in searching out and exploiting opportunities to create public value. It is predicated on the judgment that society needs value-seeking imaginations (and associated technical skills) from its public sector executives no less than from its private sector managers.³⁵ To develop such a conception, I take the following steps.

In Chapter 2, I discuss the aim of managerial work in the public sector. I argue that managers should seek "to produce public value." Because that is an abstract concept, I then offer some ideas about how managers should reckon the public value of the enterprises they lead.

This, it predictably turns out, is no small task. There are many different standards for measuring public value, and none alone is up to the

Of course, society may actually be benefiting from the imagination and industry of public sector managers who have long chafed under these restrictions and found ways to circumvent them to society's benefit.²⁸ But the point is that society has gotten this benefit undeservedly: it has not organized its relations with public managers to demand, expect, reward, or value such efforts. Inevitably, then, society gets fewer such contributions than it would if it organized itself to expect or demand or simply allow them.

Strategic Management in the Public Sector

There is a different and more useful way to think about the role of public sector managers: one that is closer (but by no means identical) to the image society has of managers in the private sector. In this view public managers are seen as explorers who, with others, seek to discover, define, and produce public value. Instead of simply devising the means for achieving mandated purposes, they become important agents in helping discover and define what would be valuable to do. Instead of being responsible only for guaranteeing continuity, they become important innovators in changing what public organizations do and how they do it.

In short, in this view, public managers become strategists rather than technicians.²⁹ They look *out* to the value of what they are producing as well as *down* to the efficacy and propriety of their means. They engage the politics surrounding their organization to help define public value as well engineer how their organizations operate. They anticipate a world of political conflict and changing technologies that requires them to reengineer their organizations often instead of expecting a stable harmony that allows them to perfect their current operations.³⁰ In such a world the librarian's ruminations about how to use the library to meet the needs of at-risk children would be viewed as a potentially valuable asset rather than as the dangerous thoughts of an empire-building bureaucrat.

The principal reason to worry about this alternative conception, of course, is that it threatens precisely what the familiar, traditional conception was designed to avoid—namely, the domination of the democratic political process by self-serving or misguided bureaucrats.³¹ The traditional view has the problem, however, of not only suppressing some potentially useful contributions by public sector managers but also failing to deliver on its promise to protect the political process from bureaucratic influence in the first place.

Indeed, almost as soon as the traditional doctrine was developed it began to be undermined by determined scholarship showing that main-

and realize their vision. Specifically, it highlights three different aspects of their job: (1) judging the value of their imagined purpose; (2) managing upward, toward politics, to invest their purpose with legitimacy and support; and (3) managing downward, toward improving the organization's capabilities for achieving the desired purposes. These, in turn, become the focus of subsequent chapters in the book.

Chapters 4 and 5 explore the function and techniques of political management—the part of strategic management that is concerned with managing upward, toward politics. In Chapter 4, I explain why political management is an important part of a public manager's job and how to diagnose political environments. Managers must mobilize support and resources for the organizations they lead while enlisting the aid of others beyond their organizational boundaries who can help them achieve the substantive results for which they are held accountable.⁴¹ In Chapter 5, I characterize five different approaches to the tasks of political management including entrepreneurial advocacy,⁴² the management of policy development,⁴³ negotiation,⁴⁴ public deliberation and leadership,⁴⁵ and public sector marketing.⁴⁶ Because the political management function is the part of the manager's job that is most threatening to democratic values, I give special attention to the question of what is proper, as well as to what is effective.⁴⁷

Chapters 6 and 7 focus on the parts of strategic management that are concerned with managing downward, toward one's organization. Chapter 6 presents a framework to be used in analyzing the "products" produced by public sector organizations, the production process that the organization is relying on, and the ways in which that process is being shaped and guided by the organization's administrative systems.⁴⁸ Because the concept of strategic management assumes a changing political and task environment, I emphasize the techniques that managers use to innovate and to encourage continued innovation in their organizations.⁴⁹ Thus, Chapter 7 explores the techniques that managers use to introduce strategically important innovations into their organizations.

Finally, in Chapter 8, I return to the questions raised in this first chapter: namely, what sort of consciousness or temperament is required of public sector managers if they are to be successful in managing both effectively and democratically? I contend that public managers must make ethical commitments and cultivate psychological stances if they are to succeed (or gain virtue) as public managers.⁵⁰

Before we get to matters of technique and finally virtue, however, we must consider the crucial matter of public value, the topic of the next chapter.

task. For example, both democratic theory and practical concerns would focus attention on how satisfied elected overseers of the enterprise seemed to be with the organization's performance. Alternatively, using the techniques of program evaluation, a manager could determine whether, and how efficiently, the organization achieved its (politically mandated but analytically defined) substantive purposes.³⁶ Or, using the techniques of benefit-cost analysis, we could estimate how much value individual beneficiaries of the enterprise gained relative to the price that those who supported the enterprise had to pay.³⁷ Finally, capitalizing on some loose analogies with private sector management, and aligning ourselves with the current enthusiasm for "customer-driven government," we could estimate the value of the organization by gauging the satisfaction of those who interacted with the organization as clients or customers.³⁸

Arguably, each of these standards has some basis for helping managers (and the rest of us citizens) determine the value of public enterprises. But the different standards are not necessarily consistent with one another, and each of these methods has its own weaknesses.

Despite the difficulties, some important observations can be made to orient public managers toward their task. Not the least of these is that it is always worth asking the question. Indeed, continually questioning the value of public enterprises is one of the things that can help managers become purposeful and creative in their work for our collective benefit.

Because public managers must ultimately act on some theory of public value, Chapter 3 develops a practical method for envisioning value in particular circumstances. The method adapts the concept of corporate strategy from the private sector to the special circumstances of the public sector.³⁹ I argue that a useful, conditional conception of public value can be envisioned by public managers if they integrate: (1) substantive judgments of what would be valuable and effective; (2) a diagnosis of political expectations; and (3) hard-headed calculations of what is operationally feasible.⁴⁰ In short, in envisioning public value, managers must find way to integrate politics, substance, and administration.

A strategic triangle can help us conceptualize this basic argument. This image focuses managerial attention on the three key questions managers must answer in testing the adequacy of their vision of organizational purpose: whether the purpose is publicly valuable, whether it will be politically and legally supported, and whether it is administratively and operationally feasible.

The triangle also serves as a device for reminding managers of the key actions and tasks that they will have to perform to help them define

PART I

ENVISIONING PUBLIC VALUE



DEFINING PUBLIC VALUE

On the day he was appointed, the sanitation commissioner drove through the city.¹ Everywhere he saw signs of public and private neglect. Trash barrels left too long at the curb were now overflowing. Back alleys hid huge, overflowing bins that had never made it to the curbs. Emptied bins were ringed by trash spilled during the emptying. In the poorer sections of town, rats scurried among the cans.

Perhaps because he was newly appointed, the commissioner felt his public accountability quite keenly. The city spent a great deal of money each year to sustain the organization's activities. Hundreds of employees earned their pay and made their careers in his organization, and scores of trucks were garaged, maintained, and deployed under his supervision. Most important, millions of people relied on his organization to keep the city clean and healthy.

Happily, as he drove through the city, he saw evidence of his organization at work. Huge trucks, painted in distinctive colors, rumbled by, trailed by sanitation workers who tipped garbage pails into their gaping maws. Street-cleaning machines trundled along the gutters in the wake of the tow trucks that removed illegally parked cars from their path. An occasional street sweeper appeared with broom and dustbin, emptying the cans that had been set out to hold the public's litter.

Still, he could not help thinking that his organization could do more. As the newly appointed commissioner, he wanted to make a difference. He wanted his organization to have an impact on the conditions he could

Government as a Value-Creating Sector

But this view denies a reality that public managers experience daily. From their perspective it is government, acting through its managers, that shields the country from foreign enemies, keeps the streets safe and clean, educates the children, and insulates citizens from many man-made and natural disasters that have impoverished the lives of previous human generations. To them it seems obvious that government creates value for the society. That is the whole point of their work.

Of course, this account is not entirely satisfactory; it looks only at the benefits of governmental activity, not at the costs. In reality public managers cannot produce the desirable results without using resources that have value in alternative uses. To keep the streets clean; to insulate the disadvantaged from the ravages of poverty, ignorance, and joblessness; even to collect the taxes that society has agreed are owed, public managers must have money to purchase equipment, pay their workers, and provide mandated benefits to clients. The money they use is raised through the coercive power of taxation. That money is lost to other uses—principally, private consumption. That loss must be laid against the putative benefits of public enterprises.

Moreover, to achieve their goals, public managers often use a resource other than money: they use the authority of the state to compel individuals to contribute directly to the achievement of public objectives.⁶ Litterers are fined to help keep the cities clean; welfare recipients are sometimes obliged to find work; and every citizen is made to feel the weight of the obligation to pay taxes to help the society achieve its collective goals.⁷

In a society that celebrates private consumption more than the achievement of collective goals, values individual liberty greatly, and sees private entrepreneurship as a far more important engine of social and economic development than governmental effort, the resources required by public managers are only grudgingly surrendered. So, it is not enough to say that public managers create results that are valued; they must be able to show that the results obtained are worth the cost of private consumption and unrestrained liberty forgone in producing the desirable results. Only then can we be sure that some public value has been created.

The Political Marketplace: "We Citizens" as a Collective Consumer

But to whom should such a demonstration be made? And how could anyone know whether the demonstration is convincing?

see around him. He wanted to create value for the citizens of the city. But how?

The question seemed particularly urgent because the newly elected mayor had asked him to define and set out his management objectives for the Department of Sanitation. As part of that strategic plan, the mayor wanted to know whether it would be advisable to privatize some or all of the operations of the Department of Sanitation.

THE AIM OF MANAGERIAL WORK

The sanitation commissioner is a manager at work. The question is: At work on what? What is the point of his efforts?

We know the aim of managerial work in the private sector: to make money for the shareholders of the firm.² Moreover, we know the ways in which that goal can be achieved: by producing products (including services) that can be sold to customers at prices that earn revenues above the costs of production.³ And we know how managerial accomplishments can be gauged: through financial measures of profit and loss and changes in the firm's stock price.⁴ If private managers can conceive and make products that earn profits, and if the companies they lead can do this continually over time, then a strong presumption is established that the managers have created value.⁵

In the public sector, the overall aim of managerial work seems less clear; what managers need to do to produce value far more ambiguous; and how to measure whether value has been created far more difficult. Yet, to develop a theory of how public managers should behave, one must resolve these basic issues. Without knowing the point of managerial work, we cannot determine whether any particular managerial action is good or bad. Public management is, after all, a normative as well as technical enterprise.

As a starting point, let me propose a simple idea: the aim of managerial work in the public sector is to create *public* value just as the aim of managerial work in the private sector is to create *private* value.

This simple idea is often greeted with indignation—even outrage. A liberal society like ours tends to view government as an “unproductive sector.” In this view government cannot create value. At best, it is a necessary evil: a kind of referee that sets out the rules within which a civil society and a market economy can operate successfully, or an institution that fills in some of the gaps in free market capitalism. While such activities may be necessary, they can hardly be viewed as value creating.

strong as the presumption of private value created by market mechanisms— at least if they can be achieved within the terms of the mandate. So, we should evaluate the efforts of public sector managers not in the economic marketplace of individual consumers but in the political marketplace of citizens and the collective decisions of representative democratic institutions.¹²

Precisely to make such demonstrations the sanitation commissioner prepares a plan to present to the newly elected mayor. In doing so, he tries to satisfy representatives of the public that his organization responds to the public's aspirations. Once he presents the plan, he will be accountable for producing measures to show that the goals and objectives of the plan have, in fact, been achieved.¹³

The claim that public managers can presume that public value is created if they meet the test of the political marketplace is also often greeted by derision. We have all become painfully aware of the folly and corruption that can beset the deliberations and choices of representative democratic institutions.¹⁴

Practicing public managers, however, have no choice but to trust (at least to some degree) in the normative power of the preferences that emerge from the representative processes. Those choices establish the justification for managerial action in the public sector. Because public managers spend public resources in the enterprises they lead, they must act as though a coherent and normatively compelling "we" existed even if they have their doubts. Otherwise, their enterprises are ill-founded.

DIFFERENT STANDARDS FOR RECKONING PUBLIC VALUE

Reconciling the tension between the desire to have democratic politics determine what is worth producing in the public sector and the recognition that democratic politics is vulnerable to corruption of various kinds has been the persistent challenge to those who would offer a theory of public management in a democracy.¹⁵ Over time, we have relied on different concepts as standards for defining managerial purposes.

Achieving Mandated Objectives Efficiently and Effectively

For most of our recent history, the predominant conception has been that public managers should work to achieve the legislatively mandated goals and objectives of their organizations as efficiently and effectively

In the private sector these key questions are answered when individual consumers stake their hard-earned cash on the purchase of a product, and when the price paid exceeds the costs of making what is sold. These facts establish the presumptive value of the enterprise. If individuals do not value the products or service enough to pay for them, they will not buy them; and if they do not buy them, the goods will not be produced.⁸

In the public sector, however, the money used to finance value-creating enterprises is not derived from the individual, voluntary choices of consumers. It comes to public enterprises through the coercive power of taxation. It is precisely that fact that creates a problem in valuing the activities of government (at least from one point of view).⁹

The problem (from this point of view) is that the use of the state's coercive power undermines "consumer sovereignty"—the crucial link between the individual judgments of value on the one hand and control over what is to be produced on the other, which provides the normative justification for private sector enterprises.¹⁰ The coercion blots out the opportunity for individuals to express their individual preferences and to have those preferences control what is to be produced. Because individuals do not choose individually to purchase or contribute to discrete governmental activities, we cannot be sure that they want what the government supplies. And if we cannot be sure that individuals want what the government produces, then, by some reckoning at least, we cannot be sure that the government produces anything of value.

What this account overlooks, however, is that the resources made available to public sector managers *are* made through a process of voluntary choice—namely, the process of representative government. To be sure, *individual*, voluntary choice does not control this system. But the institutions and processes of representative democracy come as close as we now can to creating the conditions under which individuals can voluntarily assemble and decide collectively what they would like to achieve together without sacrificing their individual desires. It is the only way we now know how to create a "we" from a collection of free individuals.¹¹ That "we," in turn, can decide to make common cause, to raise resources, and to organize to achieve its goals—all the activities that go into the policy-making and implementation roles associated with government.

Indeed, it is the explicit recognition of the power of politics to establish normatively compelling collective purposes that makes legislative and political mandates central to traditional conceptions of public administration. Those legislative mandates properly guide public sector production specifically because they define collective aspirations. The collective aspirations, in turn, establish a presumption of public value as

mandates came loaded down with special interests that were hard to reconcile with the desire to guard the general public interest.²² Other times, managers received incoherent mandates: they were expected to produce several different things that were inconsistent with one another and were given no useful instructions about which goals and objectives should take precedence over others when conflicts arose.²³ Still other times, political mandates shifted in arbitrary and unpredictable ways, destroying investments and draining momentum that had previously been built up and would be needed again once the political balance was restored to its original position.²⁴

Facing this political reality, even Wilsonian public administrators sometimes found it necessary to challenge the wisdom of politically expressed policy mandates. They did so on the basis of their moral obligations to defend the general public interest and preserve the continuity of important public enterprises.²⁵ In their minds their substantive and administrative expertise gave them the right to stand up to the misguided vagaries of politics. In the pantheon of bureaucratic heroes, the image of a civil servant who challenged badly motivated politicians to defend the long-term public interest stands right alongside the dutiful, responsive servant.

Once revealed, this sort of bureaucratic resistance to political mandates could not stand in a democracy such as ours. Indeed, a favorite target of our populist politics is the bureaucratic mandarin. As a result, much of this bureaucratic resistance went underground. It became a covert but legitimate rationale for bureaucrats of all political stripes to conduct guerrilla warfare against political demands for change on the grounds that the politicians were ill-informed, short-sighted, or badly motivated.

Analytic Techniques for Assessing Public Value

Yet politics, too, is mistrusted in our political culture, and soon a new platform for disciplining and rationalizing democratic politics emerged. This new platform was established on a new kind of expertise. Whereas the traditional theory of public administration acknowledged the substantive and administrative expertise of professionals (developed through professional experience and education), the new formulation held that special analytic techniques, drawn from the fields of economics, statistics, and operations research, could be used objectively to gauge in advance—or to learn after the fact—whether public enterprises were valuable or not.²⁶ The new techniques included policy analysis, program

as they can.¹⁶ Thus, the sanitation commissioner's job is to clean the streets as efficiently and effectively as possible.

It is quite easy to agree with this conception. Yet, reflection reveals an important feature of this common standard that is often overlooked or taken for granted: namely, this standard establishes the preeminence of *political*—primarily legislative—processes in determining what is valuable for the public sector to produce. To those who value politics as a way of creating a collective will, and who see democratic politics as the best answer we have to the problem of reconciling individual and collective interests, it is hardly surprising that the political process would be allowed to determine what is worth producing with public resources.¹⁷ No other procedure is consistent with the principles of democracy.

But to those who distrust the integrity or utility of political processes, the idea that public value would be defined politically is a little hard to stomach. They have seen too much corruption to trust the determination of public value to political processes. At a minimum these critics want assurances that the political process is a principled one that accepts the proper limits of governmental action or meets some minimal standards of fairness and competence in the deliberations that produce the mandates.¹⁸ Alternatively, they would prefer some more objective ways of ascertaining the value of public sector enterprises and some platform for confronting political processes with this objective information.¹⁹

Politically Neutral Competence

At the turn of the century Woodrow Wilson offered a solution: separate politics from administration and perfect each activity in its own sphere.²⁰ Thus, public administrators were to imagine that political mandates came to them in the form of coherent, well-defined policies. As the hard-won products of intense political processes, the policies would have the moral weight that effective democratic politics could give them. Given this accomplishment of politics, public administrators could then safely turn their attention to finding the most efficient and effective way to achieve the mandated purposes. To meet these responsibilities, public administrators were assumed to have knowledge about both substance of the fields in which they were operating and the arts of administration.²¹ By knowing what could be produced and how organizations could be made to produce what was desirable public administrators earned their keep.

However, this traditional conception failed to consider what would happen if the political reality fell short of the ideal. Often, political

analysis often focuses on the first, program evaluation on the second. The distinction is particularly important when one uses comparisons with private sector management to offer guidance to public sector managers about how they could better reckon the value of their enterprises.

As noted above, the private sector seems to have a far more reliable way of measuring the value of its production than the public sector. The revenues and profits earned from selling particular products and services—that is, the famed bottom line—provides a direct measure of a private sector enterprise's success. What is interesting about profitability, however, is that it measures what happened in the past. That piece of information is taken very seriously in the private sector, partly because it can be used to hold managers accountable and give them incentives for performance, but also because it gives private sector managers an advantage in thinking about the future. Indeed, many private sector firms have been advised to reduce their reliance on strategic planning efforts designed to produce more accurate predictions about the future and, instead, to rely on their ability to react quickly to the market conditions they encounter through their current operations.

Thus, the lesson from the private sector seems to be that it is extremely valuable to develop accurate information about performance in the past rather than concentrate all one's efforts on guessing about the future. To the extent this is true, it follows that public sector agencies should be focusing more on program evaluation and less on policy analysis. My impression, however, is that they do the opposite. This is unfortunate, for the inconsistent attention given to program evaluation deprives the public sector of the kind of accountability, incentives for action, and capacity to react quickly that the private sector has gained by paying close attention to its bottom line.

Third, we need to look at what sorts of preferences public enterprises are designed to satisfy. Most often, analytic techniques are presented as though they were all useful tools designed to help government learn whether its efforts are valuable or not. Among them, benefit-cost analysis is usually presented as the superior technique, the one that is most general and most reliably linked to value. The only reason not to rely on benefit-cost analyses is that they are more difficult to complete. Thus, program evaluation and cost-effectiveness analysis are presented as poor second cousins to benefit-cost analysis.

Yet I see an important conceptual distinction among the techniques and would argue that for most public purposes, program evaluation and cost-effectiveness analysis are the conceptually as well as practically superior approaches. Benefit cost analysis, taking guidance from the

evaluation, cost-effectiveness analysis, and benefit-cost analysis. Reformers hoped that use of these techniques could infuse policy deliberations with objective facts about the extent to which proposed initiatives could be expected to work and the extent to which the costs of government efforts could be justified by general benefits to society.

There is much to be said about whether these techniques have lived up to their promise—much more than can be said here. From the perspective of someone analyzing their overall impact on policy-making, one can fairly say that the techniques are neither routinely used nor invariably powerful when they are.⁷⁷ Still, they have succeeded in changing the political discourse about governmental programs. They have increased the appetite of the political process for fact-based arguments about the extent to which government programs achieve their stated objectives or serve the general interest.⁷⁸

In discussing the utility of these techniques to managers' efforts to define and measure the value of what they are achieving, however, three points seem key. First, for reasons that are not entirely obvious, these techniques seem to be more valuable in estimating the value of particular programs or policies than the overall value of an organization's efforts. One reason, I suspect, is that to deploy these techniques successfully, managers must have narrowly specified objectives and narrowly specified means for achieving the objectives. Specific objectives and specific means are precisely what define governmental policies and programs.

In contrast, an organization is rarely easily conceptualized as a single program or policy. Often, organizations incorporate bundles of programs and policies. The different programs and policies may have been combined to achieve some larger coherent purpose, but the achievement of that larger purpose is often exceedingly difficult to measure and even harder to attribute to the overall operations of any single organization.

It may also be important that, as already mentioned, public organizations have some kind of capital value rooted in their ability to adapt and meet new tasks and challenges. To the extent that they do, an evaluation of their performance in existing tasks and programs would not capture their full benefit to the society. In any case, use of these techniques to evaluate programs and policies has been far more common than their use in assessing the overall value produced by public organizations.

Second, we should distinguish between the use of these techniques to estimate in advance of action whether a particular governmental initiative will prove valuable or not and the use of these techniques after a program has been tried to determine whether it was successful. Policy

all had our fill of rude bureaucrats and badly designed governmental operations and procedures.

Yet, this idea, too, has flaws. It is by no means clear who the customers of a government agency are. One naturally assumes that they are the *clients* of government organizations—the citizens the organization encounters at its “business end” through individual encounters or transactions.

Insofar as government provides services and benefits to citizens, that model seems to work fairly well. But government is not simply a service provider. Often it is in the business of imposing *obligations*, not providing services.³⁰ This is true for police departments, environmental protection agencies, commissions against discrimination, and tax collectors among others. These organizations meet individual clients not as service providers but as representatives of the state obliging clients to absorb a loss on behalf of the society at large.

Of course, it may be valuable for regulatory and law enforcement organizations to think of the citizens whom they regulate as customers and to design their “obligation encounters” with as much care as “service encounters” now are.³¹ Nevertheless, it is unreasonable to imagine that regulatory and enforcement agencies find their justification in the satisfactions of those whom they compel to contribute to public purposes. More likely, the justification comes from the generally attractive consequences for others of imposing particular obligations on a few. Moreover, there may be many others than those obliged who are interested in the justice or fairness with which the obligations are imposed, the fairness they would wish for themselves if they were similarly obliged.

