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Systematically Pinching Ideas: A Comparative Approach to Policy Design

ANNE SCHNEIDER *Political Science, Oklahoma State University*

HELEN INGRAM *Political Science, University of Arizona*

ABSTRACT

Policy design, whether conceptualized as a verb referring to the process of formulating policy ideas, or as a noun describing the logic through which policy intends to achieve its objectives, remains relatively uncharted territory. This paper reviews what we know about how policy designs emerge, and identifies the kinds of biases and weaknesses that are introduced into designs by the decision heuristics employed. Theories of policy invention and expert decision-making suggest that individuals search through large amounts of relevant information stored in memory, reason by analogies, make comparisons, and either copy or simulate patterns of information. Policy scholars may contribute to improved policy design by making more explicit the biases introduced through reliance on decision heuristics, and by suggesting a more formal, self conscious search and selection process that enables designers to be more discriminating when they pinch policy ideas from other contexts. To perform this task, comparative policy analysis is needed in which common elements that exist in virtually all policies are identified and the underlying structural logic of the policies is made explicit. In this paper we set forth generic elements found in policies, describe and compare some of the more common design patterns, and discuss the circumstances where these may be inappropriately copied or borrowed, thereby thwarting the effectiveness of the policy.

Although the past two decades have been marked by considerable progress in the study of public policy, interest in policy design is recent and as yet underdeveloped. Policy design is usually thought of as a highly

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specialized, creative process involving policy experts, whose skills are too narrow to generalize beyond a specific policy domain; and technical billwriters or program designers, whose skills are more general but rather mundane and therefore not of much interest to others. When design includes ideas about strategies to solve problems, it has been viewed as so creative that it is an art rather than a science, and therefore cannot be captured.

Most standard treatments of policy analysis contain only short discussions of policy design, and the creative rather than analytical aspects of the process are emphasized (Brewer and deLeon, 1983; Quade, 1982; MacRae and Wilde, 1979). Brewer and deLeon (1983), for example, underscore the creative aspect of generating alternatives, but point out that initiation of ideas is often left to happenstance. Only recently have attempts been made to describe how designs actually are devised, or to catalog various approaches to design (Alexander, 1982; Dryzek, 1983; Linder and Peters, 1985; Ingraham, 1987; Bobrow and Dryzek, 1987).

Policy design, whether conceptualized as a verb referring to the process of formulating policy alternatives, or as a noun describing the content of policy, is obviously important. Implementation scholars, for example, trace policies that fail during the implementation process back to the statutes that structured implementation, but there is no agreement at this point on what constitutes a well designed statute (Ingram, 1987; Sabatier, 1987). Evaluation specialists trace policy failures to the content of policies and programs, particularly the underlying theory contained in the program (Bickman, 1987). Linder and Peters (1987) contend that design is more important than implementation in understanding policy outcomes. Hofferbert (1986) argues that political scientists should study the effects of policy (designs) on the democratic process. Herbert Simon, one of the first to recognize the crucial role of policy design, put it which way:

> We need to understand not only how people reason about alternatives, but where alternatives come from in the first place. The theory of generation of alternatives deserves, and requires, a treatment that is just as definitive and as thorough as the treatment we give to the theory of choice among prespecified alternatives. (1981: 121)

In this paper we present an approach to policy design that builds on an understanding of the design process as it usually occurs. The approach rests on several premises. First, policy designs often are copied, borrowed or pinched from similar policies in other locales. Second, the process of pinching involves decision heuristics (shortcuts or deviations from strictly rational decisions) that may result in a poor choice of policy designs. Third, an understanding of these heuristics as well as a more critical examination of the design elements that are likely to be pinched are

needed to improve policy designs. We argue that the practice of pinching is unlikely to give way to more deductive or rationalistic approaches. Policy analysis will, therefore, have more influence in improving policy designs if it accommodates the borrowing process. We do not argue that inductive analysis of policy examples – each of which may be flawed itself – should replace deductive reasoning from theoretical principles. We suggest that copying, borrowing, and pinching are widespread in the actual design process and that there are styles of policy analysis that could produce useful information for it.

Our approach also rests upon the contention that it is possible to analyze and compare the critical components of policy designs in a relatively efficient manner. Empirical examples of policies, such as statutes or programs, contain certain common elements, identifying who is supposed to do what, when, why, how, and for what purposes. The relationships among these elements constitutes a 'structural logic' that can be found in the statutes or programs. By analyzing these critical components, the policy scholar can perform cross-policy or cross-area comparisons that enrich the experience and enlarge the array of ideas for design beyond the more limited set that would otherwise be available. A more systematic and self-conscious approach to pinching including scrutiny of many examples drawn from a variety of settings will improve design.

