# Instruments of Government: Perceptions and Contexts

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ABSTRACT

Government uses a wide variety of instruments to reach its policy goals, ranging from indirect methods, such as moral suasion and cash inducements, to more direct ones involving government provision of services. Although there has been a fair amount of writing on the nature and use of various policy instruments, there is very little work on either the meaning ascribed to these instruments by the decisionmakers who use them (or the experts who design them) or the processes by which some come to be favored over others. Characteristics of the political system, such as national policy style, the organizational setting of the decisionmaker, and the problem situation are all likely to have some influence over the choice of instruments. The relative impact of these variables, however, is likely to be mediated by subjective factors linked to cognition. Perceptions of the proper 'tool to do the job' intervenes between context and choice in a complex way. Efforts to account for variation in instrument choice, then, must focus not only on macro level variables but on micro ones as well.

Governments have a number of tools at their disposal for exercising their influence over the economy and society. These tools range from simple exhortations to complex tax and benefit schemes. As often as these tools are used by government, however, they are not well understood. The inadequacy of our knowledge is especially noticeable when it comes to the political meaning of various tools and the process by which government officials choose among them. An instrument's meaning and appeal to decisionmakers can ultimately be traced to individual perceptions and the subjective values that reinforce them. How decisionmakers and their policy advisors perceive the instruments of government policy conditions their views of problem situations, biases their expectations of performance, and shapes their choices. Further, these perceptions operate within a complex ecology of contexts, beginning with the decisionmaker's

immediate organizational circumstances and extending to features of their political system. Understanding instrument meaning and choice, then, will take us beyond cognitive variables to consider their interaction with organizational and systemic factors.

Although inquiry into policy instruments is not new, the approach taken here differs from most other work on this topic in its commitment to a subjectivist interpretation and to bridging different levels of analysis. It is relatively unconcerned with normative evaluation of instruments (Tinbergen, 1956; Kirschen, 1964), or even with attempting to provide a thorough description of their characteristics (Kettl, 1987; McDonnell and Elmore, 1986; Hood, 1984). Rather, our interest is concentrated on how instruments are viewed by actors inside and outside government who make choices about them and, more specifically, in the criteria used by those actors to judge the suitability of instruments for addressing policy problems. The importance of the user's viewpoint is hinted at in the literatures on the tools of government and on policy design, but it has not yet been addressed systematically. Instead, objective criteria underlying instrument choice have been either inferred from general patterns of use (Salamon, 1981) or attributed to decisionmakers based on functional policy definitions (Phidd and Doern, 1978).

Our ultimate aim is to develop a multi-level theory of policy design that will both account for micro patterns of instrument choice and contribute to a better understanding of the macro features of the policy design process. Accordingly, our analysis begins with the cognitive factors that shape instrument choice and appraisal and then attempts to place those subjective factors into their proper institutional and systemic context. At the level of the decisionmaker, cognitive factors effectively mediate all performance information and determine which, if any, technical information on policy design become a part of the calculus of instrument choice. The factors salient to design and choice then are likely to vary not only with the background and roles of experts and decisionmakers but more importantly with their cognitive orientations and certain features of their context.

From this subjectivist perspective, the empirical record of the successes and failures of a given instrument across problem situations becomes far less important than decisionmakers' perceptions of that performance. Viewing performance through the eyes of the decisionmaker, and perhaps the eyes of the designer as well, is more tractable empirically than collecting and classifying extensive case materials across numerous policy domains. More importantly, it promises greater validity since so much of what constitutes the reality of policy is socially and politically defined and can easily confound the objective categories imposed by an outside investigator. Starting from a cognitive foundation, we are better able to

piece together how the available theory about instruments, technical and anecdotal information on their performance, and contextual factors influence judgments about instruments without relying solely on logical reconstructions of policy types or observed patterns of instrument adoption.

Although it would appear that much of the selection of policy instruments is done through familiarity, political tradition, or professional bias, it is still extremely important to know what decisionmakers believe they are getting when they choose one instrument rather than another. This can be accomplished simply by asking decisionmakers to position instruments with respect to each other; alternatively, one can request that instruments be rated on a number of explicit criteria. In the former instance, criteria are discovered inferentially, while in the latter, they are supplied by the investigator as explicit hypotheses. Neither approach is superior, although the inferential strategy is typically ignored in favor of the more familiar terrain of the rating scale. The open-ended questions common to most elite interviews (Putnam, 1978), moreover, are too blunt a device to reveal underlying perceptual structures. Yet, using rating scales alone elevates the risk of false positives, in effect, discovering criteria of dubious relevance. Accurately mapping the decisionmaker's perception of instruments will require more careful attention to measurement issues than in the past, and a more complex measurement strategy.