The point is important because it reminds us that service-providing agencies, too, are judged and evaluated by citizens as well as by those who are clients of the organization. Consider welfare departments, for example. In evaluating the performance of the welfare department, we need to know how clients feel about the services they receive. But we cannot rely on their evaluation as the only or even the most important way of judging the value of the services provided. Citizens and their representatives want to be sure that the total cost of the program remains low, that no one steals from the program (even if it costs more to prevent the stealing than would have been lost if the stealing occurred), and even that the clients experience some degree of stigmatization in enrolling in the welfare program (to mark the distinction between those who can be independent and those who must rely on the state).

In short, it is important to distinguish the evaluation that *citizens* and their representatives give to governmental activities from the evaluation that would be given by *clients*. The arrested offender is not in a particu-

principles of welfare economics, assumes that public sector activities should be valued by individuals sizing up the (positive or negative) consequences for them as individuals. In contrast, the techniques of program evaluation and cost-effectiveness analysis find their standard of value not in the way that individuals value the consequences of government policy but instead in terms of how well the program or policy achieves particular objectives set by the government itself. Thus, program evaluation measures how well the program achieves its intended purposes, and those purposes are inferred from the language of the statutes or policies that authorized it. Cost-effectiveness analysis measures how well a particular governmental effort scored with respect to a particular set of purposes that had been defined for that particular effort—probably with the help of professionals who could help government policymakers define what constituted a valuable kind of “effectiveness.”

In short, both program evaluation and cost-effectiveness analysis define public value in terms of collectively defined objectives that emerge from a process of collective decision-making, whereas benefit-cost analysis defines value in terms of what individuals desire without reference to any collective decision-making process. The reliance of benefit-cost analysis on pure individual preferences is, of course, what makes it a conceptually superior approach to welfare economists. But to those who believe in the capacity of a political process to establish and articulate collective aspiration, and who believe that this is the most appropriate guide to public action, program evaluation and cost-effectiveness analysis seem the better techniques precisely because they look away from individual preferences and toward collectively established purposes.

Focusing on Customer Service and Client Satisfaction

Even recently still, public administrators have developed a new conception of how to gauge the value of their enterprises: borrowing from the private sector, they have embraced the goal of customer service, committed themselves to finding the value of their efforts in the reaction of their “customers.”²⁹ This idea has some important virtues. Insofar as it encourages government managers to think about the quality of the interactions that government agencies have with citizens and to treat them as clients, and to make those encounters more satisfactory, much good will come of adopting this perspective. We have

Partly because the purposes are defined generally rather than specifically, partly because overseers of the enterprise disagree about what should be done, and partly because the managers themselves are viewed as experts in defining and solving the problems that the society faces, the sanitation commissioner has some discretion in both proposing and deciding how the assets should be deployed.³⁵ His problem, then, is to judge in what particular ways the assets entrusted to him could be redeployed to increase the value of the enterprise for which he is (temporarily) responsible.³⁶

The Product of Garbage Collection

At the outset, simple inspection of departmental operations seems to reveal what value is being produced: the department makes the city's houses, streets, and alleyways cleaner than they otherwise would be. But this observation triggers another question: why are such consequences *valuable*? Once this question arises, the analysis departs from observations of physical events and enters the realm of assertion about what citizens do (or perhaps should) value.

Note that this issue would not come up if garbage collection services were sold in the market. Then, the value that citizens attached to clean streets would be manifest in their willingness to buy the service. It is only when tax dollars finance the activity that the manager responsible for deploying this asset must give a general, politically acceptable answer to the question of why the service is valuable. The public financing of the activity breaks the link between individual desires (expressed through an individual's willingness to spend his or her own money) and the product that is delivered. It not only raises doubts about individual citizens' desires for the service (and therefore its value), but also makes it necessary to explain the value of the enterprise in terms that would be satisfactory to the community as a whole (not just to the beneficiaries of the service).

The necessity of giving a general, politically acceptable answer—of acting as though there were a collective consumer with well-defined preferences for social conditions brought about by public enterprises—is the central intellectual problem in defining the value of governmental activities. However difficult the dilemma on a theoretical level, as a practical matter, the political system resolves this issue every day by authorizing public managers to spend public resources.

The authorizations are usually justified by an account—or a story—of the value of the enterprises.³⁷ To be useful, the account must appeal not

larly good position to judge the value of the police department's operations. And the welfare client might not be either. The ultimate consumer of government operations is not the individuals who are served or obliged in individual encounters (the clients of the enterprise) but citizens and their representatives in government who have more general ideas about how a police department should be organized or welfare support delivered. They decide what is worth producing in the public sector, and their values ultimately matter in judging whether a governmental program is valuable or not.

In the end none of the concepts of "politically neutral competence," "policy analysis" and "program evaluation," or "customer service" can finally banish politics from its preeminent place in defining what is valuable to produce in the public sector. Politics remains the final arbiter of public value just as private consumption decisions remain the final arbiter of private value. Public managers can proceed only by finding a way to improve politics and to make it a firmer guide as to what is publicly valuable. That is why political management must be part of our conception of what public managers should do.³²

To see how these general considerations might affect the perceptions and calculations of public sector managers, let us return to the problem faced by the sanitation commissioner at the beginning of the chapter. How ought he to think about the question of what value he is creating, for whom, and how?

MUNICIPAL SANITATION: AN EXAMPLE

The sanitation commissioner has inherited a public enterprise. Assets in the form of tax dollars, public authority, buildings, trucks, and the cumulative experience of his organization) have been entrusted to him to accomplish more or less well-defined public purposes. It is his responsibility for the deployment of these publicly provided assets that makes him a public manager. At the time he takes office, the assets are not entirely fungible; they are already committed to particular modes of operation determined by the organization's traditions, standard operating procedures, and technologies.³³

The current operations produce a particular set of consequences. Citizen groups, the media, city councillors, and the mayor cluster around the enterprise, continually offering advice about how the assets should be redeployed—including the recommendation that the resources be turned to private individuals or spent to support private enterprise rather than public bureaucracies.³⁴

the public effort seems essential. More will be spent to produce the necessary protection because the stakes are much higher. There will also be more concern about the distribution of the services. The argument may well be made that everyone has a "right" to be protected from health threats.

Many of our political decisions revolve around this question of whether a particular thing will be treated as an amenity to be purchased by individuals as they choose or as a right that will be guaranteed by the broader society.⁴⁰ That debate embodies a discussion about the extent to which particular conditions in the society will be taken as a matter of public rather than private concern: in effect, a discussion about the boundaries of the public sector. When particular goods and services are established as matters of right and powerfully linked to notions of justice and fairness, the boundary of the public sector is expanded to include the obligation to produce a certain quantity and distribution of those goods and services. When particular goods and services are left as things that society considers valuable but not closely linked to conceptions of justice and fairness, the boundary of the public sector is narrowed.

The Costs of Garbage Collection

The value of clean streets and alleys becomes an issue not only because there are alternative ways of organizing the effort but also because costs are incurred in making them clean: resources that could be used for other purposes are committed to the enterprise of garbage collection. If there were no costs, minimal benefits would be enough to justify the enterprise. Because substantial costs are incurred, the crucial issue becomes whether the value that is produced outweighs the costs of production.

Garbage collection incurs essentially two types of costs. The most obvious is the budgetary cost of providing the service. Money is taken from private consumption to finance public efforts to keep the streets clean. The amount used is reflected in budgets and accounting systems. It varies, depending on how clean the streets are kept and what particular methods are used to keep them clean.

A second cost is somewhat less obvious: public authority is engaged as well as public money. We usually associate the use of governmental authority only with enforcement or regulatory agencies. But garbage collection, too, involves governmental authority. At a minimum, governmental authority is used to raise the tax revenues that finance the service.

just to individuals in their role as clients and beneficiaries of clean streets but, in addition, to the community at large—more precisely, to individuals in their role as citizens of a society and to their representatives in political institutions. Of course, the story does not have to be repeated or sold daily. Once established, tradition will carry it on. But there must be a story to be recalled if the occasion should arise to reconsider or reauthorize the enterprise.

In the case of garbage collection, one account is the claim that clean cities are more aesthetically appealing than dirty ones. Since citizens feel better about clean cities, public value is created by making them cleaner.

Stated so directly, the proposition sounds strange, for it suggests that the government taxes the citizenry to produce cleanliness. Yet, there is nothing particularly compelling about the value of cleanliness. Indeed, it seems a little embarrassing for a liberal society to insist on the virtue of cleanliness and tax its citizens to accomplish that goal. It is tempting, then, to search for a more powerful public value—a better story—than mere cleanliness to establish the value of the enterprise.

A stronger justification is the claim that sanitation departments protect public health. In this conception collecting garbage has value principally as it produces a chain of consequences that protects citizens from epidemics.³⁸ Keeping organic wastes off the streets reduces the rate at which dangerous bacteria are produced (to say nothing of rats, which are esthetic negatives and health risks in themselves). This routine in turn reduces the likelihood of an epidemic.

Note that this account introduces a new problem: namely, the empirical issue of whether garbage collection does, in fact, prevent epidemics. The problem—that the value of a public enterprise lies down a long and uncertain causal chain from the point of governmental intervention—is common in public sector enterprises. To the extent that we are uncertain about the causal connection between governmental outputs (picking up garbage) and desired social outcomes (reduced mortality and morbidity), the power of this second account is weakened.³⁹ But often the importance of the objective will justify the enterprise even in situations where its actual performance is quite uncertain.

The two different frames for viewing garbage collection—producing aesthetic amenity or guarding the public's health—establish quite different contexts in the public's mind for evaluating both the level and distribution of the publicly supplied services. In the case of producing an amenity, the public sector activity seems discretionary. There is no urgency about providing the service, and, importantly, less concern about its distribution. In the case of guarding public health, however,

part with some of their freedom in the interest of accomplishing a public purpose. Thus, these procedures can be seen as devices for rationing governmental authority to ensure that it is used sparingly and only where appropriate and valuable.⁴⁵

To produce public sector garbage collection, then, two resources are used: money raised through taxation and moral obligation or state authority to sustain private contributions to the solution of a public problem. In a liberal democratic society, both are in short supply. Thus, the benefits of municipal garbage collection must be large enough to outweigh these costs.

Justifications for Public Intervention

As a matter of political philosophy, most members of a liberal society generally prefer to leave the organization of its productive enterprises to markets and private institutions rather than to public mandates and governmental bureaucracies. Consequently, for a public enterprise to be judged worthwhile, it must pass a test beyond the mere demonstration that the value of its products exceeds the value of the resources used in producing the results: it must explain why the enterprise should be public rather than private.⁴⁶

This preference stems from three ideological pillars that define a proper ordering of institutions in a liberal society: first, deep respect for the power of markets to ensure that productive activities respond to individual desires; second, a belief that private institutions are better able to cultivate and exploit individual initiative and are therefore more adaptable and efficient than public bureaucracies; third, confidence that private institutions become an important bulwark of freedom against the power of government.

To a degree, the sanitation commissioner could treat these ideas as mere abstractions that have little to do with the day-to-day running of the organization he leads. Alternatively, he could think of them as important philosophical principles that he endorses and seeks to realize in his organization's operations. Or, he could recognize that, even if these principles are not important to him, they might be important to the citizens and representatives who superintend his enterprise, and that their concerns about these matters should be accommodated.

Indeed, this last perspective would come quite naturally as these ideas gained concrete political force in his city's political processes, or as cities around the country began privatizing their sanitation departments. To satisfy those interested in ensuring proper institutional relations in a

It is also used in another important way. Whenever a valuable service is publicly provided, private efforts to purchase or provide the service tend to atrophy. In the case of garbage collection, when government collects the garbage, the citizens will do less on their own. They will stop buying garbage collection from private providers. They might even stop sweeping the sidewalks in front of their stores.

To the extent that private efforts cease, cities will be less clean than if the efforts had continued. A benefit will have been produced—namely, increased leisure or more disposable income for those who were spending their time and money for private garbage collection. But the city will not be as clean. In the extreme, private efforts to keep the city clean could collapse to such a degree that the city would end up even dirtier than before.

To prevent this from happening, the government spends moral authority to create informal or formal obligations on citizens to help keep the cities clean.⁴¹ Informally, the government could sponsor public service programs to establish a social norm favoring responsible cleanliness over thoughtless littering.⁴² For example, the Sanitation Department might finance publicity campaigns to discourage littering or arrange to place trash receptacles throughout the city.⁴³ Such programs aim to facilitate voluntary efforts and eliminate any excuses for “irresponsibility.”

A more coercive (and therefore more expensive) effort to sustain private cleanup efforts includes ordinances prohibiting littering and formal requirements that citizens sweep their sidewalks. Backing up these obligations with fines and aggressive enforcement gives them real teeth.

We do not ordinarily think of the use of public authority as coming in degrees: it either obtains or it does not. But, like money, public authority may be used more or less intensively in an enterprise. The degree of authority might be reflected in the size of the burden imposed on citizens, or the magnitude of the punishment for noncompliance, or even the intrusiveness of the measures used to enforce compliance.⁴⁴

It could also be measured by the elaborateness of the procedures required to establish or impose the authority: the more elaborate the required procedures, the more significant the authority engaged. To prohibit littering, or to require citizens to keep their sidewalks clean, for example, would require formal legislative or regulatory action. Typically, such actions require extensive public deliberation. Moreover, implementing the regulations by fining citizens who did not live up to their obligation typically requires formal court action against violators. What happens in these procedures is that individual citizens are persuaded to

connections to common aspirations; therefore, its production and distribution become an appropriate focus of a society acting through government to assure justice.⁴⁹

Within the frame of efficiently producing and distributing an amenity to those who really value it, public intervention is justified by three specific arguments. First, substantial economies of scale in garbage collection could justify public intervention.⁵⁰ This occurs either because the technology of garbage collection shows declining costs across the relevant range of production, or because the value associated with garbage collection is concentrated in the last few increments of performance, when the municipal environment is transformed from a bit untidy to pristine, or from pretty safe to entirely safe.

To take advantage of these economies of scale without leaving the citizens vulnerable to exploitation by a private monopoly, the society has two choices: it can establish a regulatory agency to oversee the natural monopoly that will arise in the private sector, or it can choose to supply the service itself. In the case of garbage collection, the society has often decided to have the government supply the service itself.

Second, although clean streets, fragrant air, and the absence of vermin in alleyways are all things citizens value, they are currently unowned and unpriced.⁵¹ As a result, individual citizens have no incentive to "produce" these goods by disposing of their garbage somewhere other than in the common streets and alleyways.

To deal with this problem, the society might reasonably decide to assert common ownership of these public spaces. Having asserted ownership, it could then either establish a market for the use of these spaces by charging citizens for the privilege of dumping, or, relying on its authority, it can require private citizens to keep these areas clean on pain of both fines and the stigmatization of violating public ordinances.⁵² Alternatively, the society might simply decide to supply the service itself through governmental operations and make it unnecessary for citizens to litter. In the case of garbage collection, the society has often relied on a mix of these approaches, with an emphasis on public sector provision.

Third, because the aesthetic and health benefits of collecting garbage are generally available to all citizens of the city, it is hard to exclude citizens from enjoying these benefits even if they refuse to pay for them.⁵³ Thus all citizens have an incentive to conceal their true interests in having clean streets. If they don't contribute to the cleanup, maybe someone else will, and they can enjoy the benefit without having to do the work. Or, even if they are willing to make the appropriate contribution, they might be reluctant to do so for fear that they would be

liberal society, then, a manager of a public enterprise must show that there is some special reason why government, and its authority, should be used to finance and supply the service.

In general, two different justifications for public intervention carry weight. One is that there is a technical problem in the organization of a market to supply the good in question—some reason why free exchanges among producers and consumers will not result in the proper level of production.⁴⁷ Government must intervene to correct the defect in the market.

A second justification is that there is some crucial issue of justice or fairness at stake in the provision of the service—some right or claim of an individual against the society that others agree must be honored.⁴⁸ Government must intervene to ensure that the claim is honored—not only for the current individual who has a claim but generally for all.

Note that the first justification leaves undisturbed the primacy of individual preferences as the arbiter of social value. Ideally, both the quantity and the distribution of a particular good will be determined solely by individual preferences.

The second justification, by contrast, substitutes a different standard for establishing social value. A collective judgment is made about the value of the proposed public enterprise. Citizens acting through politics, rather than consumers acting through markets, establish both the level and the distribution of production. It is the combined preferences of citizens for an aggregate social condition that must be satisfied.

These different justifications correspond more or less closely to the two different frames for establishing the value of garbage collection: the production of tidiness and the production of public health. In one frame, public sector garbage collection provides an amenity much like any other consumer good—a tidy urban environment. One thinks principally in terms of technical problems in the organization of markets as the justification for public sector intervention.

In the second frame, public collection produces something more fundamental—the protection of public health. Here one thinks more in terms of guaranteeing a socially valuable condition, fairly distributing its benefits and accepting some social obligation to help meet the required condition.

These distinct frames express the different statuses that the two values—cleanliness and health—have in our politics. Tidiness is an amenity rather than a necessity; therefore, its production and distribution can be comfortably left to markets unless some technical problem makes this impossible. Health makes a claim as a “primary good” with strong

ments really begin to function as substitutes for the expression of individual preferences.

Once a collective assertion has been made about the value of garbage collection, the issue of production and distribution becomes one of fairness in distributing the benefits and allocating the burdens rather than one of efficiency.⁵⁵ As noted above, the issue of fairness arises because public authority is engaged. In a liberal democracy authority is collectively owned.⁵⁶ As a normative principle, it should never be used in any degree unless a representative body has sanctioned its use.⁵⁷ Moreover, it must be deployed generally and for the good of all.⁵⁸ These political principles governing the behavior of our governmental institutions are as fundamental to our understanding of our society as the preference for markets and private enterprise.

In the context of garbage collection these principles mean that those who own authority (namely, the citizens and those who represent them) must be satisfied that the public authority is being used well on their behalf. Using authority well means that the enterprise operates fairly (in the sense that similarly situated people are treated alike),⁵⁹ and that those subjected to the exertion of authority are able to ascertain that its use is justified in their individual case.⁶⁰ Note that fairness is a separate quality of a social enterprise—not necessarily linked to efficiency and not necessarily compensated or replaced by effectiveness. Although an individual transaction can be more or less fair, fairness is also, and perhaps more fundamentally, a feature of the aggregate operations of a public enterprise. Moreover, it is a quality that has value to citizens in their role as citizens authorizing a collective enterprise, rather than as individual clients and beneficiaries enjoying the service for themselves. (It may also be an important part of the experience of those clients who are obliged rather than served and thus an important part of what determines their willingness to comply. Ultimately, fairness may influence the economic efficiency of obliging organizations.)

Viewed from this vantage point, public sector garbage collection is justified by a shared social aspiration for a healthy (and clean) environment and by the necessity of fairly distributing the benefits and burdens of producing that result through a governmental enterprise. Its value registers partly in terms of the satisfactions of individuals who now enjoy clean streets (balanced by the pain of paying taxes and accepting obligations to assist in the garbage collection enterprise), and partly in terms of the satisfactions of citizens who have seen a collective need, fashioned a public response to that need, and thereby participated in the construction of a community (balanced by worries on their part that they have

exploited and thought foolish by their more cynical fellow citizens. In either case the city will end up dirtier than individual citizens would desire because everyone would hang back from making the appropriate contributions. To avoid this result, the society can oblige everyone to make financial and other contributions to the solution of what is, in the end, a common problem.

All these justifications for public intervention begin with the assumption that individual preferences properly establish the value of such efforts but that some technical problems in the organization of markets for the service justify public intervention. As noted above, however, one can consider garbage collection from an entirely different perspective. Instead of viewing the problem as one of organizing efficiently to meet individual desires for clean streets and alleyways, one can see the issue as a case of fairly distributing the benefits and burdens of meeting a public health need that has been recognized by individuals in the society as a collective aspiration and responsibility.

This language, and the analytic frame it invokes, changes a great deal in our view of the public value of garbage collection. Instead of seeing the value of the effort in terms of its impact on the desire of individual consumers for cleanliness and health, the value seems to be established exogenously by a public health imperative. Sanitary streets are a public necessity! Citizens have a right to be protected! Such pronouncements replace—even “trump”—individual preferences in establishing the value of the enterprise.⁵⁴

Often it seems that such statements are exogenously established. They come from outside the ordinary machinery of either markets or politics. A distinguished public health physician establishes the view by warning of an imminent epidemic. Or, an advocate for the poor dramatizes the inequality of the existing distribution of sanitation services through pictures of rat-infested tenements. It is as though some objective reality, or some commonly shared moral aspiration, compels everyone in the society to agree that garbage collection is a public necessity. In effect, these assertions take people out of their mode as individual consumers and ask them to respond as citizens of a community facing a common problem or obliged by a common moral aspiration.

As a practical matter, however, such assertions can never be compelling if they stand alone as mere assertions. To have standing in the community—to have power to establish, sustain, and guide the public enterprise of garbage collection—they must meet a political test. These claims must command the assent of individual citizens and gain the authorization of representative institutions. Only then can such state-

concerns the proper distribution of the available service across geographic areas, ethnic groups, social classes, and members of political parties.⁶¹ Distribution provokes political debate not only because there are competing interests but also because there are quite different principles which might reasonably be used to decide how to distribute the services.

When one thinks about the distribution of the service in terms of market efficiency or welfare maximization, one is tempted by a principle that directs garbage collection efforts to areas where they will do the most good, that is, where the efforts will produce the largest gains in terms of aesthetics and public health outcomes per unit of effort expended.⁶² An alternative concept would be to allocate public services toward those areas that already do a lot privately, partly as an incentive to maintain (or increase) private contributions and partly because the elevated levels of private effort indicate a stronger desire for cleanliness and therefore a more valuable place to spend public cleanup resources.⁶³

When one thinks of distributing the benefits of the enterprise in terms of meeting social needs, quite different principles become salient. One is to allocate garbage collection efforts to those areas most in need.⁶⁴ This approach will establish a minimum level of cleanliness throughout the city. A second principle, linked closely to fairness, is to supply the same amount of public effort to all areas of the city and let the differences in actual levels of cleanliness reflect differences in private desires and capabilities to keep the areas clean.⁶⁵

In the end none of these principles can stand as the proper basis for allocating services, though at any given moment each will have its advocate. Instead, as a practical matter, the distributional issue is resolved by a continuing political and administrative process that holds these competing principles in tension and adapts to changes in political demands or policy fashion.

Issues of administrative efficiency and program effectiveness are usually debated in terms of effectiveness and costs rather than fairness and justice. Rarely do these concerns arise as a result of reports issued by government agencies revealing shortfalls in performance. Instead, they arise from external sources: some dramatic (but temporary) performance failure such as an inability to clear the streets after an unexpected snowfall; or a newspaper story about corruption, waste, and inefficiency in a sanitation department; or the initiation of a broad effort to increase productivity by an incoming administration; or the initiation of a new project by a new commissioner (for example, a rat extermination program in vacant lots); or the encouragement of block parties to clean up

threatened a proper ordering of social institutions by making something public that might more usefully have remained private).