Policy Design Processes

The literature indicates that policy design is less a matter of invention than of selection (Simon, 1981; Alexander, 1982; Linder and Peters, 1985). Designers search through large stores of information, make comparisons, find analogies, and combine elements cafeteria-style to create proposed policies. Basic research on decision making has shown these procedures do not necessarily produce an optimal range of ideas, nor do they necessarily identify the most appropriate approaches (Kahneman, Slovic, Tversky, 1982; Alexander, 1982; Dryzek, 1983; Bobrow and Dryzek, 1987). Policy scholars aiming to inform design must accommodate these processes rather than replace them with a different structure, but they also must self-consciously seek to avoid the errors introduced by reliance on decision heuristics.

Lindblom (1959) argues that rational, deductive approaches to policy design are impossible because persons cannot possibly become knowledgeable about all possible policies and will find it difficult even to comprehend one policy entirely. Decision-makers approach policy problems from the perspective of the chain of policies they have had experience with in the past, Lindblom argued, although he acknowledged

that it may be important to enlarge this range. 'It will sometimes be stimulating for an administrator to seek out a policy analyst whose recent experience is with a different policy chain than his own', Lindblom wrote (1959: 88).

Walker's innovation research revealed that legislation was often virtually copied from one state to another. This recurrent pattern led him to conclude that: (1969: 889):

> . . . state officials make most of their decisions by analogy. The rule of thumb they employ might be formally stated as follows: look for an analogy between the situation you are dealing with and some other situation, perhaps in some other state, where the problem has been successfully resolved.

Polsby's conclusions, after reviewing eight cases of policy innovation, are similar to those of Lindblom and Walker (Polsby, 1984: 166). According to Polsby, innovative policy comes from:

> . . . comparative knowledge, usually carried in the heads of experts or subject-matter specialists; knowledge of the ways in which problems have been previously handled elsewhere.

Richard Rose argues that program-specific characteristics cause policies to be similar from one nation to another, and he demonstrates that similarities are greater within a given program domain across national boundaries than between different programs with a country (Rose, 1988).

Perhaps the most sophisticated theories relevant to the issue of policy design and invention are found in the work of Simon (1981; 1985) and in decision theory research such as that reported in Kahneman, Slovic, Tversky, (1982). Simon (1981) argued that problem-solving and design processes involve search procedures through large stores of information using *decision heuristics* (*rules of thumb*) to guide the search. The intuition that seemingly occurs spontaneously to highly skilled experts actually is recognition of similarities or analogies between the problem at hand and other information stored in memory. Simon (1981) also maintained that means-ends analysis is a powerful procedure for generating and testing each step of a possibly long sequence of actions through which differences between the present state and the desired state are reduced. The search, he said, is for *sufficient*, not *necessary*, actions for attaining goals.

Kahneman, Slovic, Tversky (1982) and their colleagues have identified several recurring types of decision heuristics, and have developed concepts reflecting the biases these heuristics introduce into decisions. One heuristic, availability, occurs when people 'assess the frequency of a class or the probability of an event by the ease with which instances or occurrences can be brought to mind'. (Tversky and Kahneman, 1982: 11). The events most likely to come to mind are more recent, more

numerous, more colorful or dynamic, more consistent with existing stereotypes or biases, and more consistent with 'associative connections', i.e., illusory correlations. Illusory correlations are causal relationships that are easy to imagine but not verified by research (Tversky and Kahneman, 1982). For example, it is possible that legislators continue to increase the severity of punishment because it is so easy to envision that crime will be reduced when, in fact, research cannot substantiate that crime goes down when punishment becomes more severe. Similarly, governments in times of scarcity commonly turn to rationing in spite of the fact that rationing can contribute to scarcity, rather than alleviating it. When applied to the problem of policy design, recall biases of these sorts could produce an inferior set of policy altenatives since alternatives that are more effective or more appropriate may not be the most dramatic, most common, or the most consistent with existing biases.

A second heuristic is the *simulation* heuristic. An individual does not simply recall information from memory, but constructs something new in a manner resembling a simulation. When applied to the problem of policy design, we might envision an initial starting point (e.g., several analogous programs or laws that the person recovers from memory). The individual may combine these cafeteria-style, some parts from one program or law, some from another, and trace their effects forward toward desirable goals, altering the dimensions and characteristics or recalling others from memory to overcome stumbling blocks. Or the designer may work back and forth between the desired ends and the policy means, seeking to fill in the connecting links and altering both ends and means until a reasonable model emerges.

Whether this produces good ideas for policy depends on the range of ideas the person is able to imagine as well as on the validity of the causal theories in the person's mind. An engineer who is faced with a flood, for example, will choose to respond with dams, dredges, and levees, rather than think of zoning regulations that restricts building in the flood plain.