To link perception with choice, however, we must turn to context. Several distinct notions of context are important here: one encompasses the institutional setting within which the decisionmaker operates; another is synonymous with the problem situation that creates the occasion for instrument choice; and yet another is a convenient summary of the temporality and other unique circumstances of the choice. In the first sense of context, we expect the organizational, institutional, and systemic setting to exert a subtle influence over the perception of instruments and, largely working through these perceptions, to affect choice.

The influence of the second notion of context is more troublesome since it entails some behavioral assumptions about how problems are addressed and, more generally, about policy formulation. To the extent that formulation occurs in a 'garbage can', with instruments in search of problems, we can expect the problem context to be mediated by the *ex ante* choice of instrument. At the opposite extreme, viewing formulation as an analytical exercise automatically assigns the problem context a definitive role in instrument choice. In effect, instruments are designed to meet the requirements of problem situations rather than vice versa.

The empirical question is: do decisionmakers (and perhaps experts) tend to choose the same instruments regardless of the problem under consideration, or do they pick different instruments to match, at least in

their own minds, a given situation? A tendency to favor the same instruments across problem contexts would suggest a close link between instrument perception and choice, and attribute much of the variation in choice to the decisionmaker's attributes and setting. Conversely, if choice varies systematically by problem situation, the link between choice and instrument perception becomes confounded by perceptions of the situation itself. The setting then would exert its influence on choice not through how instruments are viewed but by the way problems are structured.

The third notion of context as a unique constellation of events and circumstances that cannot be generalized and yet accounts fully for any given choice has contributed much to the richness of the case study method. It creates a presumption of uniqueness that justifies attention to detail but resists development of contingency statements. Although we adopt this notion of context, we restrict its influence to indirect means involving the choice setting. From this perspective, it is not the choice of instrument *per se* that is temporally unique but rather the emergence of the organizational setting within which choice takes place. When the decisionmaker's organization was founded, in other words, should matter more in explaining instrument choice than when a given choice was taken.

### Research on Policy Instruments

The conceptual backing for the propositions posed above is drawn from several bodies of literature in the policy sciences. While we can discuss these bodies separately, they share a concern with how governments attempt to perform their tasks, and a reformist penchant for seeking how government might be able to perform those tasks better.

#### Policy Design.

Concern with the instruments used by government to reach its policy goals fits within a more general concern for policy design (Linder and Peters, 1984; Bobrow and Dryzek, 1987). The basic questions are: how do governments choose goals, how do they select means for reaching goals, and how do those means conform to evaluative standards appropriate for assessing public policy? Formulation is the least analytically-developed stage of the conventional policymaking process model (Jones, 1977; Peters, 1986), at least in terms of the understanding of its dynamics by policy experts. We as yet do not have the degree of understanding about how governments choose or fashion remedies as we do about how governments choose problems to address, or have those problems thrust upon them (Kingdon, 1984). Thus, an important component of understanding the instruments of government will be understanding where the

tools come from (conceptually and practically) and the decisions processes involved in selection.

Here it is important to distinguish between two alternative uses of the term policy design in the literature. In one sense, policy design means little more than systematic cogitation about policy (Miller, 1984; Ingraham, 1987). This meaning would hearken back to the old debate between incrementalists and synopticists, and would come closer to the synopticists than would most policymaking literature in the United States (Braybrooke and Lindblom, 1963; Simon, 1947). The alternative meaning of design is the development of a systematic understanding of the selection of instruments and evaluative dimensions (Linder and Peters, 1984). This would include a prior understanding of the processes of causation of public problems, and hence some conscious attempt to select instruments that address those processes. Hence, in this second meaning of the term, not all systematic analysis of policy is design; design is reserved for purposive analysis directed toward instrument selection and appropriate means of assessment.

### The Classification of Tools and Instruments.

Most scholars are now well aware that government has a number of instruments at its disposal, and that these tools embody different mechanisms for achieving a public policy goal. That fundamental awareness aside, a number of deficiencies remaining in the classification of the tools of government, and numerous weaknesses in the connection of those classifications to other aspects of policy analysis. There is perhaps an even greater weakness in the manner of relating available policy instruments to the decisional process in government itself. Even if experts could agree on the nature of policy instruments, a number of questions would remain about how those in government would conceptualize their own alternatives.

The first large scale attempt at classifying policy means was Kirschen's (1964) analysis of the tools available for economic policy. This is a very detailed analysis with 64 types of instruments, relying upon the economist's interest in the selection of optimal instruments for intervention, and an associated normative analysis of the instruments. This was an exercise in the enumeration of available tools and their economic effects rather than either an attempt to build a taxonomy of those tools or an analysis of the broad range of effects one type of instrument or another might have. It does, however, establish a standard for comprehensiveness and further provides a useful check-list against which to compare any other enumeration or taxonomic scheme.