These views are often considered separate and inconsistent. One sees the problem either from the perspective of efficient production and distribution or from the perspective of justice and a fair distribution of burdens and benefits. My view, however, is that public managers must always see public sector enterprises from *both* perspectives. They cannot shrug off the question of efficient production and delivery of a service. Nor can they ignore the question of a fair distribution of privileges and burdens. Once public authority is engaged, issues of fairness are always present. And public authority is *always* engaged when tax dollars are being spent.

The Value of the Authorizing Process

The fact that public authority is always engaged in public sector enterprises changes who must be satisfied with the performance of an enterprise and what characteristics constitute a satisfactory performance. Because authority is engaged, and authority can only be spent by citizens and their representatives, its use must be guided by *political* agreements rather than by individual market transactions. Individual citizens thinking about what is good for the society (rather than just what is good for themselves as clients) must be satisfied with the conduct of the public enterprise as well as the clients who are directly affected by the enterprise; so must those in representative institutions who authorize the enterprise.

Consensus rarely arises in political discussions of the value of public sector enterprises. More often, debate ensues over whether and how the enterprise should be conducted. In an important sense this political logue is to public sector enterprises what the market is to private goods—the place where consumers with money to spend decide what they want to buy. But three differences apply: (1) these consumers are trading their freedom as well as their money by authorizing the government to act on their behalf; (2) they are buying the product for everyone's benefit according to a political view of what is desirable for society as a whole; and (3) they are buying whole enterprises rather than individual products of the enterprise. In short, what citizens (as opposed to clients) want is their particular conception of a fair and efficient garbage collection effort.

These apparently abstract issues often become quite concrete in the decisions surrounding a sanitation department. The most common issue

from all over a city and sending them out to collect the garbage. It sustains a staff of employees who know where they should go and what they should do to produce this result. It utilizes some accounting systems to show the managers and overseers of the enterprise how much it costs to collect the garbage and how much of the budget has already been spent. And it employs some managers who make sure that everyone in the organization plays his or her assigned role. All this operational capability represents an investment that the society has made in the municipal sanitation department.

Many would say that this cumulative experience and operating capability is an important asset that should be protected, or at least not casually abandoned. Those who express this view see in the competence of public sector organizations a broad, long-term perspective that is useful in balancing the narrow, short-term perspective of political representatives.⁶⁹

To a degree, this view has merit. There is value in the cumulative experience of the organization. It would be very costly to have to replace it. And even though much of the productivity gains associated with its accumulating experience have probably been appropriated by its managers in terms of organizational slack that reduces their uncertainty and increases their ability to respond to crises (and by its workers in the form of less pressure in the job), the organization is still likely to be much more productive in its current activities than any alternative.⁷⁰

The problem is that respect for institutional continuity can become an excuse for resisting change. Even something as apparently routine as garbage collection is not static. The world changes. Neighborhoods gain or lose population. Private efforts wax and wane. New technologies for picking up the garbage become available. New problems (such as toxic wastes) make new claims on the organization's sorting and disposal capabilities. New labor contracts change staffing patterns. All these changes affect the basic operations of garbage collection.

In addition, the political demands on the Sanitation Department might change. Perhaps a scandal will force important changes in the geographic allocation of services or the level of supervision. Or, the Sanitation Department might suddenly be directed to become an employer and route of upward mobility for ghetto teenagers rather than simply an agency that picks up the garbage. Alternatively, the sanitation commissioner might see an opportunity to use his force of street cleaners as a device for encouraging the development of block groups that could restore pride and stimulate investment in declining city neighborhoods.

a neighborhood.⁶⁶ Such debates about performance will generally be resolved by reports, studies, and the creation of new policies and procedures designed to rectify the problem.

The political debates surrounding the fairness and efficiency of garbage collection are important for at least two reasons. First, they renew the authorization of the enterprise, which maintains the flow of resources that the organization deploys to keep the streets clean. Second, they provide a continuing occasion for the society to reconsider the question of whether the resources committed to the enterprise are being used well. Like the annual meetings with stockholders in the private sector, the irregular but frequent meetings of the sanitation commissioner with public interest groups, the media, and elected representatives of the people give the commissioner an opportunity to account for his enterprise and to use that account to sustain old—and attract new—investment.

This ongoing political process authorizing the garbage collection efforts to continue (perhaps on some new terms) can have many different attributes. It can be more or less open, more or less fair, more or less well-informed about past performance and future opportunities, and more or less reasonable in its decisions. The particular qualities of this authorizing process are important since it is this process that links the enterprise of garbage collection to those who consume the enterprise as an institution of a well-ordered society.⁶⁷

Since the process can satisfy or disappoint citizens who desire a fair, efficient, and effective public sanitation effort, and since their satisfaction is an important part of the success or failure of a public enterprise, we must view that political process as creating a kind of value. If the ongoing process of authorization is managed well, if citizens feel that their common aspirations are satisfied through a process of consultation and review, the enterprise will be more valuable than if they are not. And this aspect of public value exists independently of the difference between the value of cleanliness and the cost of the resources used to produce it.

The Capital Value of the Institution

There is one last thing to observe about garbage collection. Typically an existing organization—generally, a municipal sanitation department—carries out the activity. Over time that organization develops significant expertise in collecting the garbage.⁶⁸ It has operating procedures that accomplish the extraordinary task of gathering workers and equipment

tunities or social obligations, and a suitable desire to economize on the use of tax monies invested in public sector organizations.

In practice, these two different kinds of desires collapse into one for a very important reason: whenever public authority is invoked to solve the technical problems in the market, the enterprise takes on public characteristics. Every time the organization deploys public authority directly to oblige individuals to contribute to the public good, or uses money raised through the coercive power of taxation to pursue a purpose that has been authorized by citizens and representative government, the value of that enterprise must be judged against citizens' expectations for justice and fairness as well as efficiency and effectiveness. Once the public starts producing something with public resources raised through state authority, it can no longer be viewed independently of citizens' political preferences and desires. The capacity of a public enterprise to satisfy these preferences is, therefore, an important part of its value-creating capabilities.

Third, it follows that managers of public sector enterprises can create value (in the sense of satisfying the desires of citizens and clients) through two different activities directed at two different markets. The most obvious way is to deploy the money and authority entrusted to them to produce things of value to particular clients and beneficiaries: they can establish clean parks to be used by families; they can provide treatment to heroin addicts; they can deploy military forces to make individuals secure and confident in the future. We can call this creating value through public sector production, even though what is being produced and valued is not always a physical product or service consumed by individual beneficiaries.

Public managers can also create value by establishing and operating an institution that meets citizens' (and their representatives') desires for properly ordered and productive public institutions. They satisfy these desires when they represent the past and future performance of their organization to citizens and representatives for continued authorization through established mechanisms of accountability. We might think of this activity as helping to define rather than create public value. But this activity also creates value since it satisfies the desires of citizens for a well-ordered society in which fair, efficient, and accountable public enterprises exist. The demands of citizens, rather than of clients or beneficiaries, are being met.

This dual nature of public sector value creation might seem odd. But an approximate analogue exists in the private sector. Private sector managers have two different groups they must satisfy: they must pro-

The point is that the organization's value is not necessarily limited to its operating value in its current mission. It also has a kind of capital value rooted in both its ability to adapt its specific methods to new aspects of garbage collection and its ability to produce new things potentially valuable to the society. To the extent that the organization can exploit opportunities to perform its traditional mission more efficiently or more fairly, to the extent that it can adapt to changing circumstances, and to the extent that an organization can exploit its distinctive competence to produce other things that would be valuable to citizens, the enterprise will be more valuable than it seems from observing its current performance. Indeed, it is precisely the *adaptability* of organizations that determines the long-run value of private sector firms.⁷¹ Perhaps the same should be true of public sector firms.⁷²

TOWARD A MANAGERIAL VIEW OF PUBLIC VALUE

What does this particular discussion of the public value of garbage collection tell us more generally about how public managers and all the rest of us citizens who rely on them should analyze the value of public sector enterprises? Six points seem key.

First, an axiom: value is rooted in the desires and perceptions of individuals—not necessarily in physical transformations, and not in abstractions called societies. Consequently, public sector managers must satisfy some kinds of desires and operate in accord with some kinds of perceptions.

Second, there are different kinds of desires to be satisfied. Some are for goods and services that can be produced and distributed through markets. These are the focus of private management and need not concern us. Others are for things produced by public organizations and are (more or less imperfect) reflections of the desires that citizens express through the institutions of representative government. Citizens' aspirations, expressed through representative government, are the central concerns of public managers.

At first glance, citizens' aspirations seem to be of two types. One type concerns collective things that are individually desired and consumed but cannot be provided through market mechanisms because the product cannot be divided up and sold to individual consumers. A second type involves political aspirations that attach to aggregate social conditions such as a proper distribution of rights and responsibilities between public and private organizations, a fair distribution of economic oppor-

imperfect political agreements entitle citizens and managers to do no more than to challenge their wisdom—not to disregard them or ignore their great moral weight.

If public managers are to create value over the long run, then, an important part of their job consists of strengthening the policies that are sold to their authorizers. Specifically, the policies that guide an organization's activities must reflect the proper interests and concerns of the citizens and their representatives; the story about the value to be produced must be rooted in accurate reasoning and real experience; and the real operating experience of the organization must be available to the political overseers through the development of appropriate accounting systems that measure the performance and costs of the organization's performance. It is here that the analytic techniques of policy analysis, program evaluation, cost-effectiveness analysis, and benefit-cost analysis make their major contributions.⁷⁵ Otherwise, the strengths of the political process will not be exploited, the knowledge and experience of the operating managers will not be utilized, and the acknowledged weaknesses of the process will not be challenged.

Sixth, the world in which a public manager operates will change. Citizens' aspirations will change, as will methods for accomplishing old tasks. So might the organization's task environment shift: new problems may crop up to which the organization may propose a useful solution, much as the problem of latchkey children arose as a problem for public libraries to solve. It is not enough, then, that managers simply maintain the continuity of their organizations, or even that the organizations become efficient in current tasks. It is also important that the enterprise be adaptable to new purposes and that it be innovative and experimental.

This, then, is the aim of managerial work in the public sector. Like private sector managers, managers in the public sector must work hard at the task of defining publicly valuable enterprises as well as producing that value. Moreover, they must be prepared to adapt and reposition their organizations in their political and task environments in addition to simply ensuring their continuity.

Unfortunately, this advice is far too general and abstract to be of much use to public managers. It orients them to the overall purpose of managing in the public sector, and to some general problems that must be confronted, but it does not give them particular advice about how to develop a sufficiently concrete definition of public value to guide their own and their organizations' efforts; nor does it tell them how they could engage their political and organizational environments to define and produce public value.

...
duce a product or service that customers will buy at a price that pays for the costs of production; and they must sell their ongoing capacity to produce valuable products to their shareholders and creditors. A similar situation confronts public managers: they must produce something whose benefits to specific clients outweigh the costs of production; and they must do so in a way that assures citizens and their representatives that something of value has been produced. In short, in both cases, both customers and owners must be satisfied with what the manager does.

Fourth, since governmental activities always engage political authority, the relative importance of these two different parts of management shifts. Because authority is involved, the importance of reassuring the owners" that their resources are being used well gains relative to satisfying the "clients" or "beneficiaries" of the program. Moreover, it becomes important to give the "productive" side of the enterprise some qualities that are different from the maximum satisfaction of the beneficiaries of the program. The production and distribution of the organization's products must be fair as well as efficient. These operations must economize on the use of authority as well as on the use of money.

Fifth, what citizens and their representatives (as opposed to clients and beneficiaries of programs) "buy" from public managers is an account of the public enterprise—a story contained in a policy. In this sense, a policy is to the public sector manager what a prospectus is to a private entrepreneur. Viewed from the manager's side of this transaction, the manager receives an authorization to use resources to accomplish public purposes through specified means. Viewed from the citizen's side of this transaction, the authorization is the purchase of an aggregate enterprise that promises to create value. It is a collective, political agreement to meet a problem (or exploit an opportunity) in a particular way. Politics is the answer that a liberal democratic society has given to the analytically unresolvable question of what things should be produced for collective purposes with public resources.

We know, of course, that it is treacherous to view political agreements as accurate reflections of the public will or the public interest. Political decision-making is vulnerable to many different kinds of corruption—most important being the triumph of special interests over the general interest.⁷³ It is also vulnerable to many kinds of irrationalities including shortsightedness, an unwillingness to make painful trade-offs, and an inability to deal appropriately with risk.⁷⁴ These well-known difficulties do not do affect the moral claims of political decision-making on the part of government in the eyes of both citizens and managers. But

CHAPTER 3

ORGANIZATIONAL STRATEGY IN THE PUBLIC SECTOR



Public managers create public value. The problem is that they cannot know for sure what that is.¹ Even if they could be sure today, they would have to doubt tomorrow, for by then the political aspirations and public needs that give point to their efforts might well have changed.²

Despite the ambiguity, managers need an account of the value their organizations produce. Each day, their organizations' operations consume public resources. Each day, these operations produce real consequences for society—intended or not. If the managers cannot account for the value of these efforts with both a story and demonstrated accomplishments, then the legitimacy of their enterprise is undermined and, with that, their capacity to lead.³

Nor are their responsibilities limited to current operations. Some resources used today will not be valuable until tomorrow. Investments in new equipment, new knowledge, and new human capabilities, for example, are necessitated by the prospect of change and justified by the expectation that they will improve future performance. Even if no *explicit* investments are made, current operations will affect future performance, for today's experiences shape the culture and capabilities of tomorrow's organization. Public managers, then, are obliged to hold a vision of public value, good for today and into the future.

To see this abstract problem in concrete terms, consider the situations confronting William Ruckelshaus, on being appointed administrator of

Developing more specific techniques for envisioning public value, mobilizing and learning from politics, and reengineering organizations is the principal aim of the remainder of this book. In Chapter 3, I introduce some real public sector executives who long ago saw and responded to these needs, particularly by using specific techniques for “envisioning public value,” and in doing so, set a standard for today’s public executives. In subsequent chapters, I describe other managers who can teach us about good (and bad) techniques for engaging the political environment and for guiding their organizations toward improved performance.



THE POWER OF PUBLIC IDEAS



Edited by
Robert B. Reich

Introduction



in several respects. First, they are appropriate to a heterogeneous society comprising a multiplicity of values and viewpoints, all of which need to be considered in making policy. Rather than assume a single, unifying "public interest," it is often more accurate—and safer—to assume that interests collide and thus tradeoffs are inevitable. Second, these premises direct policy making to practical, answerable questions: who wants this policy and why? how do we know? how much do they want it? who will lose by it, and how much would it cost to compensate the losers? why can't the market take care of this? what are the advantages and disadvantages of each alternative way of accomplishing the objective?

The prevailing assumptions also suggest ready means of answering the questions and reaching solutions. It is a matter of measuring what people want and analyzing the most efficient way of satisfying these wants, or of engineering compromises among competing groups purporting to speak for the self-interests of their members. Finally, the assumptions are sufficiently neutral and commonsensical that policies derived from them can gain broad assent, thus avoiding conflicts based solely on ideology or personal rancor. Compromises can readily be reached. For all these reasons, these principles together comprise what is taken for the policy-making ideal in present-day America. They offer a model for what politics *should* accomplish—*would* accomplish—if it were less corrupted by special pleadings, money, ideology, and bias.

A Revised View

For all its virtues, the prevailing view of policy making ignores other important values.² In particular, it disregards the role of ideas about what is good for society and the importance of debating the relative merits of such ideas. It thus tends to overlook the ways such normative visions shape what people want and expect from their government, their fellow citizens, and themselves. And it disregards the importance of democratic deliberation for refining and altering such visions over time and for mobilizing public action around them.

We look on this book as an effort to redress the balance. In our revised philosophy of policy making, ideas about what is good for society occupy a more prominent position. The core responsibility of those who deal in public policy—elected officials, administrators, policy analysts—is not simply to discover as objectively as possible what people want for themselves and then to determine and implement the

board of education. These personal preferences are not significantly affected by politics, social norms, or previous policy decisions. The public good, or "public interest," is thus best understood as the sum of these individual preferences. Society is improved whenever some people's preferences can be satisfied without making other people worse off. Most of the time, private market exchanges suffice for improving society in this way; public policies are appropriate only when—and to the extent that—they can make such improvements more efficiently than the market can. Thus the central responsibility of public officials, administrators, and policy analysts is to determine whether public intervention is warranted and, if so, to choose the policy that leads to the greatest improvements.

These principles are familiar, not because they describe how public policies are actually made in modern America but because they shape the way public policies are typically justified and criticized. They suggest what is and is not legitimate for government to do, how policy makers should act, how they and those who advise them should think about public problems. Importantly, these principles also sound a cautionary theme: the supposed tendency for individuals to use public policies to get what they want for themselves creates a danger that those who have the greatest stake in a given matter will collude against the rest of us, whose individual interests in any particular policy are apt to be small. This danger can be overcome if policy makers carefully ensure that everyone's preferences are objectively weighed, alternatives are fully considered, and net benefits are maximized.¹

The ubiquity and robustness of these principles in contemporary America is quite remarkable. They undergird the position papers that stream out of policy institutes and assorted think-tanks. They serve as the basis for memoranda of policy analysts in government and academe, editorials in prominent newspapers and magazines, learned treatises on public policy, court opinions crafted by judges schooled in "law and economics," lobbyists' pleadings, and administrative hearings. You hear them even when politicians or administrators talk candidly about what they think they ought (but may not be able) to do. Whenever people who deal in public policy want to be (or to sound) objective and technically rigorous in discussing solutions to public problems, they tend to employ these assumptions—sometimes tacitly, often without further explanation or rationale.

Such assumptions—about human nature, about social improvement, and about the proper role of government—have proven useful

served to direct and mobilize a vastly decentralized and often recalcitrant government behind him.

Third, we have been struck by how much the initial definition of problems and choices influences the subsequent design and execution of public policies. The act of raising the salient public question—how to overcome welfare dependency or Soviet aggression, how to improve American competitiveness or reduce the budget deficit—is often the key step, because it subsumes the value judgments that declare something to be a problem, focuses public attention on the issue, and frames the ensuing public debate. When questions “catch on” in this way, it is not because those who pose them are especially talented at manipulating public opinion or linking preconceived preferences to attractive agendas. The phenomenon is more interactive than that, and preferences are less defined, more fluid. Even before the question is asked, the public (or a significant portion of the public) seems already to be searching for ways to pose it—to give shape and coherence to events that seem random and unsettling—and thus to gain some measure of control. Rather than responding to pre-existing public wants, the art of policy making has lain primarily in giving voice to these half-articulated fears and hopes, and embodying them in convincing stories about their sources and the choices they represent.⁴

These observations have led us to a somewhat different conception of the role of government in a free society. The prevailing ideal casts government as problem solver, intervening when it can satisfy pre-existing preferences more efficiently than the market can. Democratic processes, in this view, are primarily means for alerting policy makers to what people want for themselves. But if we are correct in seeing policy making, inevitably, as a process of posing questions, presenting problems, offering explanations, and suggesting choices, then the prevailing view seriously understates the responsibilities of policy makers, policy analysts, and citizens.

It is not difficult to tally preferences in this era of instantaneous electronic polling and of sophisticated marketing techniques for discovering what people want and how much they want it.⁵ It is a considerable challenge, however, to engage the public in rethinking how certain problems are defined, alternative solutions envisioned, and responsibilities for action allocated.

To the extent that deliberation and reflection yield a broader repertoire of such possibilities, society is better equipped to cope with

best means of satisfying these wants. It is also to provide the public with alternative visions of what is desirable and possible, to stimulate deliberation about them, provoke a reexamination of premises and values, and thus to broaden the range of potential responses and deepen society's understanding of itself.

Our interest in the power of public ideas arises from several sources. First, many of the most important policy initiatives of the last two decades cannot be explained by the prevailing assumptions about human nature or social improvement. Consider the civil rights laws and regulations of the 1960s; the subsequent wave of laws and rules governing health, safety, and the environment; and the reform of the tax code in 1986. These policies have not been motivated principally or even substantially by individuals seeking to satisfy selfish interests. To the contrary, they have been broadly understood as matters of public, rather than private, interest. And this perception has given them their unique authority. People have supported these initiatives largely because they were thought to be good for *society*.³ Nor have public preferences with regard to these policies been stable and preordained. Public support has grown and changed as people have come to understand and engage with the ideas underlying them. The official acts of policy making—enacting the laws, promulgating the rules, issuing the court opinions—have been embedded within social movements and understandings that have shaped them and propelled them forward. To disregard these motivating ideas is to miss the essential story.

Second, there is evidence that the most accomplished government leaders—those who have achieved significant things while in office or at least set the direction of the public action—have explicitly and purposively crafted public visions of what is desirable and possible for society to do. These ideas have been essential to their leadership, serving both to focus public attention and to mobilize talent and resources within government. Ronald Reagan has been perhaps the clearest example of this approach to policy making. His speeches, interviews, and press statements have not been simply devices to muster public support behind a particular initiative or to glorify the accomplishments of his administration. They have been means of educating the public in an approach to governance, creating a coherent framework through which the public would come to support a wide variety of initiatives and to understand public issues. They have also

appropriate allocations of responsibility for solving them; and where solving the problems *as understood* is more useful than understanding them differently. The prevailing philosophy is less helpful—indeed, may forestall social learning—where these conditions are not met. Our suspicion—difficult to document, hopeless to prove conclusively—is that many public issues, perhaps most of those considered important enough to be discussed in the newspaper or everyday conversation, fall in the second category, in which definitions, constraints, and responsibilities are centrally at issue.

The Debate in Context

In a sense, these differences of degree and emphasis are aspects of a broader debate that has raged for centuries over human nature and the purposes and methods of governance. Do we as citizens dare entrust our collective fates to a government reflecting the demands of self-interested individuals? If not, what is the alternative?

The modern debate had its origins in the Renaissance, in the first stirrings of humanist thought and the beginnings of the bureaucratic state. By the sixteenth century, the monarchs of Europe had evolved administrative machinery capable of organizing finance, waging war, and issuing laws and regulations. These bureaucracies were populated by men who owed their positions to specialized training and administrative competence, not to feudal right. They were uniquely skilled in using organization to accomplish complex tasks efficiently. Bureaucratic absolutism was elaborated and refined in the seventeenth century by Louis XIV of France, whose specialized, hierarchical system provided a model for Prussia, Spain, Austria, and Russia. By the eighteenth century, “enlightened despots” were firmly entrenched on the continent, having subjugated the few institutions—the Riksdag in Sweden, the Dutch Republic—that could be called democratic. The rise of bureaucracy was thus a central event in the political modernization of Europe.⁷ Even with the advent of modern parliaments in the nineteenth and twentieth centuries, the instruments of central authority and bureaucratic control continued to dominate the core functions of government in continental Europe. As Max Weber described it, “the bureaucratic type of organization . . . is, from the purely technical point of view, capable of attaining the highest degree of efficiency and is in this sense formally the most rational known means for carrying out imperative control over human beings.”⁸

change and to learn from its past. The thoughtless adherence to outmoded formulations of problems, choices, and responsibilities can threaten a society's survival. Policy making should be more than and different from the discovery of what people want; it should entail the creation of contexts in which people can critically evaluate and revise what they believe.⁶

This suggests a different role for policy makers and policy analysts than that of the prevailing ideal. The responsibility of government leaders is not only to make and implement decisions responsive to public wants. A greater challenge is to engage the public in an ongoing dialogue over what problems should be addressed, what is at stake in such decisions, and how to strengthen the public's capacities to deal with similar problems in the future. Such an explicative process, properly managed, can build on itself: as society defines and evaluates its collective goals, it examines its norms and beliefs; in defining its purposes, it becomes better able to mobilize its resources and achieve its goals.