A third heuristic, *anchoring* comes into play when individuals focus on an initial anchor or starting point and revise their thinking in small increments from that point (Slovic, 1986). The resulting ideas depend heavily on the starting point; incremental policy change is one result. However, during the design of new policies, or major redesigns of existing policy, examples of statutes or programs from other places or contexts often are used as prototypes. Hence, the initial selection of these prototypes may have a profound effect on the alternatives given serious consideration. For example, the city manager form of government was initially proposed as a good government model aimed at overcoming inefficiency and corruption in local government. This model was adopted virutally without change throughout the United States. Anchoring has

the greatest potential for aiding, rather than inhibiting, innovative policy if examples are drawn from different cultures and differen policy areas.

Two other closely related problems identified by decision theorists may truncate the search process before an adequate array of good ideas has been uncovered. These are overreliance on the results from small samples (Tversky and Kahneman, 1971) and overconfidence in predictions of effects (Fischoff et al. 1981). Decision theorists have found that even research psychologists and persons trained in statistics tend to overestimate the accuracy of their own predictions under conditions of uncertainty, and place too much reliance on small samples. These problems, when combined with the fact that policy makers often satisfice rather than maximize utility, serve to cut short the search process after review of too few analogous policies.

Requiring tests for Acquired Immune Deficiency Syndrome (AIDS) illustrates a truncated search process. Policy makers may be vastly overestimating the effectiveness of testing for AIDS because they recall the effectiveness of testing for other sexually transmitted diseases. An expanded search process would have revealed that the effectiveness of the previous policies depended upon the fact that the diseases, if detected, were curable, whereas AIDS is not.

Briefly restated, the research on policy invention and pre-decision processes suggested that individuals reason by analogies, search through large amounts of information using decision heuristic rules to simplify their efforts, make successive comparisons, and copy or simulate patterns of information. Whether this produces policy alternatives that will be effective in solving the problems faced by decision makers depends on the range of ideas that occur to the decision makers, the similarity of context between the sources from which the ideas were drawn and the one at hand, as well as the efficacy of the ideas themselves once they are translated into policy alternatives. All of these, in turn, depend heavily upon the previous experiences of persons involved in the policy formulation process and upon the quality and quantity of information available to them.

For these reasons, an opportunity exists for policy scholars to contribute usefully to the design process. According to Alexander (1982: 288) 'The introduction of systematic search and design methods into the policy-making process offers perhaps the greatest potential for enhancing the quality and range of policy alternatives'. The most comprehensive review of current approaches is found in Bobrow and Dryzek (1987). Of the strategies they discuss, only two (welfare economics and public choice) have specific predictions for the content of policy. All others depend either upon a broader search, deduction from theory, or creativity. It seems reasonable to suggest that policy analysts should seek to enrich and expand experiences of policy makers vicariously. Rather

than relying exclusively on creative thinking or brainstorming, or on superficial examination of policy prototypes selected for idiosyncratic reasons, or on too few analogous policies, decision-makers should be presented with formal analysis containing descriptions and comparisons of similar or analogous policies found in other cities, states, or countries.

To a great extent, the biases introduced into designs through reliance on decision heuristics can be minimized by self-consciously recognizing that the heuristics exist, and by expanding the number of examples on hand for comparison. The latter point is important. Expanding the number of policy examples will make more ideas available and memorable; it will minimize the problems of anchoring, as the policy examples should contain a wide array of choices for specific situations, including ones from other cultural and social contexts; and it should improve the ability to develop accurate simulations by drawing upon the experiences in many other places. An expanded number of examples will reduce reliance on small samples and may help prevent unwarranted confidence in the effectiveness of a particular design as contrary examples are more likely to be found in a large sample.

The importance of context is emphasized by almost all policy scholars, and the comparative analysis of multiple policy examples may help avoid selection of policies that work in one context but not in another. By drawing examples of analogous or parallel policies from a wider variety of contexts, the analyst may be able to estimate the robustness of alternative policy designs for producing desirable effects regardless of context; or may be able to determine the types of contexts needed if particular types of designs are to produce desirable results. It is especially enlightening to draw examples from other countries where contextual differences are large.

Cross-national policy comparisons also contribute to innovation. National governments are introverted and career officials identify with particular ministries and programs. Unless the examples of other countries are brought to light through analysis, changes will be incremental even when faced with the kinds of problems that demand larger-scale changes. Of course, differences among political systems are important. Yet, program-specific characteristics exert a powerful influence, and policies in different nations in the same program area are likely to be sufficiently similar to provide numerous relevant examples (Rose, 1988).