The classificatory analysis of policy instruments became more

apparent to political scientists and policy experts with Mosher's (1980) concern with the instruments available to government, and the increasing utilization of non-expenditure instruments to reach policy goals. He provides a (very) rough catalogue of available instruments, but concentrates attention on the simple dichotomy between expenditure and non-expenditure instruments. This style of analysis was pushed forward somewhat (Salamon, 1981; Kettl, 1987) and their concern for third-party government. They also concentrate attention on the rather simple dichotomy between direct and indirect service provision, but go further than Mosher to identify differences in the political effects (but with little concern with other categories of effects) of those two classifications of instruments.

Subsequent classification efforts have provided more detailed analyses of the available instruments. Several classificatory schemes have employed only four broad categories to attempt to capture the full range of government activity. Hood (1984) used the acronym NATO to describe what, in a very broad sense, governments can do: *N*odality, *A*uthority, *T*reasure, and *O*rganization. This classificatory scheme implies that government can approach its problems by using the information at its disposal, its legal powers, its money, or its formal organizational capacity. McDonnell and Elmore (1986) also use a four-fold scheme for 'generic classes of instruments': Mandates, Inducements, Capacity-building, and System-changing. Their approach also provides some limited guidance concerning assumptions underlying each class of instruments and the expected effect of each. In a more-fully developed classificatory scheme Doern and Phidd (1983) discuss a continuum of instruments for intervening into the economy, ranging from self-regulation to public ownership. The dimension underlying this continuum is the degree of intrusiveness of the instruments (see also Phidd and Doern, 1978).

There are a number of problems with each of these schemes or taxonomies. First, the simpler schemes, e.g. Hood and McDonnell and Elmore, contain extremely broad categories, so broad perhaps that there is as much variance within them as between them (Ingram and Schneider, 1988). Further, it is not at all clear that the categories are necessarily mutually exclusive, although they are probably collectively exhaustive if we are willing to stretch their common-sense meanings. For example, since almost all public laws and therefore all public policy instruments involve Authority from Hood's scheme, where does the authoritative element of a tax program end and the treasure element begin? Or, in the McDonnell and Elmore scheme, cannot some inducements be capacity building? It appears that these schemes do not conform to fundamental standards of taxonomy construction (see McKelvey, 1982).

A second problem with these classificatory schemes is that they remain just that. There is relatively little attempt at utilization of these schemes as mechanisms for policy analysis. This could be done in one of at least two ways. The first would be to develop evaluative mechanisms related to the instruments, or to the entire range of instruments. What do we expect in a 'good' policy instrument, and what sort of mixes of criteria does each instrument imply? As we will point out, that utility may have to be contextualized at some later time, but there would be a place at which to start the analysis. To the extent that there are evaluative criteria associated with policy instruments they tend to be uni-dimensional (political or economic) rather than sufficiently multi-dimensional to reflect the reality of policymaking situations.

Alternatively, instead of evaluating the instruments in the abstract, there might be more attempt to evaluate them contextually, and develop contingent relationships between policy problems and policy instruments. This may beg a prior question—where are the usable classifications of policy problems?—but it is nonetheless an important direction in which to carry a concern about policy instruments. Such an approach would, in fact, require the development of an enhanced understanding of the nature of policy problems, moving beyond simple nominal categories (health, education, etc.) and beyond the simple classifications (e.g. Lowi, 1972; see also Spitzer, 1987) that have been used so often in political science.

Finally, as implied above, we will need to move beyond the abstract analytical schemes concerning policy instruments to a more complete understanding of the manner in which they are conceptualized by the individuals who must make policy decisions, and contextualized to meet the demands of particular situations. It may well be that those decision-makers do not, in fact, have very complete conceptualizations of policy instruments (Kelman, 1981). They may make their decisions about what policy instruments to employ based on tradition, intuition, ideology or merely familiarity. Whatever the empirical 'pictures' which the decision-makers carry in their heads about instruments, it is important to understand something of the dynamics of choice if we are to understand policymaking. In this case, as in so many other aspects of policymaking, the social constructionist viewpoint may be essential to understanding what is really happening with the participants in the process (Steinberger, 1980; Berger and Luckmann, 1966). Further, if one purpose of this type of research is to improve the quality of the decisions taken in government, it will be important to make more complete information about instruments available to decisionmakers (Dunn, 1982).

As we attempt to understand policy instruments, it is important not to lose sight of the institutional influences on their selection. Not only do the

individuals who inhabit government institutions have ideas about the appropriate policy instruments, institutions themselves appear to embody certain approaches to policy problems. We do not mean to reify the institutions, but the collective memory of an organization will tend to produce the same results from deliberations over time. Not only does the collective memory of an organization tend to be associated with the repetitive use of certain instruments, but the very nature of institutions may limit their choices.