By the same token the responsibility of policy analysts is not only to choose the best means of achieving a given objective. It is also to offer alternative ways of understanding public problems and possible solutions, and thus to expose underlying norms to critical examination. The analyst can provoke such examination in several ways: by juxtaposing widely accepted but morally or politically inconsistent assumptions about certain public problems and their solutions, by questioning the conventional metaphors and analogies used to justify and explain policies and offering new ones in their place, by providing plausible but novel interpretations of large events, by revealing underlying similarities and patterns in the public's approach to seemingly unconnected situations, and by advancing alternative future scenarios premised on how society might cope with certain problems.

Policy makers and analysts will not spend all their time in such explicative activities; there may be relatively few opportunities for effectively redefining and evaluating social norms. But these responsibilities should be understood as critically important to these jobs. Our concern with public ideas, rather than with pre-existing selfish preferences, is one of degree and emphasis. The prevailing philosophy comprises a useful set of precepts for guiding much policy making, particularly where there is wide and enduring consensus about the nature of the problems to be solved, the range of possible solutions, and

citizens' "attachment" to institutions and "affection" toward one another.¹³ After touring America, Alexis de Tocqueville mused that "the most powerful and perhaps the only means that we still possess of interesting men in the welfare of their country is to make them partakers in the government . . . civic zeal seems to me to be inseparable from the exercise of political rights."¹⁴ And by 1872 Walter Bagehot could conclude that "no State can be first-rate which has not a government by discussion. . . ."¹⁵

A third alternative for dealing with the passions of a more worldly populace was also being advanced at about the same time. Rather than rely on bureaucratic absolutism to subjugate the passions or on deliberative government to civilize them, this alternative relied on calculated self-interest to constrain them. This third view emerged from the musings of eighteenth century political economists of the "Scottish Enlightenment," like Adam Smith, Adam Ferguson, and Sir James Steuart, who regarded the discipline of the marketplace as the key to social stability.¹⁶ Steuart argued that a population governed by rational self-interest would be more stable than one susceptible to appeals to general interest, which were likely to ignite the passions. "[W]ere a people to become quite disinterested: there would be no possibility of governing them. Everyone might consider the interest of his country in a different light, and many might join in the ruin of it, by endeavoring to promote its advantages."¹⁷ The British utilitarians—Jeremy Bentham and his progeny—and the economists and sociologists who followed in their wake, shared many of these assumptions. Although, in their view, "every agent is activitated only by self interest," egoistic behavior was entirely compatible with the general good.¹⁸ Indeed, they argued, each individual's rational pursuit of his own self-interest would yield the highest utility overall. Government was necessary only as a last resort, a night watchman to guard against encroachments on trade and the freedom to pursue self-interest. Its purpose was entirely instrumental—to help maximize individual utility.

The reigning American philosophy of policy making has drawn on these three currents of thought—bureaucratic expertise, democratic deliberation, and utilitarianism—but in unequal parts. Especially in this century, beginning with the Progressives' efforts to insulate policy making from politics and continuing through the modern judiciary's oversight of policy making, there has been a tendency to subordinate democratic deliberation to the other themes. As the "administrative

The rise of this new, rationally authoritarian form of government paralleled a growing concern about the governability of the masses. By the seventeenth century many thinkers had concluded that moral exhortation and the threat of damnation could no longer be trusted to restrain man's destructive passions. Niccolo Machiavelli, for example, warned that men are "ungrateful, voluble, dissemblers, anxious to avoid danger, and covetous of gain."⁹ Thomas Hobbes foresaw the fragility of an order based on human passion and had concluded that the only alternative was a strong central government—a leviathan.

England, however, was evolving another alternative—*deliberative* government. Victory over the Stuarts had forestalled the kind of bureaucratic absolutism taking root across the Channel. In its place, the House of Commons was elaborating what Edmund Burke would call a "deliberative assembly," guided by "the general reason of the whole."¹⁰ It was through deliberation that common interests and attachments could be discovered and developed, and passions thus be restrained. Burke recoiled from the egoistic philosophy animating the French Revolution, whereby

laws are supported only by their own terrors, and by the concern which each individual may find in them from his own private speculations, or can spare to them from his own interests. In the groves of *their* academy, at the end of every vista, you see nothing but the gallows. Nothing is left which engages the affections of the commonwealth. On the principles of this mechanic philosophy our institutions can never be embodied, if I may use the expression, in persons; so as to create in us love, veneration, admiration, or attachment. But that sort of reason which banishes the affections is incapable of filling their place. These public affections, combined with manners, are required sometimes as supplements, sometimes as correctives, always as aids to law.¹¹

The notion that democratic deliberation would inspire ideas about what was good for society, and thus instill common attachments and constrain selfish passions, was widely discussed in England and America during the late eighteenth and nineteenth centuries. John Stuart Mill saw in democracy a means of developing moral and intellectual capacities "by the utmost possible publicity and discussion, whereby not merely a few individuals in succession, but the whole public, are made, to a certain extent, participants in the government."¹² American Federalists and Antifederalists both worried about the instability of a society based on selfish passion and spoke of the need for

for the conclusions reached in the following pages are at best tentative. The book should be regarded as a kind of work in progress, our present contribution to a continuing process of deliberation about the place of public ideas in the formulation of public policy. Nor, for that matter, do we speak in one voice. Our own deliberations in the preparation of this book occasioned sharp disputes, even as they refined our sense of what we were trying to accomplish together. Readers will detect differences in our approaches, divergences in our conclusions.

Ideally, however, you will be drawn along on the same intellectual journey we have traveled, exploring the same questions, becoming captivated by the same puzzles and dilemmas. In Chapter One, Gary Orren confronts the prevailing assumption, basic to the reigning philosophy of policy making, that self-interest explains most of people's behavior when they act as citizens. Next, Steven Kelman presents evidence supporting the contrary proposition that people are motivated to act in ways they think they *should* act and are thus highly responsive to normative conceptions about what is good for society. In Chapter Three, Mark Moore explores why certain of such normative ideas are particularly powerful for organizing how people think about public problems and for mobilizing them to take action.

Our discussion then turns to the implications for a democratic society. Philip Heymann argues in Chapter Four that government inevitably expresses powerful normative ideas about what is expected of citizens and what society is for, that citizens want government to undertake this function, but that this role also presents significant problems and dangers for democracy. In Chapter Five, Michael Sandel examines the explicit devices American society has evolved for constraining and legitimating government activity—a system of individual rights and procedural regularity—and asks whether that system can foster the kinds of common commitments and mutual obligations on which society depends. One means of resolving the dilemma, as I suggest in Chapter Six, is to affirm that, at least on occasion, policy makers' primary responsibility should be to foster public deliberation about where the public interest lies and what our common obligations are, rather than simply to render decisions.

The three remaining chapters examine the possibilities and limits of such deliberation in modern America. In Chapter Seven, Giandomenico Majone argues that policy analysts should think of themselves less as neutral technicians in the policy making process, more as advocates who advance alternative means of defining and solving

state" has grown, its legitimacy has increasingly rested on notions of neutral competence and procedural regularity.¹⁹ The "public interest" has been defined as what individual members of the public want for themselves—as such wants are expressed through opinion surveys, data on the public's willingness to pay for certain goods, and the pleadings of interest groups. The ideal of public policy has thus become almost entirely instrumental—designed to maximize individual satisfactions.

The tradition of democratic deliberation, with its emphasis upon what is good for *society* and its concern for citizenship education and social understanding, has been subordinated in part, I think, because of our culture's understandable fear of demagoguery and intolerance. Particularly since the 1930s, we have had ample evidence of the dangers of totalitarianism—of moral absolutism and social engineering toward some monolithic view of the public interest. It seems far safer to assume that people *are* motivated primarily by selfish desires, that social improvement *does* require tradeoffs and compromises among such goals, and that the purpose of government *is* instrumental—to accomplish such tradeoffs and compromises, particularly when private transactions do not suffice. The great virtue of the American form of government has appeared to lie precisely in its pluralism and ethical relativism, its *lack* of any overarching public ideas about what is good for society.²⁰

But there may be greater dangers in failing to appreciate the power of public ideas and the importance of deliberation about them. In an era like the present one—when overall public purposes are less clear than during wars or depressions; when the ways public problems are defined, choices posed, and responsibilities tacitly allocated can make all the difference; when many issues are so technically complex that values are easily hidden within expert judgments; and when "great communicators" can hold center stage on national media geared to visionary appeals—our strongest bulwark against demagoguery is the habit of critical discussion about and self-conscious awareness of the public ideas that envelop us.

Our Project

Thus our challenge, and yours. These are questions and concerns that we have shared for several years, as teachers, scholars, and practitioners of public policy making. This volume will not end our inquiry,

CHAPTER 1

Beyond Self-Interest

Gary R. Orren

The scene is familiar. Commuters driving to work discover that an accident has occurred ahead. Most decide to slow down a bit in order to inspect the wreckage. Before long, traffic slows to a frustrating crawl. Each driver gets only a ten-second glance at the accident's aftermath, but ends up spending an extra ten minutes caught in traffic. Had the drivers reflected on the cumulative consequences of slowing down or had they made a decision as a group, they probably would have forgone the look and avoided the delay.

In *Micromotives and Macrobehavior*, Thomas Schelling examines just such phenomena, analyzing the process by which the pursuit of individual self-interest is translated into aggregate social patterns, often in striking and unexpected ways.¹ This chapter takes more or less the reverse position, arguing that collectively held values—macromotives, if you will—are powerful determinants of individual action, or microbehavior.

People do not act simply on the basis of their perceived self-interest, without regard to the aggregate consequences of their actions. They are also motivated by values, purposes, ideas, goals, and commitments that transcend self-interest or group interest. The Senate's rejection of the proposed Family Assistance Plan provides an illustration. By any accounting of individual or regional economic self-interest, Southerners would have been the major beneficiaries of the legislation, which would have provided a guaranteed income to poor families. Yet Southerners, both blacks and whites, were the group most strongly opposed to the program. The explanation for this seeming paradox lies in the widely shared attitudes of the region: whites opposed income redistribution and feared racial equality; blacks distrusted any proposal sponsored by the Nixon White House.² At times, in effect, people act as they feel they *should* act.

problems. Ronald Heifetz and Riley Sinder suggest in Chapter Eight that political leaders can help citizens learn to take responsibility for defining and solving problems, by carefully pacing and structuring deliberative processes. Finally, in Chapter Nine, Martin Linsky explores the role of the media in public deliberation and concludes that they too can and should play a crucial role.

Several words of acknowledgement are in order. All of us profited greatly from the continued interest, encouragement, and critical judgment of our colleagues and students. In particular, John Montgomery, Raymond Vernon, Andrew Nevin, and John Donahue debated our theses and offered useful suggestions. Hale Champion, Bill Hogan, Herman Leonard, Richard Neustadt, Michael O'Hare, Dennis Thompson, and Richard Zeckhauser commented on several of these chapters. And Glen Tobin provided exceptional research support.



Notes

Introduction

1. This stylized version does not, of course, do justice to the subtleties of diagnosis and artfulness of analysis that characterize and differentiate these arguments as they appear in the writings of such political economists and political scientists as Gordon Tullock, James Buchanan, Mancur Olson, George Stigler, William Niskanen, Anthony Downs, Morris Fiorina, Milton Friedman, and our colleague Richard Zeckhauser. But for the purposes of this discussion, my sketch should be adequate.
2. Most obviously, this view offers no way of deciding on the proper distribution of wealth in a society (although it suggests that the best way of redistributing wealth is to take advantage of market forces and give poor people cash, to use as they please, rather than things). And it provides no guide to comparing, or trading off, one person's preferences against another's.
3. For a critique of conventional economics' failure to differentiate between an individual's strict self-interest and what he wants for his society, see Amartya Sen, "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory," *Philosophy and Public Affairs* 6 (Summer 1977): 5. For a philosopher's attempt to find the difference, see Brian Barry, "The Public Interest," in Anthony Quinton, ed., *Political Philosophy* (Oxford: Oxford University Press 1967), pp. 112-27.
4. In my recent *Tales of a New America* (New York: Times Books, 1987), I discuss why the core questions that have shaped American debate in recent years offer only partial, and in some ways dangerously incomplete, guides to the real choices the nation confronts in an altered world, and why, therefore, the public is ready for leaders who will give new and pertinent voice to the challenges before us.
5. One commentator has even argued that such interactive technologies should replace representative assemblies. See James C. Miller III, "A Program for Direct and Proxy Voting in the Legislative Process," *Public Choice* 7 (Fall 1969): 107.
6. For two insightful discussions of this richer notion of democracy, see

Chapter One: Beyond Self-Interest

I am grateful to Philip Guentert for his able research assistance and to Robert Klitgaard and Richard Zeckhauser for their insightful comments on an earlier draft.

1. Thomas C. Schelling, *Micromotives and Macrobehavior* (New York: W.W. Norton, 1978).
2. See Daniel P. Moynihan, *The Politics of a Guaranteed Income: The Nixon Administration and the Family Assistance Plan* (New York: Random House, 1973), pp. 375–97; Otto A. Davis and John E. Jackson, "Representative Assemblies and Demands for Redistribution: The Case of Senate Voting on the Family Assistance Plan," in Harold M. Hochman and George E. Peterson, eds., *Redistribution through Public Choice* (New York: Columbia University Press, 1974), pp. 261–88.
3. F.Y. Edgeworth, *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences* (London: C. Kegan Paul and Co., 1881), p. 16.
4. For an introductory and widely read exposition of the microeconomic model, see Paul A. Samuelson and William Nordhaus, *Economics*, 12th ed. (New York: McGraw Hill, 1985).
5. The literature criticizing neoclassical economics is voluminous. One recent book, written for a nontechnical audience, is Lester Thurow's *Dangerous Currents: The State of Economics* (New York: Random House, 1983). Despite recent efforts to introduce more accurate conceptions of human nature into the microeconomic model (some of which are noted below), economic reasoning for the most part remains anchored in the original assumptions of neoclassical theory. Since the simplest version of the microeconomic model is widely acknowledged as the accepted version, it is scrutinized here.
6. The postulate of given and fixed preferences has stood for centuries as a pivotal contention of economics; for just as long, economists have disclaimed any interest in where preferences come from. According to Albert O. Hirschman, "Any number of quotations from economists and economics textbooks could be supplied to the effect that economics had no business delving into the reasons why preferences are what they are, and it is implicit in such denials that it is even less appropriate for economists to inquire how and why preferences might change." *Shifting Involvements* (Princeton: Princeton University Press, 1982), p. 9.

Economists have begun to incorporate changes of tastes into their market models. See, for example, Carl Christian von Weizsacher, "Notes on Endogenous Changes of Tastes," *Journal of Economic Theory* 3 (December 1971): 345–72; Robert A. Pollak, "Endogenous Tastes in Demand and Welfare Analysis," *American Economic Review* 68 (May 1978): 374–91; Tibor Scitovsky, *The Joyless Economy* (New York: Oxford University Press, 1976).

- Arthur Maass, *Congress and the Common Good* (New York: Basic Books, 1983), and Benjamin Barber, *Strong Democracy* (Berkeley: University of California Press, 1984). The philosopher J.A. Passmore has suggested that in examining social institutions we should not ask "what end or purpose does it serve?" but rather "of what conflicts is it the scene?" It is often only through conflict that societies learn what their ends and purposes are. See Passmore's introduction to John Anderson, *Studies in Empirical Philosophy* (Sydney: Angus and Robertson, 1962), p. xxii.
7. For a more detailed discussion, see Samuel H. Beer, "The Strengths of Liberal Democracy," in William S. Livingston, ed., *A Prospect of Liberal Democracy* (Austin: University of Texas Press, 1979), pp. 215-29.
 8. Max Weber, *The Theory of Social and Economic Organization*, trans. A.M. Henderson and Talcott Parsons (New York: Oxford University Press, 1947), p. 337.
 9. Niccolo Machiavelli, *The Prince*, (Modern Library ed., New York: Random House, 1950), p. 61.
 10. Edmund Burke, "Address to the Electors of Bristol," November 3, 1774, in *Collected Works* (Boston: Little, Brown, 1865-1867), vol. 2, pp. 89-98.
 11. Edmund Burke, *Reflections on the Revolution in France*, ed. Connor Cruise O'Brien (1790; reprint, New York: Penguin, 1968).
 12. John Stuart Mill, "Representative Government," in *Utilitarianism, On Liberty, and Representative Government* (London: Everyman's Library, 1910), p. 243.
 13. See Gordon S. Wood, *The Creation of the American Republic, 1776-1787* (New York: Norton, 1972), pp. 65-70; Herbert Storing, *What the Federalists Were For* (Chicago: University of Chicago Press, 1981).
 14. Alexis de Tocqueville, *Democracy in America* (reprint, New York: Vintage, 1945), vol. 1, p. 252.
 15. Walter Bagehot, in his introduction to the second edition of *The English Constitution* (1872; reprint, London: Oxford University Press, 1928), p. 311.
 16. For an insightful analysis of these ideas, see Albert O. Hirschman, *The Passions and the Interests* (Princeton: Princeton University Press, 1977), pp. 66-113.
 17. Sir James Steuart, *Inquiry into the Principles of Political Economy*, ed. A.S. Skinner (1767; reprint, Chicago: University of Chicago Press, 1966), vol. 1, pp. 143-44.
 18. F.Y. Edgeworth, *Mathematical Physics: An Essay on the Application of Mathematics to Moral Sciences* (London: Keyworth, 1881), p. 16.
 19. For an illuminating discussion of the differences between democracy and "guardianship" see Robert Dahl, *Controlling Nuclear Weapons: Democracy versus Guardianship* (Syracuse, NY: Syracuse University Press, 1985).
 20. On the relationship between America's wartime experience of totalitarianism and subsequent shifts in public philosophy, see Edward Purcell, Jr., *The Crisis in Democratic Theory: Scientific Naturalism and the Problem of Value* (Lexington: University of Kentucky Press, 1973).

Chapter 9



Edited by
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'UNY Series, Educational Leadership
Daniel L. Duke, Editor

Our long-term purpose in pursuing this approach to policy analysis is to be able to answer the question: Under what conditions are different instruments most likely to produce their intended effects? In order to do that, we need to move the notion of alternative policy instruments beyond just a simple taxonomy. We need to specify why policymakers choose different instruments, how these instruments actually operate in the policy arena, how they differ from one another in their expected effects, the costs and benefits they impose, their basic operating assumptions, and the likely consequences of their use.

This article represents the initial step in that process. The first section provides a rationale for our focus on policy instruments. The next one defines the four classes of policy instruments, while the third describes how each characteristically works and with what consequences. The fourth section identifies the factors that shape the choice of one instrument over another. The concluding section outlines a research agenda for developing an analytical framework based on the concept of alternative policy instruments and as a way of assessing educational reform policies.

Why Focus on Policy Instruments?

Our focus on policy instruments stems from two interests, one conceptual and the other practical. As indicated above, the conceptual reason is a desire to help forge a next generation of implementation research. In our judgement, the most promising approach is to work toward a more parsimonious model of the determinants of implementation outcomes and ultimate policy effects, while retaining those variables that have produced the greatest explanatory pay-off—namely, ones embedded in the local political and organizational context. Policy implementation research now faces a dilemma. The most insightful studies have tended to focus on one aspect of the process such as organizational context or practitioner response to new programs. This research has produced a greater sensitivity to the sources of variation in implementation outcomes, but has not produced a complete explanation (and may even have led some analysts and policymakers to assume that implementation outcomes are largely idiosyncratic). On the other hand, empirical studies and analytical work that have attempted to be more comprehensive have usually resulted in long lists of conditions for effective implementation, lacking a clear specification of how independent variables interact with one another to affect implementation results (e.g., Mazmanian and Sabatier 1983).

(Ingram, in press), its neglect of longer term policy effects, and its primary focus on discrete federal programs.

Our interest in assessing the effects of recent education reforms across multiple states and local districts required us to address these "next generation" research issues. The education reform movement presents a unique opportunity to analyze a large number of different policies, focused on similar substantive areas and enacted within a few years of each other. However, past research provides only limited guidance because it has tended to study relatively narrow categorical programs, rather than ones targeted at all students and aimed at the core of schooling. In addition, little effort has been made to specify in any systematic way the relationship among the policy problems being addressed, the basic design features of a policy, the implementing organization and the political and organizational context in which policy targets must respond.

To address these shortcomings, we selected a framework that centers on the notion of alternative policy instruments, or the mechanisms that translate substantive policy goals (e.g., improved student achievement, higher quality entering teachers) into concrete actions. This focus builds on a promising, new direction in policy implementation research that concentrates on such mechanisms, conceptualizing them as the "technological core" of policy and categorizing them into several groups of "implements" (Elmore 1985; Bardach 1980). The categories typically analyzed include regulations, rights, grants, loans, and technical assistance. Although we expand on the notion by identifying a broader range of instruments, our basic formulation of two instruments, mandates and inducements, is also similar to ones in the economics literature (e.g., Stigler 1971; McKean 1980; Gramlich 1977; Barro 1978).

We define four generic classes of instruments:

- ¶ mandates are rules governing the action of individuals and agencies, and are intended to produce compliance;
- ¶ inducements transfer money to individuals or agencies in return for certain actions;
- ¶ capacity-building is the transfer of money for the purpose of investment in material, intellectual, or human resources; and
- ¶ system-changing transfers official authority among individuals and agencies in order to alter the system by which public goods and services are delivered.

(Each of these instruments is discussed in a subsequent section.)

likely effects. Consequently, one purpose of this research is to help expand the policy community's range of choice in the instruments it uses to solve different policy problems.

The task of conceptualizing a range of policy instruments and hypothesizing why policymakers select different instruments can be approached in two ways. Traditional social scientists would focus on the formal properties of different policy instruments. They would attempt to identify the assumptions underlying each and would assess their relative costs and benefits, often through the use of fairly abstract, mathematical models (e.g., Shepsle and Wiengast 1984). Such an approach is systematic, but often provides little practical information for the policy community. On the other hand, a politician might formulate his choice of policy largely in terms of which key constituents would lose or gain with different alternatives, how much each alternative is likely to cost, and who would bear that cost. This approach is more representative of what actually happens in the "real world," but it is also more ad hoc and idiosyncratic to individual politicians. Consequently, it contributes little to the building of generalizable models of policy implementation.