A more systematic analysis of the underlying structural logic contained in the policy examples should improve the design process, as this will make the assumptions upon which the policies rest more explicit. It should enable policy designers to make better judgements about reactions to the policy and its potential effects within the context where the policy

actually will operate. To bring a wider array of policy examples to the attention of decision makers requires an efficient technique for comparative analysis of policies.

Comparative Analysis of Policy Logic

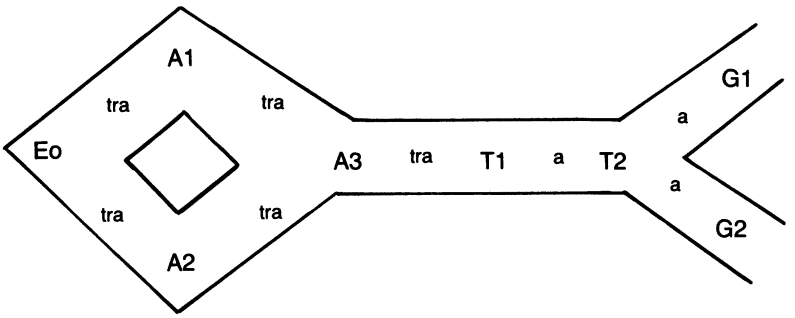
Scholars in policy design have provided useful guidance in identifying the key elements of policy logic. Empirical examples of policy, such as statutes or programs, are goal-oriented, purposive instruments that reflect values and that seek to influence the allocation of values for the society, or that seek to ameliorate problems (Bobrow and Dryzek, 1987; Linder and Peters, 1985; Wildavsky, 1979). Policies structure the implementation process by assigning responsibilities to agencies and specifying rules for decisions and activities (Sabatier and Mazmanian, 1987; Hjern, 1982). Policies seek to influence the decisions and behavior of target populations whose compliance, utilization, or reactions impinge upon the effectiveness of policy (Hofferbert, 1986).

Policies contain tools or instruments that are intended to motivate implementing agencies and target populations to make decisions and take actions consistent with policy objectives. Tools include concepts such as prescription (giving orders); enabling (providing the resources to give capacity; incentives (positive or negative payoffs); deterrence (Bardach, 1979). Others discuss tools ranging from mandates, licenses, grants, standards, and the like to vouchers and taxation. Empirical examples of policy also contain 'theories' or assumptions through which policy tools are related to the behavior of agents and targets, as well as assumptions that link their actions to technical or normative goals (Schneider and Ingram, 1988; Ingram and Mann, 1980; Wildavsky, 1979).

The basic elements of policy designs include purposes or goals, agents, targets, and linkages among these three elements. Linkages include policy tools, rules specifying the decisions and behavior that are consistent with policy purposes, and assumptions or theories why or how the tools will produce the desired results. The underlying structural logic contained in empirical examples of policy refers to the pattern in which the elements of policy occur, or the patterns through which policies address problems or seek to achieve goals (Bickman, 1987; Wholey, 1983; Mohr, 1987). Just as it is possible to diagram a sentence linking together the parts of speech, it is possible to diagram the structural logic of a policy by showing the relationships among these elements (see Figure 1).

In Figure 1, an initial policy statement, such as a juvenile justice statute, (E0) is linked to two implementing agencies, A1, the Office of Juvenile Justice and A2, the Department of Health and Human Services.

FIGURE 1. *Structural Logic*

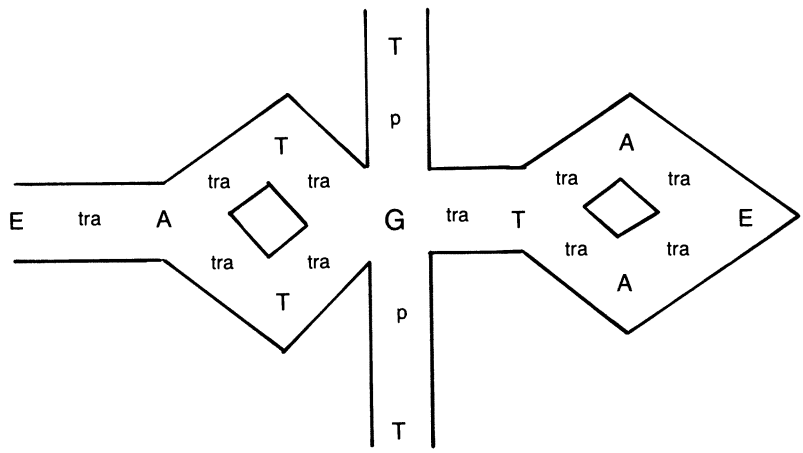


E – Statute by elected officials
A – Agency decisions and behavior
T – Target population decisions and behavior
G – Goals and purposes
t – Tools to influence decisions and behavior
r – Rules specifying the decisions and behavior, the timing, procedures and feedback (evaluation)
a – Assumptions (technical, normative, and behavioral)