## An Approach to Building Theory on Instrument Choice and Policy Design

Four elements are necessary to develop a theory of instrument choice and policy design: 1) policy instruments, the basic building blocks of public policy 2) attributes of these instruments, serving both as criteria of appraisal and organizing principles of perception 3) contexts within which assessments typically occur, and 4) users and purveyors of instruments whose behaviors we intend to explain.

1) The Quest for a Basic Set of Generic Instruments

There is little agreement in the literature on a basic set of domestic policy instruments common to Western liberal democracies, however, nor is there anything approaching consensus on a set of general classes of instruments that might serve as strata to define sampling frames. Part of the problem is a nominalist penchant for novelty and the appearance of innovation in policy design. We call something by a different name either to avoid associations with past failures or to encourage associations with valued symbols. Medi*care* and Social *Security* are both insurance mechanisms in the United States authorized under the same organic statute with compulsory premiums and age (or condition) based eligibility. And yet the former was given the appearance of an in-kind transfer program and the latter of a public pension plan. Should these nominal differences be subordinated to their functional similarities? Is there one instrument here, or two?

A related difficulty is that few instruments are limited to only a single function or to serving only one objective at a time. Consequently, identifying the policy instrument actually employed in a given circumstance may be less than straightforward. Agricultural price supports have the appearance of an insurance instrument designed to counter the variability of crop prices associated with changing weather conditions. Yet the primary function would seem to be the transfer of income to farmers in lean years. Are these kinds of price supports an insurance instrument or a transfer instrument? Should we classify an instrument by its explicit functions or its implicit ones? The expressed intentions of the framers are unlikely to be of much help in disentangling symbol from

substance or explicit functions from the implicit ones. In a pluralist system the framers themselves seldom agree. The investigator's purposes then may be the only warrant available for defending these choices.

While the distinction among functions is largely an arbitrary one based on the investigator's analytical perspective, the more interesting issue is why, in the crop support example, the cash transfer aspect remains implicit. Why use price support mechanisms instead of relatively more efficient cash grants? To be sure, some functions are more sensitive politically than others; accordingly, support for a given instrument may depend on those functions remaining implicit or at least indefinite. Tax credits may be used to mask the magnitude of government subsidies to business, for example, or loan guarantees may be used to subsidize certain activities without necessitating any current financial outlays. In short, appearances matter, but the discovery of the various implicit functions served by a given instrument tells us *why* they do.

A third difficulty in arriving at a basic set of instruments for study is that both nominal and functional differences can be confused with different levels of generality. An apparent difference between instruments may stem more from differences in the scale of their operations or in the scope of their intended results than from any basic dissimilarity in their workings. A testing and inspection requirement may represent a distinctive instrument when compared with public certification, for example, but both serve a basic screening function, with the latter simply being the more inclusive of the two. Any given sample is likely to contain several instruments that are nominally different but can be logically arranged into a hierarchy of increasing inclusiveness.

The chances of confusing differences in level of generality for basic functional differences can easily complicate comparisons across instruments. Any given pair of instruments may represent the same mechanism, but one may be a special case of the other, may encompass a larger variety of operations, or may be directed at a broader target. Are these differences at all comparable to basic functional ones? Should they be treated distinctly from the nominal differences mentioned above? Again, are there two distinct instruments represented in such cases or only one?

Many instruments represent mixed levels of generality undermining any uniform strategy for treating comparisons across levels. Instruments may be functionally similar but differ in the scale of their operations, in the range of special cases they encompass, or in the scope of their targets. To the extent that instruments entail different levels of variety, scope of operations and scale of objectives, any micro-macro distinctions only muddy the waters. Consider, for example, the problem of comparing a credit instrument such as open market operations, that while assuming only a few distinct forms is targeted at economy-wide indicators, with loan

guarantees which come in an array of shapes and sizes but are narrowly targeted at eligible households and enterprises. Neither can be said to include the other as a special case. Both are likely to affect interest rates and bear some functional similarity. Yet, they are seldom viewed as either competitors or substitutes.

The upshot of all this is that compiling a defensible list of basic policy instruments is no simple matter. Moreover, a generation of efforts to do so based primarily on typologies of policy impacts (Lowi, 1972; Spitzer, 1987), governmental roles (Ripley, 1966; Hood, 1984) or policy functions (Dahl and Lindblom, 1953; Lynn and Seidl, 1975) has made little cumulative progress. Most efforts identify four or so general classes and sort illustrative instruments among them; some hypothesize about the instruments themselves (Doern and Phidd, 1983) and others only about the general classes (Hood, 1984; Spitzer, 1987). While no definitive list of policy instruments has emerged from this literature, it does serve as an extensive and accessible compilation of strong candidates.