However, as Behn (1981) suggests, these two approaches are not dichotomous, but rather represent two ends of the same continuum. At one end lies a set of theoretical constructs; at the other, more instrumental concepts. But they are linked. The politician does consider what kinds of assumptions or conditions are necessary for different policies to operate effectively, and the analyst typically incorporates some elements of institutional context into his models. Because our analysis of alternative policy instruments is designed both to advance theory and produce useful information for policymakers, we have attempted to draw on the strengths of both approaches, and to negotiate the boundary between what formal constructs tell us can be done and what policymakers actually do. Consequently, we lay out the formal properties of four types of policy instruments, and we examine how they typically operate and what political and organizational factors shape policymakers' choices among them.

Range of Policy Instruments

When legislators or executives make policy, they seldom see themselves deliberately choosing among different ways of accomplishing some purpose. More often than not, they advocate particular solutions or adjudicate conflicts among political interests who advocate

Our solution to this tension is to move back from specific programs and focus on their underlying mechanisms as a way of generating hypotheses about the links among policy, implementation patterns, and ultimate effects. A conceptual framework focused on policy instruments not only holds the potential for moving beyond static descriptions of the implementation process, but it also embeds key variables such as local response patterns in a larger, theoretically richer context.

Although little conceptual or empirical work has yet been done using this approach, other policy analysts are also beginning to view it as a useful one. For example, one author has suggested that a fruitful way to maneuver the field of implementation research out of its current "rut" is not to continue to focus on individual programs or groups of programs, but instead "on the generic tools of government action, on the 'techniques' of social intervention that come to be used, in varying combinations, in particular public programs" (Salamon 1981, p. 256). Our research is an attempt to do that by analyzing what is meant by the successful application of a given instrument, and by identifying the conditions necessary for different policy instruments to work as intended.

The second, more practical, reason arises from a concern that past research has done little to expand knowledge about the choice of instruments available to motivate policy action. Policymakers often lack information about the full range of instruments available to them. Many times the imposition of new mandates seems the most feasible option because it appears relatively inexpensive and presumably sends a clear signal about what policymakers expect from those being regulated. Inducements like grants-in-aid are most often used when policy must move through the intergovernmental system or when consensus about the change that needs to occur is low (Ingram 1977). Although they may sometimes use these two instruments together or in combination with other approaches, policymakers rarely have sufficient information about how much strategies can most effectively be integrated with one another or what other instruments are available.

Officials also lack systematic knowledge about the relative effectiveness of alternative instruments in addressing different types of problems, their underlying dynamics, comparative costs, attendant problems, and how well they fit into the existing policy environment. This deficiency is a particular problem in policy areas like education because of the wide range of problems that must be addressed and the numerous local settings in which policy must operate. As a result, the link between policy and action is not as strong as it might be and policymakers may turn to mandates by default, because they lack information about the full range of policy instruments, their feasibility, and

Table 1 Policy Instruments Defined

	<i>Primary Elements</i>	<i>Expected Effects</i>	<i>Costs</i>	<i>Benefits</i>	<i>Examples</i>
Mandates	Rules	Compliance	<i>Initiators</i> Enforcement <i>Targets</i> Compliance Avoidance	Specific benefits to individuals Diffuse benefits to society	Environmental regulation Non-discrimination requirements Speed limits
Inducements	Money (procurement)	Production of value; short-term returns	<i>Initiators</i> Production Oversight Displacement <i>Producers</i> Overhead Matching Avoidance	<i>Initiators/Producers</i> Increased budget authority <i>Clients</i> Value received	Grants-in-aid to government In-Kind grants to individuals
Capacity-building	Money (investment)	Enhancement of skill, competence, long-term returns	Short-term costs to initiating government	Short-term, specific benefits to receiving agency Long-term, diffuse benefits to society	Basic research Preservation
System-changing	Authority	Composition of public delivery system; incentives	Loss of authority by established deliverers	Gain in authority by new deliverers	Vouchers Deinstitutionalization New providers (HMOs, Community Mental

positions. Problems make their way onto the policy agenda by political advocacy. Responses to those problems are dictated by the stock of available solutions, by the advocacy of certain solutions, and by the resources (money, knowledge, political support, and organizational capacity) available to frame solutions (Kingdon 1984).

As policy analysts, we take a different, but complementary, perspective from the one taken by actors in the fray. We are concerned about the *range* of options available for addressing a particular problem, about the underlying theoretical premises of those options, about the "fit" between problems, objectives, and options, and about special implementation problems associated with certain classes of options. These concerns can be captured, we think, by a relatively parsimonious set of categories, which we have labelled mandates, inducements, capacity-building, and system-changing. Table 1 presents these categories and their constituent elements.

These categories of policy instruments are constructed from two main sources: (a) existing theories about the effects of governmental action; and (b) observed patterns in the choices of policymakers. Our discussion of mandates, for example, draws on theories of regulation, which address the conditions under which the targets of regulation can be expected to comply given various levels of enforcement, sanctions, and costs and benefits of compliance. (See, e.g., Bardach and Kagan 1982; Mitnick 1980; Stigler 1971). Our discussion of inducements draws on theories of public finance that deal with intergovernmental transfers. These theories address the conditions under which government agencies can be induced to perform certain actions by conditional grants of funds from other governmental agencies. (See, e.g., Gramlich 1977; Ingram 1977.) These are areas in which the basic theoretical issues are relatively well-specified; hence the problem is one of mobilizing existing theory around a somewhat different set of questions.

In the other two areas, capacity-building and system-changing, it seems to us that a strong *prima facie* case can be made for distinguishable categories of policy instruments, based on observed patterns of policymaking, even though their theoretical basis is less well-developed. As we shall see, capacity-building, like inducement, involves the conditional transfer of funds from one governmental agency to another, but introduces the additional element of investment in uncertain future benefits. In this sense, capacity-building draws on theories of regulation and intergovernmental transfers, but raises the question of how those mechanisms work in situations where the expected outcomes are distant and ambiguous. System-changing entails transfers of authority, rather than money, with the aim of altering the institutional structures

individuals or groups, as, for example, when handicapped or disadvantaged students benefit from federal or state-mandated programs in local school. Often mandates are intended to benefit a broader community or society as a whole, as, for example, when polluters are required to install abatement equipment to reduce bad air or water.²

Inducements are transfers of money to individuals or agencies in return for the production of goods or services. Inducements are a form of procurement, in the sense that an agency is empowered to transfer money or authority to an individual or another agency in return for something of value (Bardach 1980). The expected effect of inducements is the production of value. The thing of value may be a program addressed to a particular clientele (compensatory education for disadvantaged students, work incentives for welfare mothers) or it might be a tangible project (and interstate highway).

Because inducements are conditional grants for money, they are frequently accompanied by rules (often called regulations) designed to assure that money is used consistently with policymakers' intent. These rules create oversight costs to the implementing agency. They entail costs to implementing agencies, in the form of unreimbursed administrative expenses, matching requirements, and avoidance costs designed to mitigate the effect of undesirable conditions on the transfer of money or authority. The benefits of inducements accrue both to implementing agencies, in the form of increased budget and authority, and to individual beneficiaries, through the value that is produced by the implementing agency. Often however, the interests of implementing agencies and those of the intended beneficiaries are not completely consistent, so that a certain amount of money transferred through inducements is lost to the production of valued benefits and siphoned off into activities that have value mainly to the implementing agency (see Gramlich 1977).

The main differences between mandates and inducements, however, are threefold: First, mandates use coercion to affect performance, while inducements transfer money as a condition of performance. Second, mandates exact compliance as an outcome, while inducements are designed to elicit the production of value as an outcome. Third, as we shall see in more detail later, mandates assume that the required action is something all individuals and agencies should be expected to do, regardless of their differing capacities, while inducements assume that individuals and agencies vary in their ability to produce things of value and that the transfer of money is one way to elicit performance.

Capacity-building is the transfer of money to individuals or agencies for the purpose of investment in future benefits—material, intellec-

by which policies are implemented.¹ To some degree, system-changing instruments owe their theoretical underpinnings to the critique of public bureaucracy growing out of political economy (Moe 1984; Niskanen 1971; Tullock 1965). But that literature has spoken only indirectly to the problems of policy analysis.

Capacity-building and system-changing, it seemed to us, were sufficiently different from mandates and inducements, in their composition, expected effects, and implementation problems, to require separate treatment. The notion of investment in future benefits underlying capacity-building captures a common problem reported in earlier implementation research—that mandates and inducements often fail for lack of knowledge, skill, and competence rather than the will to comply. Capacity-building also captures those policies that focus mainly on longer term developmental objectives rather than short-term compliance or production. The notion of transfers of authority underlying system-changing captures a common problem confronted by policymakers—how to match purposes with existing or potential institutions. Selecting or creating an implementing agency is often as important a choice for policymakers as transferring money or specifying rules. Yet the choice of agency is often not treated by policymakers as a distinguishable problem.

Our theoretical aims in constructing these categories are both positive and normative. We expect that by specifying policy instruments in this way, we lay bare certain recurring problems that policymakers face and give them a predictive structure. In this sense, our aims are positive. We also expect that specifying policy instruments contributes to policymakers' understanding of the instrumental relationship between objectives and policy choices. In this sense, our aims are normative.

Mandates are rules governing the actions of individuals and agencies. The expected effect of mandates is compliance, or behavior consistent with what the rules prescribe. In their pure form, mandates entail no transfer of money as an inducement to comply. They require enforcement, and enforcement is costly to the enforcing agency. They also entail the imposition of costs on the objects of enforcement—individuals and implementing agencies. These costs typically take two forms: Compliance costs are the costs borne by individuals and agencies as a consequence of behaving consistently with mandates; avoidance costs are costs borne as a result of circumventing mandates, bargaining with enforcement agencies about the terms of compliance, or using political influence and litigation to change mandates (McKean 1980). The benefits of mandates sometimes accrue primarily to specific

receive general public aid, for example, or nationalizing the provisions of health care. The key shift in these new arrangements is in the *authority* to provide a publicly-supported or subsidized product or service. In the case of schools, the shift was from a public quasi-monopoly to a public-private competitive market (system-broadening). In the case of health care, the shift was from a predominantly private market in which in-kind transfers to individuals serve public purposes to a public monopoly (system-narrowing).

System-changing policies may be based on the expectation that transferring authority will increase efficiency, as with the preferential treatment of Health Maintenance Organizations (HMOs) in federal health care policy. Or they may be based on the expectation that transferring authority will alter the distribution of political power, as when the federal government created local community action agencies in cities, during the 1960s War on Poverty, to strengthen the political influence of poor and minority citizens against local governments.

One effect of system-changing policies may be to alter the distribution of public funds to providers or consumers of public goods and services, and in this sense they may resemble inducements. But the fundamental property of system-changing policies is the distribution of authority, not money. Changes in the distribution of money, in other words, follow changes in the distribution of authority in system-changing policies.

System-changing policies may result in the creation of whole new classes of agencies, as with HMOs and federal health care policy, or community mental health centers and federal mental health policy. Alternatively, they may result in the dissolution of significant parts of public delivery systems, as with the closing of state juvenile detention facilities with deinstitutionalization. These changes may dramatically alter the distribution of money among agencies and individuals, without necessarily altering the total amount spent in a given sector or the mandates and inducements under which agencies and individuals operate. On the other hand, system-changing may be accompanied by changes in mandates and inducements that are designed to enhance their effects.

In summary, policymakers face a discrete number of potentially powerful choices when they respond to a policy problem. They can set rules, they can conditionally transfer money, they can invest in future capacity, and they can grant or withdraw authority to individuals and agencies. Each of these options is expected to carry a particular effect—compliance, production, capacity, or authority. And each carries a package of benefits and costs to different actors.

tual, or human resources. As with all investments in material or human capital, capacity-building carries with it the expectation of future returns. But these returns are often uncertain, intangible, immeasurable, and distant. Sometimes capacity-building involves intermediate products or services, such as the federal government's investment in science and mathematics curriculum development, which produced both materials and future capacity to teach, or federal investment in high energy particle accelerators, which produced both pork barrel benefits for local constituencies and future capacity to carry out basic research. In other instances, capacity-building involves only distant returns, such as those entailed in the preservation of wilderness, or unrestricted income support for children (as in children's allowances in Canada and European countries).

The costs of capacity-building accrue to the government making the investment and to society in general. The benefits of capacity-building accrue in the short term to the specific individuals and the institutions that are their recipients, but the ultimate beneficiaries are future members of society, whose interests cannot be clearly determined in the present. Hence, policymakers use immediate measures as proxies for their longer-term effects. Is the particle accelerator actually built and is it used for basic research? Are adequate numbers of science and mathematics teachers entering the teaching force and are they staying long enough to provide instruction to students? Society's willingness to invest in intangible, immeasurable, and distant benefits may affect its future ability to respond to mandates and inducements. It is difficult, for example, to envision a policy of inducements designed to improve the quality of science instruction working in the absence of a generally literate and well-educated teacher force. In this sense, capacity-building may be instrumental to mandates and inducements.

The main difference between capacity-building, on the one hand, and mandates and inducements, on the other, lies in the proximity and tangibility of their effects. Capacity-building has distant and ambiguous effects, mandates and inducements have proximate, and tangible effects.

System-changing is the transfer of official authority among individuals and agencies. The expected effect of system-broadening or -narrowing is a change in the institutional structure by which public goods and services are delivered and often a change in the incentives which determine the nature and effects of those goods and services. System-broadening, as a policy instrument, is best understood by imagining a constant budget for a given public service—education or health care, for example—and then imagining some dramatic change in policy toward the provision of that service—allowing private schools to

Table 2 Policy Instruments—Assumptions and Consequences

	<i>Assumptions</i>	<i>Consequences</i>
Mandates	<p>Actions required regardless of capacity; good in its own right</p> <p>Action would not occur with desired frequency or consistency without rule</p>	<p>Coercion required</p> <p>Create uniformity, reduce variation</p> <p>Policy contains information necessary for compliance</p> <p>Adversarial relations between initiators, targets</p> <p>Minimum standards</p>
Inducements	<p>Valued good would not be produced with desired frequency or consistency in absence of additional money</p> <p>Individuals, agencies vary in capacity to produce; money elicits performance</p>	<p>Capacity exists; money needed to mobilize it</p> <p>As tolerable range of variation narrows, oversight costs increase</p> <p>Most likely to work when capacity exists</p>
Capacity-building	<p>Knowledge, skill competence required to produce future value; or</p> <p>Capacity good in its own right or instrumental to other purposes</p>	<p>Capacity does not exist; investment needed to mobilize it</p> <p>Tangible present benefits serve as proxies for future, intangible benefits</p>
System-changing	<p>Existing institutions, existing incentives cannot produce desired results</p> <p>Changing distribution of authority changes what is produced</p>	<p>Institutional factors incite action; provokes defensive response</p> <p>New institutions raise new problems of mandates, inducements, capacities</p>

districts. The standard would also create enforcement problems for the state education agency. On the other hand, setting the standard at, or slightly above, the median score allows the state to assert standards, while at the same time minimizing its own enforcement problems and the costs it imposes on local districts. This standard, however, contains

How Instruments Work

Different policy instruments carry different assumptions about problems and solutions. Once specified, these assumptions tell us a good deal about the fit between problem and policy and about the basic conditions for successful implementation (Table 2).

Mandates assume (a) that the required action is something all individuals and agencies should be expected to do, regardless of their differing capacities, and (b) that the required actions would not occur, or would not occur with the frequency or consistency specified by the policy, in the absence of explicit prescription. Rules, in other words, are introduced to create uniformity of behavior or, at least, to reduce variations in behavior to some tolerable level.

Problems that prompt mandates are typically ones in which coercion is required to change behavior, and in which the expectation is that the behavior prescribed by policy is correct in its own right. Occupational health and safety regulations, speed limits, nondiscrimination requirements, compulsory school attendance laws, student graduation standards, and entry standards for teachers are all examples where governments have decided to use coercion as the chief means of creating uniformity or reducing variation in behavior.

Because mandates assume an essentially coercive or adversarial relationship between enforcers and the objects of enforcements, they place the major responsibility for assuring compliance on the initiating government. The level of enforcement which the initiating government is willing to pay for is a key determinant of the level of compliance it can expect. Since the investment of additional resources in enforcement typically entails diminishing marginal returns in compliance, implementation of mandates usually consists of trying to achieve the highest level of compliance possible within the resource constraints imposed on the implementing agency. Mandates seldom, if ever, result in uniform compliance, since the last unit of compliance usually involves prohibitively high enforcement costs (Stigler 1971; Viscusi and Zeckhauser 1979). Hence, it is usually in the interests of some individuals or agencies to resist compliance, or to spend money on avoiding compliance, if by doing so they can reap positive benefits.

Mandates typically set minimum standards for compliance, and in doing so introduce disincentives to exceed those standards. If, for example, the median reading achievement level for high school seniors in a given state is at the eighth grade level, a 12th-grade reading achievement graduation standard would create compliance problems for many high school seniors, as well as a significant number of school

the problems associated with the implementation of inducements begin to look more and more like those associated with mandates. The key difference, as noted above, though, is that mandates expect compliance without compensation, while inducements use conditional compensation as a lever to elicit the required behavior.

In addition to differences in capacity, individuals and agencies vary in their preferences and priorities. District A may see bilingual education as a major priority, it may have a vocal political constituency that favors bilingual education, and it may invest a large share of its own resources in bilingual education in addition to any inducements it receives from the state or federal government. District B, on the other hand, may regard bilingual education as a distraction from its locally-initiated academic excellence program, bilingual education may have no constituency, and it may use state or federal inducements to fund the bare minimum of required activities. Both districts have bilingual programs, yet the effect of the inducement varies considerably.

Inducements are most likely to be effective when the capacities exist to produce the things that policymakers value and when preferences and priorities support the production of those things. Large variations in capacity or preferences and priorities will produce similar variations in the results produced by inducements. The degree to which inducements come to resemble mandates in their enforcement problems depends on the degree of variability in capacities, preferences, and priorities policymakers are willing to tolerate.

Capacity-building assumes (a) that, in the absence of immediate investment, future material, intellectual, or human benefits will not be realized by society; and (b) that these longer term benefits are either worth having in their own right, or are instrumental to other purposes that policymakers regard as important.

The kind of problems that prompt capacity-building responses are fundamental failures of performance by some set of individuals or institutions. Issues of capacity enter the political agenda when, for example, policymakers realize that the country will lose its competitive edge in high-energy physics if the federal government does not invest large sums of money on a new particle accelerator, or that more than one million of the nation's 2.4 million teachers will leave their jobs in the next six to eight years.

The intangible and uncertain results of capacity-building create major problems for policymakers. Investments in basic knowledge—social science research, language instruction, particle physics—are difficult to justify in themselves, because they are made at the expense of other uses of public funds that have more immediate, tangible pay-offs.

little incentive for improved performance on the part of low-achieving students and districts.

Standards, even when they are clear, are limited in the degree to which they can significantly change behavior. Reducing the speed limit on interstate highways from 70 miles per hour to 55 miles per hour significantly reduced the median speed of automobiles, highway fatalities, and fuel consumption. It also created large problems of enforcement and noncompliance. The important feature of the speed limit law was that the law itself contained all the information necessary for individuals to comply. By contrast, high school graduation standards based on academic achievement do not contain the information necessary for compliance. In order to comply, individuals must not only read and understand the standards, they must engage in other activities—teaching and learning—that require skill, motivation, and resources. So graduation standards might fail either because individuals and school systems deliberately fail to comply, or more likely, because of some failure of capacity on the part of individuals or schools.

Inducements assume (a) that, in the absence of additional money, one would not expect certain valued things to be produced, or to be produced with the frequency or consistency prescribed by policy; and (b) that individuals and agencies vary in their ability to produce things of value and the transfer of money is one way to elicit performance.

Problems that prompt inducements are ones in which the absence of money directed at the appropriate purposes is the key determinant of the problem. Inducements assume that the capacity exists to produce whatever is required or can be readily acquired if the right monetary incentives are provided. Inducement problems are, at some fundamental level, production or procurement problems; the object is to get individuals and agencies to produce something of value with the money that is transferred.

Individuals and agencies vary, of course, in their capacity to produce things of value. Individuals vary in their food consumption practices, even though we prescribe limited uses for food stamps. School districts vary in their ability to teach English to non-English speaking students, even though we transfer money in a more or less equitable way to enhance bilingual instruction.

A central issue in the implementation of inducements, then, is how much variation policymakers are willing to tolerate in the production of things of value, and how narrowly they are willing to prescribe how money is to be used and what is produced. As the range of tolerable variation narrows, and the restrictions or inducements increase,

expanded eligibility for subsidized health care to a new set of institutions, health care maintenance organizations (HMOs) and introduced strong financial incentives to form such organizations. The perennial issue of education vouchers is an example of an unsuccessful attempt to capitalize on discontent with existing public schools to broaden the array of publicly-subsidized providers of education and to alter the relationship between those institutions and their clients.

Granting authority to new institutions or redistributing authority among existing institutions sets the initial conditions for a response to the failure of existing institutions, but it also introduces a new set of problems for policymakers. Existing institutions can blunt or co-opt system-broadening policies, as when school practitioners worked to reduce the level of parent influence in the educational voucher experiment in Alum Rock, California. System-broadening policies can fail for lack of capacity in the institutions to which authority is transferred, as in the case of deinstitutionalization of the mentally ill, where community residential treatment did not develop fast enough to respond to the outflow of patients from state mental hospitals. Introducing public service providers raises the issues of how closely they should be controlled, whether they should be allowed to choose their own clients, and what performance expectations they should meet. System-changing policies, then, have a tendency to devolve or degrade into incremental modifications of existing institutions and into more traditional mandates and inducements.

Choosing a Policy Instrument

The four generic classes of policy instruments we have defined could all be used to address the same policy goal. Yet policymakers typically choose to rely on one of these instruments, or to supplement their primary reliance on one with some combination of instruments. What leads policymakers to select one instrument over another?

We have identified two factors that we hypothesize shape this choice: how a policy problem is defined, and the resources and constraints policymakers face.³ Problem definition for policymakers occurs within an essentially political context in which decisions are tempered by a variety of feasibility considerations (May 1986). We assume that these factors constitute the resources and constraints that enter into policymakers' calculations throughout the process of matching policy problems and instruments. However, for the sake of conceptual clarity, we consider each of these factors separately, beginning with problem definition.

Because of the intangibility and uncertainty of the results of capacity-building measures, there is a tendency in policy discussions either to emphasize their present utility or to discount future benefits because of their intangibility. Investments in particle physics research are "really" useful in this view because of their short-term utility for military weapons development, or they are not useful at all because of their dubious value in producing immediate returns. Investments in curriculum development are "really" useful because they produce tangible materials, or they are not useful at all because they fail to produce immediate effects on school curriculum. Capacity-building is seldom, if ever, successful as an inducement because there are basic contradictions between mobilizing material, intellectual, and human resources for future purposes and the immediate production of value.