These in turn, are linked to an operational program (A3). The program interacts directly with the target population of juvenile offenders (T1) in an effort to reduce the incidence of delinquency and to require juveniles to pay restitution to the victims. The reduction in delinquency and the payment of restitution are linked to a second target (T2: victims), who realize increased security from crime (G1) and increased fairness from the payment of restitution (G2). The linkages may contain tools (t), rules (r), and three different kinds of theories of assumptions (a). These are technical assumptions, normative asumptions, and behavioral assumptions.

If the policy design task focuses on solving a particular kind of problem, then the analyst may wish to diagram all formal policies directed at the problem, and may also wish to incorporate target populations in the private or voluntary sectors whose decisions and behavior impinge on the problem, even though these persons are not the direct targets of policy provisions. A diagram of this sort is shown in Figure 2. This perspective is akin to the bottom-up perspective in implementation analysis suggested by Hjern (1982), and Elmore's (1978) backward-mapping approach. The goal (G) in Figure 2 may refer to reducing the incidence of teenage pregnancy that may be alleviated through a host of formal policies and informal policies operating through public and private agencies or groups, including schools, parents, churches, hospitals, and peer groups.

FIGURE 2. *Problem-Oriented Structural Logic*



This diagram shows two formal statutes (E) directing activities of agents (A) and targets (T) toward a goal or problem (G). Two other target groups also are linked to problem amelioration through decisions and activities in the private sector (p).

Purposes or goals

Goals may be explicitly stated in written documents, learned through interviews, inferred from analysis of the policy examples or legislative history, or inferred from means/ends reasoning. Not all goals should be expected to be immediate, short term, measurable, achievable, clear, or consistent. Some goals serve hortatory purposes, the statements of which are an end in themselves. These kinds of goals are aspirations that provide a sense of direction and testify to the importance of certain moral principles. Policies often pursue goals that are inconsistent and require balancing conflicting interests or values. Although there is considerable disagreement at this time about whose goals or purposes should be included in an analysis, our position is that the analyst should be inclusive rather than exclusive and should seek to represent the values of all relevant groups, not simply the legislatively mandated goals or those of major interest to certain factions.

Target populations

Target populations are the groups or individuals whose decisions and behavior are related to policy goals directly or indirectly. This includes persons or groups who are expected to gain and lose from the policy. Targets may be explicit or the analyst may need to infer targets from

analysis of the policy content and the context in which it will operate. Policy provisions may designate eligibility rules or formulas (either for inclusion or exclusion) that define the target population, or the policy may provide broad definitions, or no definitions at all. If formulas are used, they may be based on characteristics or geographic areas or individuals. The critera may reflect principles of equality, need, equity (merit), effort expended, potential contribution to solving the problems, or some combination of these. Target populations referenced in the policy examples may reflect political or bureaucratic agendas that are divorced from cosideration of achieving substantive policy goals. Hence, the analyst should pay some attention to the linkage between each target and the goals to be achieved. The locus of control for selecting targets may reside in the initial statue or may be the responsibility of any implementing agency. Policy may permit targets to be self-selected or may provide for voluntary participation. The rules defining the target population may be precise and quantitative or vague, the latter permitting considerable discretion for lower-level agents.

Agents

Agents are the officials assigned responsibilities by policy documents as well as others who may have assumed responsibilities in relation to the policy. Dimensions of interest here include the locus of control (i.e., the level of government responsible for key design and implementation decisions) and the level of control (i.e., the amount of discretion permitted) (see Ingraham, 1987). Agents may extend beyond government agencies to private organizations that deliver services to target populations. Pinching ideas about the structure among agencies should be done with caution as selection of agents and assignment of responsibility primarily reflect contextual factors. Also, agendas other than the instrumental, substantive, agenda of concern to the policy deisgner may be important. For example, agents may have been selected because of their level of support for certain policy positions, the competence of their staff, the availability of slack resources, or other reasons unique to the context from which the policy example was drawn.

Linkage mechanisms

The linkages contain three kinds of assumptions: technical, normative, and behavioral. Some linkages also contain policy tools (means to influence decisions or behavior) and rules (stipulations about procedures, timing, and so forth). The actions of targets are connected to macro-level goals either through technical assumptions or normative assumptions.

1. Technical assumptions. These can be thought of as if . . . then inferences in policy that connect behavior of targets to technical goals or that connect one technical goal with another. For example, if water users stop pumping ground water, the water table will stop going down. If criminals are incapacitated for longer periods of time, the crime rate will decline.