Once we have a consistent notion of the instrument as a reliable unit, we can attempt to enumerate the population of units, and then draw a sample of 'representative' instruments that will capture something approaching the full range and variety of workable designs for implementing public policy. The enumeration of the population undertaken here is based on a synthesis of published lists of instruments, eliminating repetition but preserving their assignment to general classes. While four classes came up repeatedly as the preferred number, they were hardly ever the same four. We use seven classes to accommodate these disparities: 1) direct provision 2) subsidy 3) tax 4) contract 5) authority 6) regulation (the only consensus class), and 7) exhortation. The idea is to avoid biasing our sample of instruments in a way that might not permit us to accommodate others' priorities and points of view. Unlike earlier efforts at building lists from typologies, our aim is not to preserve a tidy classification scheme but rather to be able to capture experts' and decisionmakers' logic in use. Accordingly, the accuracy of the link between a given instrument and a particular class or type matters less than thoroughness in arriving at a representative list. The proper links between instruments and instrument classes as well as the identities of the classes themselves remain key empirical questions.

Tentative enumeration of instruments that emerges from this selection procedure is intentionally second best with no assurance of either an exhaustive or mutually exclusive set of entries. Claims to an exhaustive listing can easily be rebutted by pointing to the 'levels of generality' problem introduced earlier. Similarly, claims about mutually exclusive listings can be shown to be insensitive to the complex interplay between an instrument's functions and its (nominal) appearance. Nonetheless, to

ensure balance across classes and representativeness within them, our list includes three instruments from each of the 7 classes, along with 1 extra instrument from the two largest classes, regulation and subsidy. The list of 23 instruments intended to be representative of the various enumerations found in the literature appears in the Appendix. The list provides a useful reference point for eliciting policymakers' judgments.

2) Design Criteria, and the Attributes of Instruments

Much of the analytical effort at typologizing the instruments of public policy has been motivated by the prospect of building a theory of instrument choice as a vantage point for understanding policymaking. Presumably, the instruments chosen reveal something about the intentions and purposes of the choosers, over and above the influences and constraints of a particular context. The corollary is that the choice of instrument, and more generally the design of policy, has substantial consequences for performance. Few would deny that every instrument interacts with its context; however, it is the relative importance of the interaction for performance that remains an empirical question (compare Majone, 1975 with Doern and Phidd, 1983). To the extent that the choice of instrument has an independent effect, the criteria underlying that choice reveal not only the most important components of instrument design but also the dimensions of performance that appear most salient to the chooser.

Those more attentive to the interaction of instrument with context advocate a close match or goodness of fit between them rather than any particular characteristic of the instrument itself (Mayntz, 1981; Elmore, 1985). This interactive view of instruments and context bears an interesting relationship to the attempts of systems experts at prescribing the best tool for a given job. For Elmore, in contrast, finding the very best tool is secondary to properly defining the job and then sorting out the contingencies. With the job taken as given, however, the instrument's capacity to alter the context in the desired direction—its efficacy— becomes its only relevant feature. While appealing in its logic, this teleological view is insensitive to the many factors that contribute to the soundness of an instrument's design, irrespective of its efficacy in a given context. Such views can offer no account, besides human fallibility, for instances when the less efficacious or 'wrong' instrument happens to be chosen. Attempts to refine this account with the notion of 'feasibility' operating as an arbitrary constraint (Meltsner, 1975; May, 1981) work once again to shift the focus from the instrument *per se* to conditions prevailing in its context.

There is a line of reasoning, extending back to Dahl and Lindblom's early work (1953), that focuses on the attributes of instruments as a means of highlighting the necessary tradeoffs among them. Such tradeoffs

effectively foil any attempt to arrive at a single best instrument. From their survey of instruments, Dahl and Lindblom (1953) conclude that less coercive instruments generally appear both harder to control and more resource intensive than more coercive ones. Although Ripley (1966) substitutes intrusiveness for coerciveness and level of selectivity in impact for ease of control, he poses the same basic tradeoffs. Less selective instruments tend to be more intrusive, and while cheaper to administer, they are more costly in terms of political support.

Later work narrows the focus but reinforces these conclusions. Concentrating on the tradeoff between administrative costs and political support, Salamon (1981) finds that the same characteristics that make instruments easy to manage, also make them prone to political opposition. Hood (1984) refines Ripley's notion of selectivity to encompass ease of control and accuracy but also finds that while instruments with these qualities are typically less intrusive they tend to also be resource-intensive. Diver (1983) completes this connection by tying accuracy to complexity. Simple instruments economize on the costs of monitoring and enforcement but are generally inaccurate and error-prone; that is, they may mis-define subjects or misdirect them. These errors in turn create unnecessary intrusions. To achieve greater accuracy, one must be willing to add to the complexity of an instrument's design and bear the higher costs of its administration.