The tendency to mistake capacity-building for inducement often leads policymakers to confuse the immediate production of results and the creation of capacity for future production. A federal program to produce greater competence in mathematics and science, as a response to competition from abroad, can only produce limited results in the short-term because it is calling on the limited capacity of existing elementary and the secondary schools to teach mathematics and science. By the time investments in capacity reach maturity, in the form of more highly qualified, better trained teachers, policymakers may or may not still be worried about the nation's competitive edge. The only way to assure a short-term response, in other words, is to call upon existing capacity.

System-changing instruments assume (a) that existing institutions, working under existing incentives, cannot produce results that policymakers want; and (b) that altering the distribution of authority among institutions, by broadening or narrowing the type of institutions that participate in the production of things of public value, will significantly change the nature of what is produced or the efficiency with which it is produced.

The kind of problems that prompt system-changing responses are either unresponsiveness of existing institutions to respond to important changes in their environment. When state hospitals and private psychiatric clinics seemed unable to respond to growing need for mental health treatment, federal and state policy shifted to funding community-based treatment. When juvenile detention institutions failed to respond to growing demands for less punitive, more rehabilitative care of juvenile offenders, federal and state policymakers moved to reduce or eliminate the authority of detention facilities and transfer that authority to less punitive organizations. When federal policymakers saw increasing problems with health care costs containment, they

they hope to effect and the instruments they choose. For example, given the way different instruments operate, we would expect that if policymakers perceive a policy problem as the need to move behavior *beyond* an expected minimum, they will be more likely to choose inducements. On the other hand, if they view the purpose as moving behavior to a specified minimum, they will be more likely to select a mandate approach.

Intentional preferences manifest themselves not just in judgments about the way a particular policy system ought to look, but also in how that desired state might be best achieved. Included in this category are those values typically associated with policymaker ideology or political philosophy—for example, whether market mechanisms are preferable to nonmarket ones, or what governmental levels should perform different functions. Regardless of what indicator data may suggest about a particular policy problem, policymakers prefer policy instruments consistent with their own values. So, for example, we would argue that those believing in a strong governmental role are likely to look to mandates; those who believe in the preeminence of market mechanisms are likely to prefer inducements or system changing instruments.⁴

The notion of policy problem definition, then, includes both analytical and normative components. Through the use of such mechanisms as indicator systems, policymakers process information about the scope and nature of a problem. Such analytical sources can also help them in identifying the probable causes of various problems by providing data about relationships among key factors in a given policy system. However, policymakers also interpret this information using their own pre-existing values about how the system actually works and how it ought to work. This is the normative component of problem definition with both its casual and intentional aspects. We make these distinctions within the more general concept of problem definition because we believe that these separate factors may have an independent effect on the choice of policy instruments.

Resources and Constraints

The way a policymaker defines a problem may, in many cases, indicate a clear choice of instrument. However, few policymakers act alone, or operate in an environment without constraints that limit their range of choice. Consequently, the selection of a policy instrument depends on the constraints a policymaker faces and the resources available either to diminish the force of those constraints or to enhance the effectiveness of a given instrument. In simplest terms, identifying

The Definition of a Policy Problem

Past research has examined the role of problem definition in policy analysis (Dery 1984; Wildavsky 1979) and in agenda-setting (Kingdon 1984). In hypothesizing about its role in instrument selection, we assume that problem definition functions much the same way there as it does in agenda-setting, and further assume that it consists of several components.

The first embodies a basic set of facts that most people can agree upon (e.g., that student test scores have declined, that traffic fatalities have increased). Marshalling such facts to define a policy problem often depends on the existence of relevant indicators—statistics that describe the state of the policy system and provide a benchmark for comparing current conditions with those of earlier times or different places (Kingdon 1984; for a comprehensive discussion of policy indicators, see MacRae 1985).

Once a problem has been identified, the search for causes and potential solutions contains both analytical and normative aspects. For example, research indicates that achievement is linked to the number and types of courses students take, and indicator data showed that students were taking fewer courses during the 1970s. However, while such research-based information might help define the nature of a problem and its probable causes, it is not the only source.

Policymakers hold values about the preferred state of the social system and which mechanisms should be used to achieve that condition. This more normative dimension generates two types of policymaker judgments. The first are casual statements about assumed relationships among key components of the policy system. For example, some policymakers observing test score declines may attribute them primarily to incompetent teachers, while others may assume that they are due to "watered-down" texts, lazy students, or unconscientious parents. These differences stem from differing casual theories about how social systems actually operate.

A second aspect can be classified as a set of intentional beliefs about how the system *ought* to work. This intentional aspect is analogous to MacRae and Wilde's notion that a social problem can be defined as the contrast between an observed state of affairs and a valued expectation (1979, p. 23). So, for example, implicit in a concern about student test score decline is an expectation that students of a given age ought to perform at a particular achievement level.

This intentional component also manifests itself in the relationship between how policymakers define the level of changed behavior

the ability of the initiating level to implement a policy and the ability of the target to meet the policy's requirements. It includes the number and types of personnel available, their level of expertise, and relevance to the demands of a particular policy instrument. Instruments require varying levels of capacity, with mandates demanding the greatest amount and capacity-building (by definition), the least. Research on regulatory policy has typically portrayed the likelihood of compliance as based on a calculation that weighs the costs of compliance and non-compliance (i.e., the severity of sanctions and the likelihood of enforcement). However, this assumes that targets have the ability to comply if they decide the costs of non-compliance are sufficiently high. Yet an equally important factor in determining compliance may be the capacity of implementing agencies and the ability of those subject to a mandate to meet its requirements.

Capacity-level is one dimension; the other is the distribution of that capacity across targets. One critical characteristic of the intergovernmental system is the amount of variability across state and local settings. These differences in personnel resources and skill levels often preclude the use of mandates because they assume a near-uniform response. Rather, variability in capacity levels may lead policymakers to the other three types of instruments because they permit greater latitude in the response of targets.

Fiscal resources. Past research suggests that organizational and fiscal slack is a necessary (though not sufficient) condition for policy innovation (Cyert and March 1963; Nelson 1978). Organizations and governmental agencies which have more resources than they need to perform required functions can devote the excess to experimenting with new approaches.

Without the existence of slack resources, the opportunity costs of enacting new policies become a major constraint on policymakers' options. If, for some reason, additional funds are available, then the choice of policy instruments can be made on other grounds. If, however, the alternatives are either to trade-off resources with other policies or to raise revenues through increased taxation, policymakers are likely to look to those instruments that appear to cost less.

We assume that mandates impose the least cost on those initiating a policy because most of the burden of compliance (and hence, the cost) is likely to be borne by the policy target. System-changing instruments also appear to cost less than the other two instruments. Most system-changing policies now in place in education either have only limited participation (e.g., alternative routes of teacher certification) or reallocate existing expenditures from one target to another (e.g., allow-

resources and constraints is how policymakers assess what is feasible, given how they define a policy problem.

Resources and constraints are rarely mutually exclusive categories. Most resources and constraints are mirror opposites of each other. For example, money and information are resources; the lack of them may constitute a constraint. Resources are also not completely exogenous to the individual policymaker. A skillful politician may create resources to further his policy agenda where they did not previously exist. Conversely, less skilled politicians may create constraints where none existed, or deplete available resources too hastily. We believe that six types of resources and constraints are particularly significant in the choice of a policy instrument. They are: institutional context, governmental capacity, fiscal resources, political support or opposition, information, and past policy choices.

Institutional context. Institutional context is a multi-dimensional factor. It includes a set of enduring characteristics—the allocation of formal and informal authority among policy actors, and the structure and function of existing agencies. These characteristics persist regardless of which individuals occupy a particular office or role position. We assume that in a state where the political culture supports strong local control norms, state policymakers are less likely to enact mandates than in a state where the notion of strong central government is widely accepted. Similarly, the structure and function of state agencies may strongly determine what instruments are chosen. We know, for example, that state education agencies whose primary function has been the enforcement of federal program mandates experience great difficulty in implementing capacity-building policies: they often lack the appropriate personnel and their organizational structure must be radically changed (McDonnell and McLaughlin 1980). Institutional context is manifested not just in the implementation of a policy, but also in its enactment. Which branch of government initiates a policy or which legislative committee (Shepsle and Weingast 1984) has jurisdiction over it may shape the choice of policy instrument.

Most of the time institutional context acts as a constraint on policymakers, particularly if they are considering a major departure from past practice. They may lack sufficient authority because it is shared with other actors at their governmental level or across levels in the intergovernmental system. Or they may find that the transaction costs of existing bureaucracies adapting to new roles and responsibilities are prohibitive. Hence, institutional context often serves as a strong bias towards the status quo in choice of policy instruments.

Governmental capacity. Governmental capacity defines both

differentiated according to local preferences, and then traded-off against each other.) Capacity-building instruments tend to be visible only to direct participants, and hence do not provide a broad enough base on which to build a strong political coalition. System-changing instruments are often controversial because they represent a radical departure from current policy, and focus the political debate on deeply-held beliefs about the utility of market mechanisms. Consequently, they require a very strong political support coalition.

Information. We hypothesized that the information, likely to shape the choice of policy instruments, is of three types:

- about what is preferred by other policy makers, organized interests, and constituents—*political intelligence*;
- about the target, its capacity to implement and probable response to various instruments—*strategic information*; and
- about the technical requirements of various instruments and which are likely to work under different conditions—*analytical information*.

Clearly, the match between policy problem and instrument will be best when all three types of information (and particularly the latter two) are available and reliable. The availability of such information is particularly important for a policy area like education because control is so fragmented among policy actors and governmental levels (Weiss and Gruber 1984). Weiss and Gruber imply that it may be important for a policymaker to expend greater effort in obtaining information about the likely response of targets to mandates. With inducements, however, targets may have a greater incentive to produce useful knowledge about their own competence (Weiss and Gruber 1984, p. 230). Schultze (1977) also makes a similar point, arguing that inducements lessen the need for the most difficult-to-collect information (viz., about individual production functions and demand curves), and substitute the more efficient information-processing and feedback mechanism of the market.

Although the information needed for inducement strategies may be easier to obtain, the costs of not having such information are still high. As Bardach notes, the lack of adequate information about the effects of inducements often results in inefficient reward schedules that generate incentives which turn out "to be too weak or too strong, or just plain perverse" (1980, p. 7). Analytical information about the effects of inducements is limited because most research in this area has either focused on intergovernmental grants (for a review of this literature, see Gramlich 1977) or tax policy (for a review of this literature, see

ing high school students to attend post-secondary institutions removes state aid from one educational level and gives it to another).

When used to address the same policy problem as a mandate or system-changing instrument, inducements and capacity-building instruments, on average, are likely to impose a higher cost on those initiating the policy. However, policymakers, faced with other constraints such as the nature of the institutional context or limited political support, may decide an inducement is the only viable instrument, despite limited fiscal resources. The proliferation of small categorical programs within the federal government during the 1960s and 1970s typifies this situation. Finding it necessary to respond to growing demands from various interest groups and lacking sufficient authority to impose new mandates, Congress used limited federal resources to create a variety of small-grant, inducement programs. Much of these programs' ineffectiveness can be attributed to their inadequate funding, and the lack of realization that if requisite fiscal resource levels are not considered in choosing a policy instrument, serious inefficiencies may result.

Political support and opposition. Given that policymakers can seldom act autonomously, they need to anticipate other actors' preferences in order to build the political coalition necessary for their favored instrument's selection. Other policymakers, organized interests, and constituents may have *a priori* preferences for certain instruments over others; these preferences constitute a potential resource or constraint. In addition, however, policymakers have the potential to manipulate elite and public opinion in favor of their choice. They can use the size of their electoral plurality as a mechanism for commanding policy support. Policymakers might also be able to argue that their preferred instrument is consistent with the political ideology of various actors, or that benefits such as visibility or future electoral support will accrue as a result of supporting a particular instrument.

Conversely, the strength of opposing interests is a constraint—particularly if they are well-organized, have an alternative definition of the policy problem, and prefer a different instrument. In the face of strong opposition, a policymaker may find that an inducement (such as a small grant program) may be the only option for addressing a policy problem as he or she has defined it. The alternative would be to do nothing or to accept the opposition's approach.

Generally an inducement will require the lowest level of political support. Mandates usually require higher support levels to enact because the burden they impose on targets is perceived as widespread and fairly uniform. (Inducements, on the other hand, can take the form of pork barrel legislation where perceived costs and benefits can be

identified are not always mutually exclusive of one another. Their relative significance in the choice of a given instrument may also vary considerably from one context to another. As a first step, however, we feel confident in conceptualizing resources and constraints as those factors that modify policymakers' initial preferences for certain policy instruments, based on their feasibility in an essentially political world.

Conclusions and a Future Research Agenda

A major challenge for the next generation of policy research will be to apply the lessons of past implementation studies in building a more powerful conceptual framework and at the same time, in producing more useful information for policymakers. By focusing on alternative policy instruments, we are attempting to do just that. Because we view the instruments through which substantive goals are translated into action as lying at the core of any policy, we feel this approach will allow us to develop a parsimonious framework that specifies the key relationships among problem definition, instrument choice, organizational context, implementation, and effects. We believe that our four classes of policy instruments capture the major dimensions along which some mechanisms differ—namely, the instrumentality motivating policy action (rules, money, and authority), expected effects, primary costs and benefits, and the time frame for accomplishing policy objectives.

We came to the topic of alternative policy instruments because of our interest in the reform policies that states and localities have enacted over the past few years to improve the quality of public education. As we observed policymakers search for alternatives to mandates, we realized that a conceptual exercise, defining the range of policy instruments and examining the political and organizational conditions needed for each to work as intended, could also generate practical applications. In this sense, our approach to the next generation of policy research is also aimed at producing useful information about the broader range of policy instruments.

We view this paper as a first step in a long process of refining our categories of instruments and empirically testing hypotheses about their interaction with different policy problems and contexts. The next step will consist of empirical research that attempts to classify a diverse set of policies, operating in different institutional contexts, according to our four instrument types. We want to make certain that the policy instruments we have defined actually exist in that form in the policy arena. For example, do a set of policies fit our definition of mandates

Bosworth 1984). However, when the intended effect of an inducement is to motivate actions other than changes in economic behavior (e.g., better teaching), much less is known about which inducements are most effective or how they should be combined with other policy instruments. In many policy areas, we also lack the ability to measure performance reliability and then to connect rewards to performance. For example, research to identify the elements of a fair and accurate evaluation system for awarding teacher-directed inducements is still in the early stages (Wise, Darling-Hammond, McLaughlin, and Bernstein 1984).

Similar gaps in information also exist for capacity-building and system-changing instruments. This lack may constitute one reason why policymakers turn to mandates so frequently. Although the costs of obtaining adequate information on mandates may be high, the underlying theory and technology are available. Because that capacity is less highly developed for the other policy instruments, the risks involved with choosing them may be significantly higher, at least on the informational dimension.

Past policy choices. The cumulative effects of past policy choices shape the selection of policy instruments in several ways. First, past policies may significantly influence what the public wants from government and how it expects those goals to be accomplished. These expectations, in turn, affect the standards by which a policymaker's performance is judged by the electorate, and the range of acceptable alternatives available. For example, if past administrations have traditionally relied on inducements to accomplish their goals in a particular policy area, it may be very difficult for subsequent administrations to use a different instrument, even if their definition of the policy problem would lead them to do so.⁵

Second, the cumulative effects of past policies may circumscribe the use of fiscal resources. The budgetary commitments made by past administrations can seriously limit the alternatives available to their successors. Given this constraint and confronted with a serious problem, policymakers may turn to those instruments which impose less cost at the initiating level and more on policy targets.

This budgetary effect of past policies is especially significant since it works, in effect, as a secular constraint, independent of any particular policymaker or administration. In fact, it may be that as this type of constraint grows over time, it will lead more policymakers to consider system-changing instruments that reallocate existing resources and authority, with necessarily requiring additional amounts.

As this discussion of past policy choices and its relationship to fiscal resource levels indicates, the resources and constraints we have

ment or follow the primary one. For example, a voucher scheme changes which institutions have the authority to receive public funds for providing educational services, but it is also accompanied by financial inducements to motivate private institutions to participate. Similarly, a career ladder is essentially an inducement to encourage better performance from teachers, but it might also be supplemented by capacity-building policies such as ones to train principals to evaluate teachers more effectively. This line of research will not only identify the different ways that instruments can be used in combination with one another, but also which factors influence whether such combinations occur.⁶

Despite the number of unanswered questions and the size of the future research agenda, we feel that a focus on policy instruments is a productive approach. Because it seeks to develop a predictive framework that links the major components of the policy stream, it holds the potential for producing a theoretically richer generation of policy research. In essence, this approach to policy research asks: Does the notion of policy instruments, as we have defined it, help explain why policies take the form they do, and does it help predict their ultimate effects?

However, another set of questions are equally important if we are to provide useful information to policymakers. These ask whether the notion of policy instruments provides policymakers with additional insight about the range of alternatives available to them, and whether it gives them a useful perspective for better understanding the links among policy, practice, and effects. In some sense, these latter questions require only that our framework function well as a descriptive device without being strongly predictive. Yet the ability to provide the policy community with new insight, beyond that gained from other theories or analytical frameworks, may be the strongest test of whether our four classes of policy instruments constitute a valid depiction of public policy and its effects.

and have more in common with each other than with other policies that could be classified as inducements, capacity-building, or system-changing instruments? One empirical test of our framework will be the degree to which the variation across classes of instruments is greater than the variation within any one type (e.g., among different kinds of mandates).

Our initial approach to this research is a multi-year examination of state-initiated education reforms in six states. While working in the same time frame and addressing similar problems, states have chosen to emphasize very different instruments and to use them in diverse combinations. Consequently, this focus provides a unique opportunity to explore the concept of alternative policy instruments. If this initial research is productive, we hope that other education policies, as well as ones in other policy areas, can be examined using the same framework.

A number of other questions will be addressed as part of the research on state education reforms. For example:

What factors are most significant in shaping policymakers' choice of instruments?

Are certain instruments typically used by different policy actors (e.g., legislatures vs. state boards of education) or for different types of implementing agencies (e.g., state bureaucracies vs. local school sites)?

Are different leadership strategies used to advance different policy instruments?

Do different policy instruments interact with policy targets (e.g., school districts, teachers, students) in the ways we have hypothesized?

Is the organizational and political context in which policies are implemented more important in explaining implementation patterns and policy effects for some instruments than for others?

Another component of the empirical research will be aimed at developing finer distinctions within and across categories of instruments based on how they actually operate. In conceptualizing classes of instruments, we have discussed them singly in order to make the distinctions among them clearer. However, we know that in selecting from a menu of options, policymakers often choose a combination of strategies for achieving a particular policy goal. At this point, we would hypothesize that for any given policy problem, policymakers will select a dominant policy instrument, but that others may be used to supple-

Michael D. Cohen, James G. March, and
Johan P. Olsen

A Garbage Can Model of Organizational Choice

Organized anarchies are organizations characterized by problematic preferences, unclear technology, and fluid participation. Recent studies of universities, a familiar form of organized anarchy, suggest that such organizations can be viewed for some purposes as collections of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be an answer, and decision makers looking for work. These ideas are translated into an explicit computer simulation model of a garbage can decision process. The general implications of such a model are described in terms of five major measures on the process. Possible applications of the model to more narrow predictions are illustrated by an examination of the model's predictions with respect to the effect of adversity on university decision making.

Consider organized anarchies. These are organizations—or decision situations—characterized by three general properties.¹ The first is problematic preferences. In the organization it is difficult to impute a set of preferences to the decision situation that satisfies the standard consistency requirements for a theory of choice. The organization operates on the basis of a variety of inconsistent and ill-defined preferences. It can be described better as a loose collection of ideas than as a coherent structure; it discovers preferences through action more than it acts on the basis of preferences.

The second property is unclear technology. Although the organization manages to survive and even produce, its own processes are not understood by its members. It operates on the basis of simple trial-and-error procedures, the residue of learning from the accidents of past experience, and pragmatic in-

ventions of necessity. The third property is fluid participation. Participants vary in the amount of time and effort they devote to different domains; involvement varies from one time to another. As a result, the boundaries of the organization are uncertain and changing; the audiences and decision makers for any particular kind of choice change capriciously.

These properties of organized anarchy have been identified often in studies of organizations. They are characteristic of any organization in part—part of the time. They are particularly conspicuous in public, educational, and illegitimate organizations. A theory of organized anarchy will describe a portion of almost any organization's activities, but will not describe all of them.

To build on current behavioral theories of organizations in order to accommodate the concept of organized anarchy, two major phenomena critical to an understanding of anarchy must be investigated. The first is the manner in which organizations make choices without consistent, shared goals. Situations of decision making under goal ambiguity are common in complex organizations. Often problems are resolved without recourse to explicit bargaining or to an explicit price system—market—two common processes for decision making in the absence of consensus. The second phenomenon is the way members

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resolve all problems is 22, and the net energy load is $22 - 66 = -44$.

Net energy load 1: moderate load. Under this condition, the energy required for each problem is 2.2. Thus, the energy required to make a choice is 2.2 times the number of problems attached to that choice, and the minimum effective energy required to resolve all problems is 44. The net energy load is $44 - 66 = -22$.

Net energy load 2: heavy load. Under this condition, each problem requires energy of 3.3. The energy required to make a choice is 3.3 times the number of problems attached to that choice. The minimum effective energy required to resolve all problems is 66, and the net energy load is $66 - 66 = 0$.

Although it is possible from the total energy point of view for all problems to be resolved in any load condition, the difficulty of accomplishing that result where the net energy load is zero—a heavy load—is obviously substantial.

Three pure types of organizational arrangements are considered in the access structure (the relation between problems and choices).

Access structure 0: unsegmented access. This structure is represented by an access array in which any active problem has access to any active choice.

$A_0 =$

Access structure 1: hierarchical access. In this structure both choices and problems are

making of the j th choice. Otherwise, d_{ij} is 0. The second is the mapping of problems onto choices, the access structure. The access structure of the organization is described by A , a w -by- m array in which a_{ij} is 1 if the j th choice is accessible to the i th problem. Otherwise, a_{ij} is 0.

In order to connect these variables, three key behavioral assumptions are specified. The first is an assumption about the additivity of energy requirements, the second specifies the way in which energy is allocated to choices, and the third describes the way in which problems are attached to choices.

Energy additivity assumption. In order to be made, each choice requires as much effective energy as the sum of all requirements of the several problems attached to it. The effective energy devoted to a choice is the sum of the energies of decision makers attached to that choice, deflated, in each time period, by the solution coefficient. As soon as the total effective energy that has been expended on a choice equals or exceeds the requirements at a particular point in time, a decision is made.

Energy allocation assumption. The energy of each participant is allocated to no more than one choice during each time period. Each participant allocates his energy among the choices for which he is eligible to the one closest to decision, that is the one with the smallest energy deficit at the end of the previous time period in terms of the energies contributed by other participants.