2. Normative assumptions. Normative assumptions connect the behavior of the target with value judgements about social welfare. Water users should conserve ground water because it should be available to future generations. Crime should be decreased because people deserve to have more secure lives. Values are culturally specific and normative assumptions may vary from one country to another or from one time period to another.

3. Behavioral assumptions. Imbedded in policy are if . . . then assumptions relating policy tools to behavior of agents or targets. If water users are charged more for each gallon used, then the amount of water used will decline. If penalties for crime are made more certain and severe, then fewer persons will commit crimes.

4. Tools of influence. These are the explicit or implicit incentives and other means imbedded in the policy that increase the probability of agents and targets taking actions in concert with policy objectives. Many of the most common tools can be grouped into five broad categories: authority, incentives, capacity-building, symbolic and hortatory communications, and learning (Schneider and Ingram, 1988).

5. Rules. Rules prescribe actions of targets and agents. Among the most important rules are timing and procedures. Timing refers to the schedules or deadlines specified by policy documents for agents or targets to comply with policy, to take advantage of policy opportunities, or to achieve specific policy goals. Policy can take effect immediately, or its application can be delayed or staged. Delayed or staged implementation may facilitate the acquisition of technical information about the magnitude or nature of the problem, the education of the general or special constituencies, and the development of capacity within implementing agencies. Goals may be too ambitious to be accomplished immediately. Procedures may designate forms and access to decision making, and establish reporting and analysis requirements. These procedures may set up mechanisms to monitor and oversee implementation and to produce feedback about reactions to the policy and other policy effects.

An analysis of the structural logic of policy will expediate comparison and will make possible self-conscious and systematic transference of ideas in policy designs. Diagrams of the policy logic are only a guide to the critical elements of policy and can be drawn to any scale, depending on the

needs of policy designers. Broadscale maps of policy logic may portray an entire policy domain; detailed maps might be drawn of specific components of particular programs or to show how several different policies impact upon a particular problem or target population.

Characteristics of designs can be related to the policy making situations in which they were found, to different kinds of policy purposes, and to different policy results. By analyzing the logic of a larger sample of policy examples, it becomes possible for policy analysts to liberate the policy design process from the myopia imposed by the decision heuristics that characterize the more informal design processes.

Commonly Copied Policy Designs

It is beyond the scope of this paper to develop a comprehensive catalogue of design patterns, but some of the more commonly encountered ones are given below. In the past, the informal design process has been characterized by copying policy elements and underlying policy logic because it was consistent with prevailing fashion and experience. Consequently, in systematically pinching from existing policy models, the analyst needs to be aware that past policies are like geologic strata, their composition revealing a good deal about the design processes at work at particular times and in particular substantive areas. Given the importance of context, care must be taken not to copy designs without careful thought about differences in contexts, values, and technologies that may impinge upon policy effects.

The Wilsonian or Authority Design

Many existing policies still contain Wilsonian notions of the role of administration in government and how administrators can be motivated to deliver policy objectives. The idealized Wilsonian administrator is value neutral and willingly follows policy directives. It is possible to separate policy from administration, and administrators simply administer the directives of policy. Judgement is restricted to professional matters where experts supply the necessary knowledge.

The behavioral assumption underlying these policy designs is that individuals do things because they are supposed to do them, and the incentives inherent in the hierarchical structure will be sufficient to achieve compliance. Hence, the policy relies on mandates, tightly prescribed rules, and agencies that are linked together in the policy chain through a series of superior-subordinate relationship. Neither street-level bureaucrats nor targets are given much discretion in action. Little attention is given in policy to the capacity of agents or targets to perform

mandated actions. The timing for compliance is usually immediate, and rules restrict access of outside influences to the administrative process. Such feedback as may be required by rules is to inform hierarchical superiors.

When authority strategies are extended to target populations, they often take the form of criminal or civil codes where certain behavior is simply prohibited (or required) and penalties established for violations. If the behavior does not fall into line with policy objectives, a common response is to increase the certainty or severity of penalties rather than to shift to other strategies.

Borrowing heavily from authority designs involves certain risks which analysis need to assess (O'Toole, 1987; Ingram, 1989; Hjern, 1982; Gormley, 1987). Although these are among the simplest designs to formulate, they often do not work as expected. For example, Gormley (1987) points out that reliance on coercive controls to induce desired agency behavior usually is not necessary to achieve compliance and often will have counterproductive results. Agency officials are motivated by incentives other than those inherent in a hierarchical arrangement. Citizens are not likely to cease engaging in widely-accepted practices simply because it has been prohibited by law, even when the penalties are quite severe, as with driving under the influence of alcohol, or use of recreational drugs. Another problem is that it may be impossible to develop comprehensive designs that take into account all of the different circumstances that will be encountered by local-level service providers. For instance, agents and targets may not have the capacity to do what is mandated even if they want to do so.