In sum, three basic relationships frame the central tradeoffs: 1) the higher the precision of the instrument, the less intrusive it is likely to be 2) the less intrusive the instrument, the less likely it is to arouse public opposition, but 3) the higher its precision, the more complex and costly the instrument is to administer. One's choice of instrument then would seem to depend on the relative value one places on each of these four general attributes. In fact, several attempts have been made to explain patterns of instrument choice by imputing one or more of these values to decisionmakers.

Much of the work on policy and instrument types is organized, either implicitly or explicitly, around the theme of coerciveness; this focus is grounded in a political tradition that supports a presumption against liberty-limiting uses of governmental power. Arranging policy instruments along a continuum from the least to the most coercive effectively forms a natural ordering of steadily increasing burdens of proof and persuasion associated with the expansion of government's role in private activities. Further, different requirements of proof and persuasion can be seen to engage distinctive policy processes. By inference, in choosing an instrument somewhere along the continuum, in effect, one is also selecting the policy process required to implement that choice (Lowi, 1972; Atkinson and Chandler, 1983).

Taking this a step further, several investigators (Doern and Wilson, 1974; Phidd and Doern, 1978) treat the presumption against coercion as the central criterion informing decisionmakers' choices among instruments; that is, other things being equal, the decisionmaker will always choose the least coercive untried instrument, moving over time from least coercive to most coercive in any given policy area. Our earlier discussion of tradeoffs featured several variations on the coerciveness criterion, including intrusiveness (Ripley, 1966);—it suggested limitations being placed more on autonomy than on liberty—and a more inclusive constraint on subject (Hood, 1984). Together these attributes tap an underlying current of ideological thought that occasionally surfaces in public debate over instruments. In the absence of other information, ideological principles may provide the only basis for discriminating among complex instruments, as Kelman (1981) finds in his case study of fees and quotas as instruments of pollution control.

There are three distinct questions here. First, does coerciveness act as the primary criterion in instrument choice? Secondly, does an instrument's precision appear to mitigate its coerciveness in the same way, as some contend, it mitigates intrusiveness? And finally, do basic ideological stands, for instance, pro-government or pro-market, serve as generic principles for organizing thinking about instruments? The centrality-of-coercion hypothesis has been challenged by several investigators who find political support, or in the politician's case electoral self-interest, to be a more potent motivator of decisionmaker's behavior than any vague notion of coerciveness (Trebilcock, et al., 1982). This raises the question of public visibility and the risks of over- or under-inclusion on the part of a given instrument. The more visible instrument would appear to represent the greater opportunity (and risk) for seekers of political support. The bluntness of the instrument may enhance its visibility but at the same time may enlarge its opposition. Moreover, sharpening a given instrument is an expensive proposition. While the logic of these assertions has some appeal, the empirical question remains: are these tradeoffs a part of the real-world process of instrument choice?

The attributes discussed here can be loosely grouped into four general categories: 1) resource-intensiveness, including attributes such as administrative cost and operational simplicity 2) targeting, taking in precision and selectivity 3) political risk, comprised of attributes related to support and opposition, such as public visibility, and 4) constraint, including coerciveness and ideological principles limiting government activity. The first and third categories, resource intensiveness and political risk can be viewed as correlates of political feasibility, as it might apply to individual instruments. Resource-intensiveness addresses intra-governmental concerns while political risk deals with external ones. The

second category, targeting, relates more to technical feasibility and the practical assessment of instrument quality. The fourth category, constraint, ties instruments to more fundamental beliefs about what is ideologically acceptable, over and above considerations of quality and cost. To ensure balance across categories and representativeness within them, we draw 2 criteria from each of these four categories. The resulting set of 8 design criteria and a tentative set of corresponding dimensions on which instruments might vary appear in the Appendix.

3) The Ecology of Contexts

One of the principal legacies of Harold Lasswell, as a founding father of the policy sciences, is the recognition that the policy context exerts considerable influence over both the course of events in policymaking and the outcome (Torgerson, 1985). To some extent, his championing of contextuality can be viewed as an antidote to the practice of policy analysis at that time; in effect, the institutional concerns of political scientists had finally found a place in the toolkit of practitioners trained in economics and operations research.

Ironically, at about the same time, political science was turning away from institutional concerns in the midst of a behavioral revolution. The notion of context as institutional framework thus became confounded with the systems idea of environment. Systems metaphors stressed adaptation and contingency as sources of behavioral variation and contributed to an undercurrent of environmental determinism in social science theory (March and Olsen, 1984). While the era of comparative state studies, with their emphasis on environmental explanations of policy variation, appears to be over, a milder form of determinism can still be found in policy studies that emphasize feasibility as a potent influence on both the decisionmaker and expert. For some, the selection of policy instruments has become simply an exercise in feasibility testing (Hoppe, van de Graaf and van Dijk, 1987).