Problem allocation assumption. Each problem is attached to no more than one choice each time period, choosing from among those accessible by calculating the apparent energy deficits (in terms of the energy requirements of other problems) at the end of the previous time period and selecting the choice closest to decision. Except to the extent that priorities enter in the organizational structure, there is no priority ranking of problems.

These assumptions capture key features of the processes observed. They might be modified in a number of ways without doing violence to the empirical observations on which they are based. The consequences of these modifications, however, are not pursued here. Rather, attention is focused on the implications of the simple version described. The

interaction of organizational structure and a garbage can form of choice will be examined.

ORGANIZATIONAL STRUCTURE

Elements of organizational structure influence outcomes of a garbage can decision process (a) by affecting the time pattern of the arrival of problems choices, solutions, or decision makers, (b) by determining the allocation of energy by potential participants in the decision, and (c) by establishing linkages among the various streams.

The organizational factors to be considered are some that have real-world interpretations and implications and are applicable to the theory of organized anarchy. They are familiar features of organizations, resulting from a mixture of deliberate managerial planning, individual and collective learning, and imitation. Organizational structure changes as a response to such factors as market demand for personnel and the heterogeneity of values, which are external to the model presented here. Attention will be limited to the comparative statics of the model, rather than to the dynamics produced by organizational learning.

To exercise the model, the following are specified: (a) a set of fixed parameters which do not change from one variation to another, (b) the entry times for choices, (c) the entry times for problems, (d) the net energy load on the organization, (e) the access structure of the organization, (f) the decision structure of the organization, and (g) the energy distribution among decision makers in the organization.

Some relatively pure structural variations will be identified in each and examples of how variations in such structures might be related systematically to key exogenous variables will be given. It will then be shown how such factors of organizational structure affect important characteristics of the decisions in a garbage can decision process.

Fixed Parameters

Within the variations reported, the following are fixed: (a) number of time periods—twenty, (b) number of choice opportunities—ten, (c) number of decision makers—ten, (d) number of problems—twenty, and (e)

of an organization are activated. This entails the question of how occasional members become active and how attention is directed toward, or away from, a decision. It is important to understand the attention patterns within an organization, since not everyone is attending to everything all of the time.

Additional concepts are also needed in a normative theory of organizations dealing with organized anarchies. First, a normative theory of intelligent decision making under ambiguous circumstances (namely, in situations in which goals are unclear or unknown) should be developed. Can we provide some meaning for intelligence which does not depend on relating current action to known goals? Second, a normative theory of attention is needed. Participants within an organization are constrained by the amount of time they can devote to the various things demanding attention. Since variations in behavior in organized anarchies are due largely to questions of who is attending to what, decisions concerning the allocation of attention are prime ones. Third, organized anarchies require a revised theory of management. Significant parts of contemporary theories of management introduce mechanisms for control and coordination which assume the existence of well-defined goals and a well-defined technology, as well as substantial participant involvement in the affairs of the organization. Where goals and technology are hazy and participation is fluid, many of the axioms and standard procedures of management collapse.

This article is directed to a behavioral theory of organized anarchy. On the basis of several recent studies, some elaborations and modifications of existing theories of choice are proposed. A model for describing decision making within organized anarchies is developed, and the impact of some aspects of organizational structure on the process of choice within such a model is examined.

THE BASIC IDEAS

Decision opportunities are fundamentally ambiguous stimuli. This theme runs through several recent studies of organizational choice.² Although organizations can often be

viewed conveniently as vehicles for solving well-defined problems or structures within which conflict is resolved through bargaining, they also provide sets of procedures through which participants arrive at an interpretation of what they are doing and what they have done while in the process of doing it. From this point of view, an organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work.

Such a view of organizational choice focuses attention on the way the meaning of a choice changes over time. It calls attention to the strategic effects of timing, through the introduction of choices and problems, the time pattern of available energy, and the impact of organizational structure.

To understand processes within organizations, one can view a choice opportunity as a garbage can into which various kinds of problems and solutions are dumped by participants as they are generated. The mix of garbage in a single can depends on the mix of cans available, on the labels attached to the alternative cans, on what garbage is currently being produced, and on the speed with which garbage is collected and removed from the scene.

Such a theory of organizational decision making must concern itself with a relatively complicated interplay among the generation of problems in an organization, the deployment of personnel, the production of solutions, and the opportunities for choice. Although it may be convenient to imagine that choice opportunities lead first to the generation of decision alternatives, then to an examination of their consequences, then to an evaluation of those consequences in terms of objectives, and finally to a decision, this type of model is often a poor description of what actually happens. In the garbage can model, on the other hand, a decision is an outcome

(1971), Olsen (1970, 1971), and Rommetveit (1971). The ideas, however, have a broader parentage. In particular, they obviously owe a debt to Allison (1969), Coleman (1957), Cyert and March (1963), Lindblom (1965), Long (1958), March and Simon (1958), Schilling (1968), Thompson (1967), and Vickers (1965).

² We have based the model heavily on seven recent studies of universities: Christensen (1971), Cohen and March (1972), Enderud (1971), Mood

$D_2 =$
 1000000000
 0100000000
 0010000000
 0001000000
 0000100000
 0000010000
 0000001000
 0000000100
 0000000010
 0000000001

As in the case of the access structure, actual decision structures will require a more complicated array. Most organizations have a mix of rules for defining the legitimacy of participation in decisions. The three pure cases are, however, familiar models of such rules and can be used to understand some consequences of decision structure for decision processes.

Energy Distribution

The distribution of energy among decision makers reflects possible variations in the amount of time spent on organizational problems by different decision makers. The solution coefficients and variations in the energy requirement for problems affect the overall relation between energy available and energy required. Three different variations in the distribution of energy are considered.

Energy distribution 0: important people—less energy. In this distribution important people, that is people defined as important in a hierarchical decision structure, have less energy. This might reflect variations in the combination of outside demands and motivation to participate within the organization. The specific energy distribution is indicated as follows:

Decision maker	Energy
1	0.1
2	0.2
3	0.3
4	0.4
5	0.5
6	0.6
7	0.7
8	0.8
9	0.9
10	1.0

$= E_0$

The total energy available to the organization each time period (before deflation by the solution coefficients) is 5.5.

Energy distribution 1: equal energy. In this distribution there is no internal differentiation among decision makers with respect to energy. Each decision maker has the same energy (0.55) each time period. Thus, there is the following distribution:

Decision maker	Energy
1	0.55
2	0.55
3	0.55
4	0.55
5	0.55
6	0.55
7	0.55
8	0.55
9	0.55
10	0.55

$= E_1$

The total energy available to the organization each time period (before deflation by the solution coefficients) is 5.5.

Energy distribution 2: important people—more energy. In this distribution energy is distributed unequally but in a direction opposite to that in E_0 . Here the people defined as important by the hierarchical decision structure have more energy. The distribution is indicated by the following:

Decision maker	Energy
1	1.0
2	0.9
3	0.8
4	0.7
5	0.6
6	0.5
7	0.4
8	0.3
9	0.2
10	0.1

$= E_2$

As in the previous organizations, the total energy available to the organization each time period (before deflation by the solution coefficients) is 5.5.

Where the organization has a hierarchical decision structure, the distinction between important and unimportant decision makers is clear. Where the decision structure is unsegmented or specialized, the variations in energy distribution are defined in terms of the same numbered decision makers (lower numbers are more important than higher numbers) to reflect possible status differ-

arranged in a hierarchy such that important problems—those with relatively low numbers—have access to many choices, and important choices—those with relatively low numbers—are accessible only to important problems. The structure is represented by the following access array:

$A_1 =$

```

111111111
111111111
011111111
011111111
001111111
001111111
000111111
000111111
000011111
000011111
000001111
000001111
000000111
000000111
000000011
000000011
000000001
000000001

```

Access structure 2: specialized access. In this structure each problem has access to only one choice and each choice is accessible to only two problems, that is, choices specialize in the kinds of problems that can be associated to them. The structure is represented by the following access array:

$A_2 =$

```

100000000
100000000
010000000
010000000
001000000
001000000
000100000
000100000
000010000
000010000
000001000
000001000
000001000
000001000
000000100
000000100
000000010
000000010
000000001
000000001

```

Actual organizations will exhibit a more

complex mix of access rules. Any such combination could be represented by an appropriate access array. The three pure structures considered here represent three classic alternative approaches to the problem of organizing the legitimate access of problems to decision situations.

Decision Structure

Three similar pure types are considered in the decision structure (the relation between decision makers and choices).

Decision structure 0: unsegmented decisions. In this structure any decision maker can participate in any active choice opportunity. Thus, the structure is represented by the following array:

$D_0 =$

```

111111111
111111111
111111111
111111111
111111111
111111111
111111111
111111111
111111111
111111111
111111111

```

Decision structure 1: hierarchical decisions. In this structure both decision makers and choices are arranged in a hierarchy such that important choices—low numbered choices—must be made by important decision makers—low numbered decision makers—and important decision makers can participate in many choices. The structure is represented by the following array:

$D_1 =$

```

111111111
011111111
001111111
000111111
000011111
000001111
000000111
000000011
000000001
000000001

```

Decision structure 2: specialized decisions. In this structure each decision maker is associated with a single choice and each choice has a single decision maker. Decision makers specialize in the choices to which they attend. Thus, we have the following array:

choices. Important choices are made by oversight and flight. Unimportant choices are made by resolution. These differences are observed under both of the choice entry sequences but are sharpest where important choices enter relatively early. Table 4 shows

TABLE 4. PROPORTION OF CHOICES THAT ARE MADE BY FLIGHT OR OVERSIGHT UNDER FOUR CONDITIONS OF CHOICE AND PROBLEM ENTRY TIMES, BY TIME OF ARRIVAL AND IMPORTANCE OF CHOICE (FOR HIERARCHICAL ACCESS OR DECISION STRUCTURE)

		Time of arrival of choice	
		Early, first 5	Late, last 5
Importance of choice	High, first 5	0.86	0.65
	Low, last 5	0.54	0.60

the results. This property of important choices in a garbage can decision process can be naturally and directly related to the phenomenon in complex organizations of important choices which often appear to just happen.

Eighth, although a large proportion of the choices are made, the choice failures that do occur are concentrated among the most important and least important choices. Choices of intermediate importance are virtually always made. The proportion of choice failures, under conditions of hierarchical access or decision structures is as follows:

Three most important choices	0.14
Four middle choices	0.05
Three least important choices	0.12

In a broad sense, these features of the process provide some clues to how organizations survive when they do not know what they are doing. Much of the process violates standard notions of how decisions ought to be made. But most of those notions are built on assumptions which cannot be met under the conditions specified. When objectives and technologies are unclear, organizations are charged to discover some alternative decision procedures which permit them to proceed without doing extraordinary violence to the domains of participants or to their model of

what an organization should be. It is a hard charge, to which the process described is a partial response.

At the same time, the details of the outcomes clearly depend on features of the organizational structure. The same garbage can operation results in different behavioral symptoms under different levels of load on the system or different designs of the structure of the organization. Such differences raise the possibility of predicting variations in decision behavior in different organizations. One possible example of such use remains to be considered.

GARBAGE CANS AND UNIVERSITIES

One class of organization which faces decision situations involving unclear goals, unclear technology, and fluid participants is the modern college or university. If the implications of the model are applicable anywhere, they are applicable to a university. Although there is great variation among colleges and universities, both between countries and within any country, the model has general relevance to decision making in higher education.

General Implications

University decision making frequently does not resolve problems. Choices are often made by flight or oversight. University decision processes are sensitive to increases in load. Active decision makers and problems track one another through a series of choices without appreciable progress in solving problems. Important choices are not likely to solve problems.

Decisions whose interpretations continually change during the process of resolution appear both in the model and in actual observations of universities. Problems, choices, and decision makers arrange and rearrange themselves. In the course of these arrangements the meaning of a choice can change several times, if this meaning is understood as the mix of problems discussed in the context of that choice.

Problems are often solved, but rarely by the choice to which they are first attached. A choice that might, under some circumstances, be made with little effort becomes an arena for many problems. The choice becomes al-

TABLE 2. EFFECTS OF VARIATIONS IN LOAD UNDER FOUR CONDITIONS OF CHOICE AND PROBLEM ENTRY TIMES

		Mean problem activity	Mean decision maker activity	Mean decision difficulty	Proportion of choices by flight or oversight
Load	Light	114.9	60.9	19.5	.45
	Moderate	204.3	63.8	32.9	.70
	Heavy	211.1	76.6	46.1	.64

lems to track each other through choices. Subject to structural restrictions on the tracking, decision makers work on active problems in connection with active choices; both decision makers and problems tend to move together from choice to choice. Thus, one would expect decision makers who have a feeling that they are always working on the same problems in somewhat different contexts, mostly without results. Problems, in a similar fashion, meet the same people wherever they go with the same result.

Fourth, there are some important interconnections among three key aspects of the efficiency of the decision processes specified. The first is problem activity, the amount of time unresolved problems are actively attached to choice situations. Problem activity is a rough measure of the potential for decision conflict in the organization. The second aspect is problem latency, the amount of time problems spend activated but not linked to choices. The third aspect is decision time, the persistence of choices. Presumably, a good organizational structure would keep both problem activity and problem latency low through rapid problem solution in its choices. In the garbage can process such a result was never observed. Segmentation of the access structure tends to reduce the number of unresolved problems active in the organization but at the cost of increasing the latency period of problems and, in most cases the time devoted to reaching decisions. On the other hand, segmentation of the decision structure tends to result in decreasing problem latency, but at the cost of increasing problem activity and decision time.

Fifth, the process is frequently sharply interactive. Although some phenomena associated with the garbage can are regular and flow through nearly all of the cases, for ex-

ample, the effect of overall load, other phenomena are much more dependent on the particular combination of structures involved. Although high segmentation of access structure generally produces slow decision time, for instance, a specialized access structure, in combination with an unsegmented decision structure, produces quick decisions.

Sixth, important problems are more likely to be solved than unimportant ones. Problems which appear early are more likely to be resolved than later ones. Considering only those cases involving access hierarchy where importance is defined for problems, the relation between problem importance and order of arrival is shown in Table 3. The system, in

TABLE 3. PROPORTION OF PROBLEMS RESOLVED UNDER FOUR CONDITIONS OF CHOICE AND PROBLEM ENTRY TIMES, BY IMPORTANCE OF PROBLEM AND ORDER OF ARRIVAL OF PROBLEM (FOR HIERARCHICAL ACCESS)

		Time of arrival of problem	
		Early, first 10	Late, last 10
Importance of problem	High, first 10	0.46	0.44
	Low, last 10	0.48	0.25

effect, produces a queue of problems in terms of their importance, to the disadvantage of late-arriving, relatively unimportant problems, and particularly so when load is heavy. This queue is the result of the operation of the model. It was not imposed as a direct assumption.

Seventh, important choices are less likely to resolve problems than unimportant

Decision structure. Like the access structure, the decision structure is partly a planned system for the organization and partly a result of learning and negotiation within the organization. It could be expected to be systematically related to the technology, to attributes of participants and problems, and to the external conditions under which the organization operates. For example, there are joint effects of two factors: (a) relative administrative power within the system, the extent to which the formal administrators are conceded substantial authority, and (b) the average degree of perceived interrelation among problems. It is assumed that high administrative power or high interrelation of problems will lead to hierarchical decision structure, that moderate power and low interrelation of problems leads to specialized decision structures, and that relatively low administrative power, combined with moderate problem interrelation, leads to unsegmented decision structures. The hypothetical relations are shown in Figure 2.

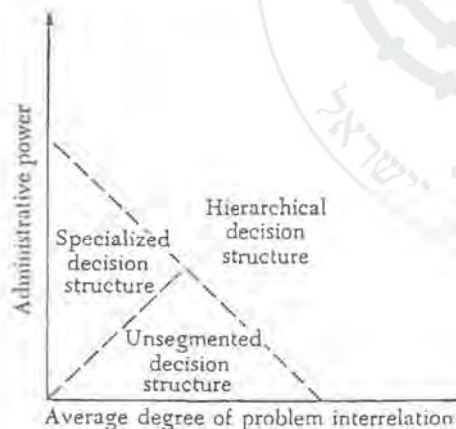


FIGURE 2. HYPOTHESIZED RELATIONSHIP BETWEEN ADMINISTRATIVE POWER, INTERRELATION OF PROBLEMS, AND THE DECISION STRUCTURE OF AN ORGANIZATION

Energy distribution. Some of the key factors affecting the energy distribution within an organization are associated with the alternative opportunities decision makers have for investing their time. The extent to which

there is an active external demand for attention affects the extent to which decision makers will have energy available for use within the organization. The stronger the relative outside demand on important people in the organization, the less time they will spend within the organization relative to others. Note that the energy distribution refers only to the relation between the energy available from important people and less important people. Thus, the energy distribution variable is a function of the relative strength of the outside demand for different people, as shown in Figure 3.



FIGURE 3. HYPOTHESIZED RELATIONSHIP BETWEEN EXIT OPPORTUNITIES AND THE DISTRIBUTION OF ENERGY WITHIN AN ORGANIZATION

Within a university setting it is not hard to imagine circumstances in which exit opportunities are different for different decision makers. Tenure, for example, strengthens the exit opportunities for older faculty members. Money strengthens the exit opportunities for students and faculty members, though more for the former than the latter. A rapidly changing technology tends to strengthen the exit opportunities for young faculty members.

Against this background four types of colleges and universities are considered: (a) large, rich universities, (b) large, poor universities, (c) small, rich colleges, and (d) small, poor colleges.

most impossible to make, until the problems drift off to another arena. The matching of problems, choices, and decision makers is partly controlled by attributes of content, relevance, and competence; but it is also quite sensitive to attributes of timing, the particular combinations of current garbage cans, and the overall load on the system.

Universities and Adversity

In establishing connections between the hypothetical attributes of organizational structure in the model and some features of contemporary universities, the more detailed implications of the model can be used to explore features of university decision making. In particular, the model can examine the events associated with one kind of adversity within organizations, the reduction of organizational slack.

Slack is the difference between the resources of the organization and the combination of demands made on it. Thus, it is sensitive to two major factors: (a) money and other resources provided to the organization by the external environment, and (b) the internal consistency of the demands made on the organization by participants. It is commonly believed that organizational slack has been reduced substantially within American colleges and universities over the past few years. The consequences of slack reduction in a garbage can decision process can be shown by establishing possible relations between changes in organizational slack and the key structural variables within the model.

Net energy load. The net energy load is the difference between the energy required within an organization and the effective energy available. It is affected by anything that alters either the amount of energy available to the organization or the amount required to find or generate problem solutions. The energy available to the organization is partly a function of the overall strength of exit opportunities for decision makers. For example, when there is a shortage of faculty, administrators, or students in the market for participants, the net energy load on a university is heavier than it would be when there is no shortage. The energy required to find solutions depends on the flow of possible problem solutions. For example, when the environment of the organization is relatively rich,

solutions are easier to find and the net energy is reduced. Finally, the comparative attractiveness and permeability of the organization to problems affects the energy demands on it. The more attractive, the more demands. The more permeable, the more demands. Universities with slack and with relatively easy access, compared to other alternative arenas for problem carriers, will attract a relatively large number of problems.

Access structure. The access structure in an organization would be expected to be affected by deliberate efforts to derive the advantages of delegation and specialization. Those efforts, in turn, depend on some general characteristics of the organizational situation, task, and personnel. For example, the access structure would be expected to be systematically related to two features of the organization: (a) the degree of technical and value heterogeneity, and (b) the amount of organizational slack. Slack, by providing resource buffers between parts of the organization, is essentially a substitute for technical and value homogeneity. As heterogeneity increases, holding slack constant, the access structure shifts from an unsegmented to a specialized to a hierarchical structure. Similarly, as slack decreases, holding heterogeneity constant, the access structure shifts from an unsegmented to a specialized to a hierarchical structure. The combined picture is shown in Figure 1.

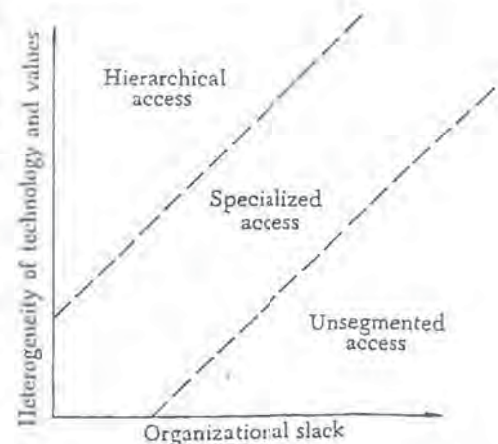
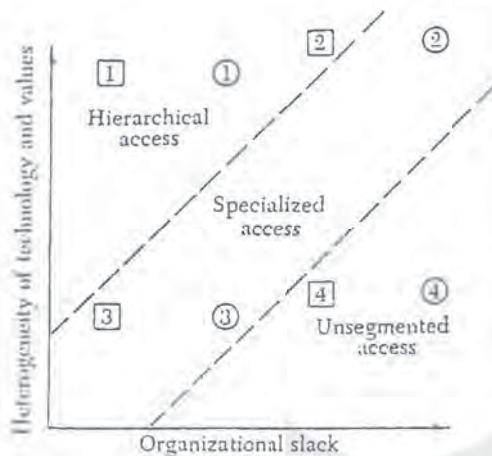


FIGURE 1. HYPOTHESIZED RELATIONSHIP BETWEEN SLACK, HETEROGENEITY, AND THE ACCESS STRUCTURE OF AN ORGANIZATION



- ① Large, poor school, good times
- ② Large, rich school, good times
- ③ Small, poor school, good times
- ④ Small, rich school, good times

- ① Large, poor school, bad times
- ② Large, rich school, bad times
- ③ Small, poor school, bad times
- ④ Small, rich school, bad times

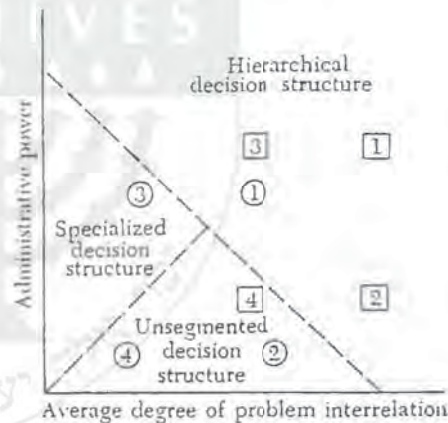
FIGURE 4. HYPOTHESIZED LOCATION OF DIFFERENT SCHOOLS IN TERMS OF SLACK AND HETEROGENEITY

decision time, and a decrease in the proportion of decisions by resolution as adversity begins. The small, poor schools seem to move in a direction counter to the trends in the other three groups. Decision style is little affected by the onset of slack reduction, problem activity, and decision time decline, and decision-maker mobility increases. Presidents of such organizations might feel a sense of success in their efforts to tighten up the organization in response to resource contraction.

The application of the model to this particular situation among American colleges and universities clearly depends upon a large number of assumptions. Other assumptions would lead to other interpretations of the impact of adversity within a garbage can decision process. Nevertheless, the derivations

from the model have some face validity as a description of some aspects of recent life in American higher education.