Capacity-Building Designs

Capacity-buidling is a common policy strategy in certain domains in a number of different countries. Cross-national data from eight western democracies indicate that education and health programs command high levels of public expenditure and public employment – both of which are necessary components of raising capacity (Rose, 1988). In both health and education, the operative policy assumption is that the target populations will embrace opportunities for improvement if they are made available. Great Society programs of the 1960s in the United States also were good examples of capacity-building designs. The prevailing assumption was that poverty, discrimination, and other social problems could be eliminated if enough resources were committed to the effort. It was assumed not only that agencies if given sufficient resources would implement appropriate program ideas, but also that disadvantaged people, when given a chance, would change their habits.

The behavioral assumption underlying capacity-building strategies is that motivation is not a problem: people will make decisions and take actions consistent with policy if they have the resources and opportunites to do so.

Provision of resources, such as equipment, training, technical assistance, or dollar grants, are the most common tools found in capacity building designs. Resources often are granted with no operational strings attached except that the resources be used to build the capacity for which they were provided. Timing for compliance may be open ended and rules often provide for open access and participation in administration. Evaluation requirements may be non-existent as higher-level agencies assume that lower-level agencies know which policies will be effective and that they will implement these.

As the wealth of analysis has made clear, capacity-building approaches do not always produce desired results. The assumption that only lack of capacity prevents policy relevant behavior may not be warranted. Many of the capacity-building strategies used in the United States are initiated by one level of government that provides 'seed money' to a lower level with the understanding that if the program is effective, the lower-level government will pick up its cost in the future. Thus, capacity-building programs may fail to survive, even if they are effective, because lower levels of government may not have the resources. Similarly, capacity-building programs directed at target populations, such as job training programs, are intended to produce self reliant individuals who will be able to find jobs in the private sector. If such jobs do not materialize, the programs may appear to have failed. Another problem with capacity-building designs is that agencies may engage in 'net widening' or extension of the target population beyond that intended by policy in an effort to become eligible for more capacity-building resources. Thus, services may be provided to persons for whom they were not intended or who do not need them. Further, some agencies pursue bureaucratic or political power agendas and select strategies other than those that would have the most dramatic impact on the problem for which the resources were intended.

Tangible Incentives Designs

The past decade in the United States has seen a marked increase in policy designs that motivate agents and targets through provision of tangible payoffs, both positive and negative. Pollution control through establishment of standards and charges for polluting the atmosphere is an example. Economic development policies often rest upon positive incentives, such as tax waivers, grants, favorable regulations, and so forth.

These designs are distinguished from authority designs by the fact that the latter mandate (either prohibit or require) certain practices and enforce the requirements either through the hierarchical structure among agencies or through the criminal and civil code. The latter confers an ethical or moral repugnance on certain behavior and seeks to extinguish it entirely. Incentive designs do not attempt to extinguish certain practices, nor to condemn them, but only to insure that persons who engage in these practices, are charged for them, or to offer rewards for pesons who engage in the contrary practices. These designs assume individuals respond to incentives and disincentives, and that they generally can be counted on to act in their own self interest. Individuals here are assumed to be free agents who pursue self-defined benefits.

As with the other designs, those that rely upon positive or negative incentives do not always produce policy-preferred results. Mistakes may be made in anticipating how agents and targets define self interest. The payoffs often take the form of economic benefits or other tangible goods that government can provide, and not all individuals are motivated mainly by these kinds of payoffs. Further, some behavior that policy makers wish to encourage may be regarded as so undesirable that no incentive-based polices will be effective; or some behavior may be so enticing that even severe penalties do not serve as a deterrent. Further, lack of knowledge and capacity by agents or targets whose behavior is at issue may inhibit understanding and preclude the effectiveness of incentive-based strategies.

Symbolic and Hortatory Designs

Symbolic and hortatory designs encourage compliance or utilization of policy through manipulation of symbols. By contrast with authority designs, practices are neither required nor prohibited. In contrast with capacity and incentive designs, no actual or tangible goods are offered. Rather, policy urges or encourages certain actions by attempting to alter perceptions, attitudes, or values.

Some policies simply state their purposes and priorities thereby giving deference to some values over others and lending the reputation of the governing body to certain objectives. Other policies motivate policy-preferred behavior through appeals to normative beliefs about what is just, correct, and 'right'. Policy may appeal to people's sense of justice or may seek to modify attitudes and beliefs in an effort to induce compliance or behavior consistent with policy goals. Policy designs may call for information campaigns that promote norms or beliefs consistent with policy objectives, or that associate certain behavior with norms or beliefs that are widely accepted.