Finally, the literature on problem structuring offers yet another way of understanding context and its influence (see Dunn, 1982). Here the emphasis is on neither the institutional framework nor the policy environment, but rather on the context of meaning which shapes how policy problems are defined. Once the issue of definition is resolved, the choice of policy instruments becomes a relatively straightforward matter of matching tool to task. To say that the context determines the selection and performance of instruments, from this perspective is to claim that instrument and problem share the same context of meaning, or, in other words, their connection rests in the eye of the beholder. This is consistent with the popular garbage can model of decisionmaking which admits that solutions (and their advocates) often go in search of problems rather than vice

versa, as the more rationalist models would have us believe (Cohen, March and Olsen, 1972).

Although some contextual factors associated with instrument perception and choice may be universal in their influence, we expect substantial variation in instrument processes across different combinations of organizational, institutional, and systemic characteristics, over and above the variation introduced by the decisionmaker's own attributes. An extensive catalog of these factors and their empirical combinations could be developed, but we will discuss only a sampling of the more salient ones. It should be noted that the relationships we posit are tentative and are intended as hypotheses. Further, our approach to these relationships de-emphasizes the tracing of processes that might link macro characteristics with micro ones in favor of a contingency perspective that searches out patterns of common variation. The set of these characteristics selected as hypothesized contributors to variation in instrument choice appears in Table 1.

### The Systemic Context.

The study of comparative public policy has tended to focus more on the extent to which individual nations have become involved in various policy domains, rather than on their selection of instruments. In part this is a legacy of the premise due to Lowi (1972) that policy domain effectively delimits the choice process. There is some indirect evidence to suggest that national policy styles (Richardson, 1982) are likely to influence the perception and choice of policy instruments across such domains. The instruments that appear natural in one nation to address its policy problems may not appear natural in another. While it remains an empirical question as to whether these variations in policy style reflect traditions and institutional habits or a more self-conscious analytical process, we expect national styles to be responsible for a fair amount of variation in instrument choice.

Although the precise meaning of political culture is open to different interpretations, our use of the term is intended to capture the values of a statist tradition in different countries, and hence the acceptability of centralized governmental intervention into the economy and society. We hypothesize that, other things being equal, countries with a more statist tradition, such as in Germany and Scandinavian nations, will accept more intrusive policy instruments more readily than in less statist countries. Relatedly, we would expect the relative coerciveness of instruments to matter less as a criterion for instrument choice in those countries that have a strong statist tradition. If supported, this conjecture would

TABLE I: A Tentative List of Causes of Variation in Choice of Policy Instruments

| EXOGENOUS FACTORS | | | ENDOGENOUS FACTORS |
|---|---|---|---|
| CONTEXT AS SETTING | | CONTEXT AS PROBLEM | |
| *Systemic Variables* (Macro) | *Organizational Variables* (Meso) | *Problem-Specific Variables* (Meso) | *Individual Variables* (Micro) |
| National Policy Style | Organizational Culture – pattern of recruitment | Policy Domain – crowding – scale | Background |
| Political Culture (Statism) | – period of establishment | Requirements – symbolic | Roles – professional – institutional |
| Social Cleavages | – pattern of socialization | – functional – support | Cognitive Factors – perceptions – ideology |
| | External Contacts – policy communities – clientele | Constraints – existing commitments – resource limitations | – values and criteria |

limit the scope of the centrality of coercion hypothesis associated with the work of the Canadian scholars Doern and Phidd (1983).

To the extent that social cleavages based in language, religion, region, and so on, are present in a country and have substantial political salience, governments may prefer less visible policy instruments. For example, varieties of tax and regulatory instruments would be preferred over direct expenditures or governmental provision of services. Presumably, the gains and losses conferred on different social groups by regulatory controls or tax breaks are less readily calculable than those associated with expenditure and service programs, and hence are less likely to raise objections based on inequity among competing groups. Similarly, governance in divided societies may require more coercive instruments, while in well-integrated, more homogeneous societies, instruments such as public promotion and information may be sufficient for the same purposes.

### The Organizational Context.

In addition to the contribution of national characteristics to defining the context for perception and choice, the characteristics of particular organizations within the public sector also play a role. Organizations have cultures and value systems just as do nations, and they also have

both a mission and an institutional memory shaping the course of their intervention in a particular policy domain. This institutional context creates what amounts to a predisposition toward some instruments and against others.

Consider the contribution of the time period in which the organization was formed to the development and persistence of a unique set of values and symbols that might be reflected in instrument choice. Organizations formed during periods of expansion in the public sector, e.g. the New Deal or the Great Society in the United States, may be more inclined toward expenditure-based instruments, say, cash grants or the direct provision of services by the government, in part because of the ethos of confidence in government and an ambitious sense of purpose. On the other hand, organizations formed during periods of fiscal restraint may tend toward more cautious measures of smaller scale and lower expectations, favoring cheaper regulatory instruments, for example, over more intensive spending programs. Once set at the time of establishment, these elements of organizational culture may be difficult (although certainly not impossible) to change and may have a lasting influence over instrument perception and choice.