The model also makes some predictions of future developments. As adversity continues, the model predicts that all schools, and particularly rich schools, will experience improvement in their position. Among large, rich schools decision by resolution triples, problem activity is cut by almost three-fourths, and decision time is cut more than one-half. If the model has validity, a series of articles in the magazines of the next decade detailing how President X assumed the presidency of large, rich university Y and guided it to "peace" and "progress" (short decision time, decisions without problems, low problem activity) can be expected.



- ① Large, poor school, good times
- ② Large, rich school, good times
- ③ Small, poor school, good times
- ④ Small, rich school, good times

- ① Large, poor school, bad times
- ② Large, rich school, bad times
- ③ Small, poor school, bad times
- ④ Small, rich school, bad times

FIGURE 5. HYPOTHESIZED LOCATION OF DIFFERENT SCHOOLS IN TERMS OF ADMINISTRATIVE POWER AND PERCEIVED INTERRELATION OF PROBLEMS

Important variations in the organizational variables among these schools can be expected. Much of that variation is likely to be within-class variation. Assumptions about these variables, however, can be used to generate some assumptions about the predominant attributes of the four classes, under conditions of prosperity.

Under such conditions a relatively rich school would be expected to have a light energy load, a relatively poor school a moderate energy load. With respect to access structure, decision structure, and the internal distribution of energy, the appropriate position of each of the four types of schools is marked with a circular symbol on Figures 4, 5, and 6. The result is the pattern of variations indicated below:

	Load	Access structure	Decision structure	Energy distribution
Large, rich	Light 0	Specialized 2	Unsegmented 0	Less 0
Large, poor	Moderate 1	Hierarchical 1	Hierarchical 1	More 2
Small, rich	Light 0	Unsegmented 0	Unsegmented 0	More 2
Small, poor	Moderate 1	Specialized 2	Specialized 2	Equal 1

With this specification, the garbage can model can be used to predict the differences expected among the several types of school. The results are found in Table 5. They suggest that under conditions of prosperity, overt conflict (problem activity) will be substantially higher in poor schools than in rich ones, and decision time will be substantially longer. Large, rich schools will be characterized by a high degree of problem latency. Most decisions will resolve some problems.

What happens to this group of schools under conditions of adversity—when slack is reduced? According to earlier arguments, slack could be expected to affect each of the organizational variables. It first increases net energy load, as resources become shorter and thus problems require a larger share of available energy to solve, but this effect is later compensated by the reduction in market demand for personnel and in the relative attractiveness of the school as an arena for problems. The market effects also reduce the differences in market demand for important

and unimportant people. The expected results of these shifts are shown by the positions of the square symbols in Figure 6.

At the same time, adversity affects both access structure and decision structure. Adversity can be expected to bring a reduction in slack and an increase in the average interrelation among problems. The resulting hypothesized shifts in access and decision structures are shown in Figures 4 and 5.

Table 5 shows the effects of adversity on the four types of schools according to the previous assumptions and the garbage can model. By examining the first stage of adversity, some possible reasons for discontent among presidents of large, rich schools can be seen. In relation to other schools they are not seriously disadvantaged. The large, rich

schools have a moderate level of problem activity, a moderate level of decision by resolution. In relation to their earlier state, however, large, rich schools are certainly deprived. Problem activity and decision time have increased greatly; the proportion of decisions which resolve problems has decreased from 68 percent to 21 percent; administrators are less able to move around from one decision to another. In all these terms, the relative deprivation of the presidents of large, rich schools is much greater, in the early stages of adversity, than that of administrators in other schools.

The large, poor schools are in the worst absolute position under adversity. They have a high level of problem activity, a substantial decision time, a low level of decision maker mobility, and a low proportion of decisions being made by resolution. But along most of these dimensions, the change has been less for them.

The small rich schools experience a large increase in problem activity, an increase in

TABLE 5. EFFECT OF ADVERSITY ON FOUR TYPES OF COLLEGES AND UNIVERSITIES OPERATING WITHIN A GARBAGE CAN DECISION PROCESS

Type of school/ type of situation	Organi- zational type	Deci- sion style propor- tion resolu- tion	Outcome			
			Problem activity	Problem latency	Deci- sion maker activity	Deci- sion time
<i>Large, rich universities</i>						
Good times	0200	0.68	0	154	100	0
Bad times, early	1110	0.21	210	23	58	34
Bad times, late	0111	0.65	57	60	66	14
<i>Large, poor universities</i>						
Good times	1112	0.38	210	25	66	31
Bad times, early	2112	0.24	248	32	55	38
Bad times, late	1111	0.31	200	30	58	28
<i>Small, rich colleges</i>						
Good times	0002	1.0	0	0	100	0
Bad times, early	1002	0	310	0	90	20
Bad times, late	0001	1.0	0	0	100	0
<i>Small, poor colleges</i>						
Good times	1221	0.54	158	127	15	83
Bad times, early	2211	0.61	101	148	73	52
Bad times, late	1211	0.62	78	151	76	39

tions in which the preconditions of the garbage can process cannot be eliminated. In some, such as pure research, or the family, they should not be eliminated. The great advantage of trying to see garbage can phenomena together as a process is the possibility that that process can be understood, that organizational design and decision making can take account of its existence and that, to some extent, it can be managed.

APPENDIX

Version five of the Fortran program for the garbage can model reads in entry times for choices, solution coefficients, entry times for problems, and two control variables, NA and IO. NA controls various combinations of freedom of movement for decision makers and problems. All results are based on runs in which NA is 1. Comment cards included in the program describe other possibilities. The latter variable, IO, controls output. At the value 1, only summary statistics are printed. At the value 2, full histories of the decision process are printed for each organizational variant.

The following are ten summary statistics:

1. (KT) Problem persistence, the total number of time periods a problem is activated and attached to a choice, summed over all problems.
2. (KU) Problem latency, the total number of time periods a problem is activated, but not attached to a choice, summed over all problems.
3. (KV) Problem velocity, the total number of times any problem shifts from one choice to another.
4. (KW) Problem failures, the total number of problems not solved at the end of the twenty time periods.
5. (KX) Decision maker velocity, the total number of times any decision maker shifts from one choice to another.
6. (KS) Decision maker inactivity, the total number of time periods a decision maker is not attached to a choice, summed over all decision makers.
7. (KY) Choice persistence, the total number of time periods a choice is activated, summed over all choices.

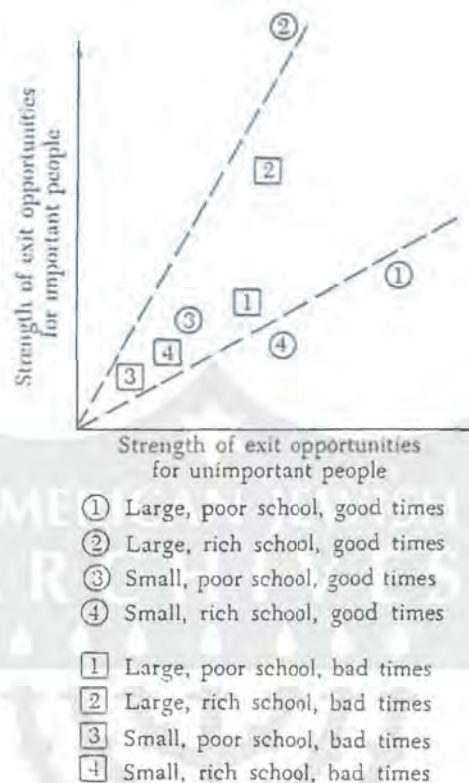


FIGURE 6. HYPOTHESIZED LOCATION OF DIFFERENT SCHOOLS IN TERMS OF EXIT OPPORTUNITIES

CONCLUSION

A set of observations made in the study of some university organizations has been translated into a model of decision making in organized anarchies, that is, in situations which do not meet the conditions for more classical models of decision making in some or all of three important ways: preferences are problematic, technology is unclear, or participation is fluid. The garbage can process is one in which problems, solutions, and participants move from one choice opportunity to another in such a way that the nature of the choice, the time it takes, and the problems it solves all depend on a relatively complicated intermeshing of elements. These include the mix of choices available at any one time, the mix of problems that have access to the organization, the mix of solutions looking

for problems, and the outside demands on the decision makers.

A major feature of the garbage can process is the partial uncoupling of problems and choices. Although decision making is thought of as a process for solving problems, that is often not what happens. Problems are worked upon in the context of some choice, but choices are made only when the shifting combinations of problems, solutions, and decision makers happen to make action possible. Quite commonly this is after problems have left a given choice arena or before they have discovered it (decisions by flight or oversight).

Four factors were specified which could be expected to have substantial effects on the operation of the garbage can process: the organization's net energy load and energy distribution, its decision structure, and problem access structure. Though the specifications are quite simple their interaction is extremely complex, so that investigation of the probable behavior of a system fully characterized by the garbage can process and previous specifications requires computer simulation. No real system can be fully characterized in this way. Nonetheless, the simulated organization exhibits behaviors which can be observed some of the time in almost all organizations and frequently in some, such as universities. The garbage can model is a first step toward seeing the systematic interrelatedness of organizational phenomena which are familiar, even common, but which have previously been regarded as isolated and pathological. Measured against a conventional normative model of rational choice, the garbage can process does appear pathological, but such standards are not really appropriate. The process occurs precisely when the preconditions of more normal rational models are not met.

It is clear that the garbage can process does not resolve problems well. But it does enable choices to be made and problems resolved, even when the organization is plagued with goal ambiguity and conflict, with poorly understood problems that wander in and out of the system, with a variable environment, and with decision makers who may have other things on their minds.

There is a large class of significant situa-

APPENDIX TABLE: FORTRAN PROGRAM FOR GARBAGE CAN MODEL, VERSION FIVE

```

C      THE GARBAGE CAN MODEL. VERSION 5
C      ***
C      IO IS 1 FOR SUMMARY STATISTICS ONLY
C      IO IS 2 FOR SUMMARY STATISTICS PLUS HISTORIES
C      ***
C      NA IS 1 WHEN PROBS AND DMKRS BOTH MOVE
C      NA IS 2 WHEN DMKRS ONLY MOVE
C      NA IS 3 WHEN PROBS ONLY MOVE
C      NA IS 4 WHEN NEITHER PROBS NOR DMKRS MOVE
C      ***
C      IL IS A FACTOR DETERMINING PROB ENERGY REQ
C      ***
C      VARIABLES
C      ***
C      NUMBERS
C      COUNTERS    UPPER LIMITS    NAME
C      ***
C      1          NCH              CHOICES
C      J          NPR              PROBLEM
C      K          NDM              DECMKRS
C      LT         NTP              TIME
C      ***
C      ARRAYS
C      CODE        DIMEN          NAME
C      ***
C      ICH         NCH            CHOICE ENTRY TIME
C      ICS         NCH            CHOICE STATUS
C      JET         NPR            PROB. ENTRY TIME
C      JF          NPR            PROB. ATT. CHOICE
C      JFF         NPR            WORKING COPY JF
C      JPS         NPR            PROB. STATUS
C      KDC         NDM            DMKR. ATT. CHOICE
C      KDCW        NDM            WORKING COPY KDC
C      XEF         MCH            ENERGY EXPENDED
C      XERC        MCH            CHOICE EN. REQ.
C      XERP        NPR            PROB. EN. REQ.
C      XSC         NTP            SOLUTION COEFFICIENT
C      ***
C      2-DIMENSIONAL ARRAYS
C      ***
C      CODE        DIMEN          NAME
C      ***
C      IKA         NCH,NDM        DECISION STRUCTURE
C      JIA         NPR,NCH        ACCESS STRUCTURE
C      XEA         NDM,NTP        ENERGY MATRIX
C      ***
C      ***
C      ***
C      SUMMARY STATISTICS FOR EACH VARIANT
C      COL 1: KZ: TOTAL DECISIONS NOT MADE
C      COL 2: KY: TOTAL NUMBER ACTIVE CHOICE PERIODS
C      COL 3: KX: TOTAL NUMBER CHANGES BY DECISION MAKERS
C      COL 4: KW: TOTAL PROBLEMS NOT SOLVED
C      COL 5: KV: TOTAL NUMBER CHANGES BY PROBLEMS
C      COL 6: KU: TOTAL NUMBER LATENT PROBLEM PERIODS
C      COL 7: KT: TOTAL NUMBER ATTACHED PROBLEM PERIODS
C      COL 8: KS: TOTAL NUMBER PERIODS DMKRS RESTING
C      COL 9: XR: TOTAL AMOUNT OF UNUSED ENERGY

```


8. (KZ) Choice failures, the total number of choices not made by the end of the twenty time periods.

9. (XR) Energy reserve, the total amount of effective energy available to the system but not used because decision makers are not attached to any choice.

10. (XS) Energy wastage, the total effective energy used on choices in excess of that required to make them at the time they are made.

In its current form the program generates both the problem access structure and the decision structure internally. In order to examine the performance of the model under other structures, modification of the code or its elimination in favor of Read statements to take the structures from cards will be necessary.

Under $IO = 2$, total output will be about ninety pages. Running time is about two minutes under a Watfor compiler.



```

      JIA(I,J)=0
      IF(JA.EQ.1) GO TO 532
      IF(JA.EQ.2) GO TO 534
      JIA(I,J)=1
      GO TO 550
532  IF ((1-J).GT.(1/2)) GO TO 550
      JIA(I,J)=1
      GO TO 550
534  IF(I.NE.(2*J)) GO TO 550
      JIA(I,J)=1
      JIA(I-1,J)=1
550  CONTINUE
560  CONTINUE
      DO 590 I=1,NOM
      DO 580 J=1,NTP
      XEA(I,J)=0.55
      IF(JF.EQ.1)GO TO 580
      XXA=I
      IF(JE.EQ.0)GO TO 570
      XEA(I,J)=(11.0-XXA)/10.0
      GO TO 580
570  XEA(I,J)=XXA/10.0
580  CONTINUE
590  CONTINUE
C    *** FINISH READ  INITIALIZATION
      DO 994 LT=1,NTP
1006  FURMAT(2X,6HCHOICE,2X,13,2X,6HACTIVE )
C    CHOICE ACTIVATION
      DO 101 I=1,NCH
      IF(ICH(I).NE.LT)GO TO 101
      ICS(I)=1
101  CONTINUE
C    PROB. ACTIVATION
      DO 110 J=1,NPR
      IF(JET(J).NE.LT)GO TO 110
      JPS(J)=1
110  CONTINUE
C    FIND MOST ATTRACTIVE CHOICE FOR PROBLEM J
      DO 120 J=1,NPR
      IF (JPS(J).NE.1) GO TO 120
      IF(NA.EQ.2)GO TO 125
      IF(NA.EQ.4)GO TO 125
      GO TO 126
125  IF(JF(J).NE.0)GO TO 127
126  S=1000000
      DO 121 I=1,NCH
      IF (ICS(I).NE.1) GO TO 121
      IF(JIA(J,I).EQ.0)GO TO 121
      IF(JF(J).EQ.0)GO TO 122
      IF(JF(J).EQ.1)GO TO 122
      IF((XERP(J)+XERC(I)-XEE(I)).GE.S)GO TO 121
      GO TO 123
122  IF((XERC(I)-XEE(I)).GE.S)GO TO 121
      S=XERC(I)-XEE(I)
      GO TO 124
123  S=XERP(J)+XERC(I)-XEE(I)
124  JFF(J)=I
121  CONTINUE
      GO TO 120
127  JFF(J)=JF(J)

```



```

C          COL 10:XS: TOTAL AMOUNT OF WASTED ENERGY
C          ***
C          INPUT BLOCK, READ-IN AND INITIALIZATIONS.
          DIMENSION ICH(20),JF(20),XERC(20),XEE(20),XSC(20),JFF(20),XERP(20
          *),JET(20),JPS(20),ICS(20),KDC(20),KDCW(20),JIA(20,20),IKA(20,20),
          CXEA(20,20),KABC(20,20),KORC(20,20),KCBC(20,20)
1001      FORMAT(5(13,1X))
1002      FORMAT(10(13,1X))
1003      FORMAT(25(11,1X))
1004      FORMAT(10F4.2)
          NTP=20
          NCH=10
          NPR=20
          NOM=10
          B      READ(5,1002)((ICH(I),I=1,NCH)
          READ(5,1004)((XSC(LT),LT=1,NTP)
          READ(5,1002)((JET(J),J=1,NPR)
          READ(5,1003) NA,10
          WRITE(6,1050) NA
1050      FORMAT('1      DEC. MAKER MOVEMENT CONDITION (NA) IS ',11/)
          DO 998 IL=1,3
          IB=IL-1
          DO 997 JAB=1,3
          JA=JAB-1
          DO 996 JOB=1,3
          JO=JOB-1
          DO 995 JEB=1,3
          JE=JEB-1
          XR=0.0
          XS=0.0
          KS=0
          DO 10 I=1,NCH
          XERC(I)=1.1
          XEE(I)=0.0
10          ICS(I)=0
          DO 20 K=1,NOM
          KDC(K)=0
20          KDCW(K)=KDC(K)
          DO 40 J=1,NPR
          XERP(J)=IL*1.1
          JF(J)=0
          JFF(J)=0
          JPS(J)=0
40          JPS(J)=0
C          SETTING UP THE DECISION MAKERS ACCESS TO CHOICES.
          DO 520 I=1,NCH
          DO 510 J=1,NOM
          IKA(I,J)=1
          IF(JD.EQ.1) GO TO 502
          IF(JD.EQ.2) GO TO 504
          GO TO 510
502      IF(I.GE.J) GO TO 510
          IKA(I,J)=0
          GO TO 510
504      IF(J.EQ.1) GO TO 510
          IKA(I,J)=0
          GO TO 510
510      CONTINUE
520      CONTINUE
C          SETTING UP THE PROBLEMS ACCESS TO CHOICES.
          DO 560 I=1,NPR
          DO 550 J=1,NCH

```

```

      IF(NA.EQ.3)GO TO 261
      IF(NA.EQ.4)GO TO 261
      GO TO 299
261   DO 262 K=1,NOM
      IF(KDC(K).NE.1)GO TO 262
      KDCW(K)=1
262   CONTINUE
299   CONTINUE
      DO 200 I=1,NCH
200   KABC(LT,I)=ICS(I)
      DO 210 K=1,NOM
      KBBC(LT,K)=KDC(K)
      IF(KDC(K).EQ.0)GO TO 210
      KDC(K)=0
210   KDCW(K)=0
      DO 220 J=1,NPR
      KCBC(LT,J)=JF(J)
      IF(JPS(J).EQ.0) GO TO 230
      IF(JPS(J).EQ.1) GO TO 220
      KCBC(LT,J)=1000
      GO TO 220
230   KCBC(LT,J)=-1
220   CONTINUE
994   CONTINUE
C     FINISH TIME PERIOD LOOP. BEGIN ACCUMULATION OF 10 SUMMARY STATISTICS.
      KZ=0
      KY=0
      KX=0
      KW=0
      KV=0
      KU=0
      KT=0
      DO 310 I=1,NTP
      DO 320 J=1,NCH
      IF(KABC(I,J).NE.1)GO TO 320
      KY=KY+1
      IF(I.NE.NTP)GO TO 320
      KZ=KZ+1
320   CONTINUE
310   CONTINUE
      DU 330 I=2,NTP
      DO 340 J=1,NOM
      IF(KBBC(I,J).EQ.KBBC(I-1,J))GO TO 340
      KX=KX+1
340   CONTINUE
330   CONTINUE
      DO 350 I=1,NTP
      DO 360 J=1,NPR
      IF(KCBC(I,J).EQ.0)GO TO 351
      IF(KCBC(I,J).EQ.-1) GO TO 360
      IF(KCBC(I,J).EQ.1000) GO TO 352
      KT=KT+1
      GO TO 360
351   KU=KU+1
      GO TO 360
352   IF(I.NE.NTP)GO TO 360
      KW=KW+1
360   CONTINUE
350   CONTINUE
      KW=NPR-KW

```



```

120  CONTINUE
      DO 130 J=1,NPR
131    JF(J)=JFF(J)
130    JFF(J)=0
      LTT=LT-1
      IF(LT.EQ.1)LTT=1
C     FIND MOST ATTRACTIVE CHOICE FOR DMKR K
      DO 140 K=1,NOM
      IF(NA.EQ.3)GO TO 145
      IF(NA.EQ.4) GO TO 145
      GO TO 146
145    IF(KDC(K).NE.0)GO TO 147
146    S=1000000
      DO 141 I=1,NCH
      IF (ICS(I).NE.1) GO TO 141
      IF(IXA(I,K).EQ.0)GO TO 141
      IF(KDC(K).EQ.0)GO TO 142
      IF(KDC(K).EQ.1)GO TO 142
148    IF((XERC(I)-XEE(I)-(XEA(K,LTT)*XSC(LTT)).GE.S)GO TO 141
      GO TO 143
142    IF((XERC(I)-XEE(I)).GE.S)GO TO 141
      S=XERC(I)-XEE(I)
      GO TO 144
143    S=XERC(I)-XEE(I)-XEA(K,LTT)*XSC(LTT)
144    KDCW(K)=I
141    CONTINUE
      GO TO 140
147    KDCW(K)=KDC(K)
140    CONTINUE
      DO 150 K=1,NOM
151    KDC(K)=KDCW(K)
      IF(KDC(K).NE.0)GO TO 150
      XR=XR+(XEA(K,LT)*XSC(LT))
      KS=KS+1
150    KDCW(K)=0
C     ESTABLISHING THE ENERGY REQUIRED TO MAKE EACH CHOICE.
      DO 199 I=1,NCH
      IF(ICS(I).EQ.0)GO TO 199
      XERC(I)=0.0
      DO 160 J=1,NPR
      IF (JPS(J).NE.1) GO TO 160
      IF(JF(J).NE.1)GO TO 160
      XERC(I)=XERC(I)+XERP(J)
160    CONTINUE
      DO 170 K=1,NOM
      IF(IXA(I,K).EQ.0)GO TO 170
      IF(KDC(K).NE.1)GO TO 170
      XEE(I)=XEE(I)+XSC(LT)*XEA(K,LT)
170    CONTINUE
199    CONTINUE
C     MAKING DECISIONS
      DO 299 I=1,NCH
      IF (ICS(I).NE.1) GO TO 299
      IF(XERC(I).GT.XEE(I))GO TO 299
      XS=XS+XEE(I)-XERC(I)
      ICS(I)=2
      DO 250 J=1,NPR
      IF(JF(J).NE.1)GO TO 250
      JPS(J)=2
250    CONTINUE

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***** DATA AS FOLLOWS (AFTER GUIDE CARDS) *****

0	1	2	3	4	5	6	7	8
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
008.005.006.007.004.009.002.010.003.001	1.000.900.700.300.100.100.300.700.901.00	0.600.600.600.600.600.600.600.600.600.60	009.005.008.007.010.003.003.001.007.009	006.008.005.002.004.002.004.010.006.001	1	2		