Some policy designs seek to influence behavior through the provision of postive labels, or by avoiding negative labels. In the United States, for example, massive de-institutionalization movements have occurred in which persons have been removed from large, state-operated institutions for criminals, delinquents, mentally ill, mentally retarded, and so forth, into community-based programs. These policies draw upon the notion that individual behavior is influenced by the labels inflicted upon people by public policy and by society, and that providing special institutions for certain kinds of people produces negative labeling effects. Hence, policies that label individuals as 'criminal' or 'sick' or 'unemployed' or 'poor' or 'dumb' may produce or enhance the symptoms of these problems thereby exacerbating rather than solving them.

The risks and shortcomings of symbolic and hortatory policy have been well documented (Edelman, 1964). Although feelings about policy may be positive, accomplishments may not materialize. Symbolic and hortatory policies that fail to achieve objectives may result in cynicism and alienation among agents and targets. Individual targets may unfairly be put in a double bind where their self interest is at odds with the values to which policy is designed to appeal.

Policy Learning Designs

Policy designs may provide to lower level agents or targets a wide choice of policy tools, few rules to constrain their actions, or may be silent on a wide range of decisions and actions that might be taken in relation to particular problems thereby permitting discretion and innovation rather that directed activities. Policy learning designs, however, are more than a pure 'hands off' approach in that they seek to insure that those who select from among policy tools have the capability and incentives to learn about the effects of their actions. Such policy designs may also be more open ended about purposes and objectives, specifying only broad-based goals such as crime reduction, preservation of natural resources, or community development. These designs may be adopted when problems are perceived as needing immediate action, but neither kowledge about which actions would alleviate the problem nor widespread support for any particular action exists.

Policy learning designs may specify how those with authority to make decisions learn whether there is compliance and learn about other effects of their decisions. The mechanisms may range from formal evaluation and monitoring to manipulation of organizational and political arrangements that facilitate policy oversight, such as requirements for public hearings.

Learning strategies are clearly warranted when there is great uncertainty about goals, about the choice of targets, agents, or tools to influence

them. However, learning is not an end in itself and unless policy-related progress is made, the strategy may appear to be government for its own sake. It may be difficult to distinguish learning that is essential to the production of improved policy in the future from delay, goal displacement, or excessive red tape and paperwork.

Conclusions

Policy analysts have not given full attention to the matter of policy design, believing it to be either so specific and technical or so creative as to defy systematic study. Yet, the policy implementation literature and the evaluation literature suggest that many policy failures can be traced to the flaws in statutes and in program theory.

Reviewing what is known about the design process makes clear that design is less a matter of invention that it is of reasoning by analogy, search through possible examples relying on decision heuristics, or indiscriminately copying policy based on prevailing fashion or limited knowledge and experience. We have argued here that the pinching of ideas needs to be formalized, and that policy analysts can play an important role through comparative policy analysis.

Because all policies have certain common elements, that is, they attempt to achieve policy relevant behavior through the manipulation of targets, agents, and linkages, it is possible to break examples of policy down to basic constituent parts, and to analyze different patterns in which elements have been arranged in previous policy. Through such analysis, policy analysts can inject into the policy design process a much wider range of examples and expand and enrich the policy ideas known to policy makers. As Lindblom pointed out (1959), decision makers limit their consideration of alternatives to those they know about, a limitation that constrains the search process to the policy streams with which they are already familiar. The stream can be enlarged by diagramming and examining the underlying logic of policies in other cities, states, or countries; or policies with similar elements but in different policy domains.

Systematically comparing policy ideas not ony expands the experiences of policy makers vicariously, but also opens the design process to participation by general policy analysts without specific previous expertise in the policy area. This is especially important in emerging policy areas and areas undergoing redefinition.

A more systematic approach to policy design also provides some hope to escape the constraints of fashion in policy designs that in the past have been copied, at times almost slavishly, with little considerations of their appropriateness. Some kinds of designs occur rather commonly: Wilso-

nian or authority designs, capacity building designs, incentive designs, symbolic or hortatory policy designs, and learning designs. Many policies incorporate mixed designs, either because of exceptionally varied behavior requiring a diverse array of tools, or because policy failures have resulted in shifts to new designs without eliminating old ones.

Unfortunately, not much is known about which designs are effective in which kinds of policy contexts. Political scientists seem more adept at documenting design failures than finding successes. Nevertheless, by intentionally selecting a wider array of policy examples and by careful analysis of the underlying structural logic of the examples, a real opportunity exists for comparative policy analysis to contribute to improved policy design.

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