Another organizational factor affecting the selection of instruments is the nature of external contacts. These contacts will be of at least two different types. One is the nature of the clientele served by the organization. Some of these relationships may be very obvious; organizations serving disadvantaged populations will tend to rely on cash grants or in-kind transfers more than will other organizations. Other relationships may be somewhat more subtle. So, for example, organizations serving multiple clientele groups, or which have multiple purposes, may rely (much as we argued above for the national level) more on regulatory instruments to be able to serve all factions in a relatively evenhanded way.

The second aspect of the external environment of the organization is the policy community within which it functions. The developing literature on policy communities (Campbell, 1989; Walker, 1989) points to the importance of the contacts of public organizations and programs with research organizations, multiple interest groups, other governmental organizations, etc. in shaping policy. While this is usually discussed more in terms of choosing to intervene in a policy area and the content of policy, the policy community may be of equal relevance in the selection of the instruments of policy. This is especially true given that think tanks in particular tend to become associated with particular policy instruments and may advocate those as solutions to a variety of policy problems. If such a think tank is included as a significant component of policy community of the public sector organization, then that organization will be under some pressure to adopt that particular instrument.

*Context As Problem Situation.*

First, individuals may respond to a given context with judgments of effectiveness that remain fairly constant across particular instruments. For the most part, the attributes of any given instrument are thought to matter less than the prevailing conditions, including feasibility, political support, and so on. Second, how an individual assesses an instrument may be largely independent of the context within which it is applied. This is the contra-Lasswellian view that remains a part of the policy sciences. In this instance, contextual factors would seem to play a much smaller role than do the characteristics of the instruments themselves. Third, some contexts may induce certain tool assessments consistently in individuals, regardless of other differences in their training or points of view. This convergence of tools and contexts is consistent with what happens in the garbage can model, with opportunity rather than particular individuals prompting the convergence. Do assessments of instrument effectiveness appear to be consistent across contexts? Do certain individuals favor certain tools regardless of the particular job to be done?

4) Types of Users

The point made above concerning the need to understand decision-makers' conceptualizations of the available instruments should be extended to make a clear distinction between the producers and consumers of knowledge about policy instruments (Dunn, 1986; Dunn and Holzner, 1988). Academics have been the producers of the analysis about instruments, but there is little evidence that this analysis has actually penetrated to the target consumers of that knowledge—those in government who must actually make decisions. For example, Kelman (1981) found that few of those making decisions about environmental policy instruments could provide any detailed justifications for their preferences for certain instruments. They tended to respond in terms of some vague ideological predispositions, and their familiarity with instruments currently being used.

While cognitive factors are important in design decisions, we expect other characteristics of individuals to interact with them. Consider, for example, the fundamental differences between the theorists and producers of designs outside government and the consumers and promoters of these design ideas within government. Although we expect systematic differences in perception and evaluation to emerge within these two groups, based on background and training, we anticipate a more dramatic set of differences, based on role and status, to emerge between these two groups. Such differences would be consistent with the two-worlds metaphor grounded in the knowledge utilization literature. The alternative hypothesis, however, is that networks will tend to form around

particular instruments, based on shared perceptions and beliefs that overwhelm any role differences, and perhaps background ones as well.

The individuals who comprise an organization are likely to influence the types of instruments that the organization favors. A number of characteristics of individuals may be associated with preferences toward certain instruments. For example, just as organizations may be influenced by the period in which they were formed, so too may individuals be influenced by the time period in which they are socialized politically, and in which they were recruited to the organization. Organizations have age lumps (Downs, 1967) of employees whose values may affect instrument selection. Perhaps more important than age or general socialization is the professional socialization received by members of an organization. Everything else being equal, we would expect individuals trained as lawyers, for example, to first think of using legal instruments (administered contracts, procedural guidelines, etc.) with which they are most familiar rather than other types of instruments (Gormley, 1986). Likewise, economists tend to think first of tax and expenditure instruments, or other incentive-dependent instruments such as franchises. This tendency may be reinforced by organizational memberships, as some organizations come to be dominated by one profession or another.

Similarly, it may also be reinforced by the characteristics of national administrative systems. For example, the pattern of recruiting lawyers into the civil service in various Northern European countries might tend to generate a greater reliance on legally-oriented instruments than might otherwise be expected. To the extent that any analysis of instruments has penetrated into government, it appears to have done so in the form of economists and/or lawyers who bring with them the biases of their respective professions toward certain types of instruments, and toward different standards of assessment (Gormley, 1986).

### An Alternative Path to a Theory of Design

The above discussion advocates an alternative way for developing and ultimately testing theory about the design of policy instruments. It stands in stark contrast, however, to the path most often advocated in the literature on instruments and policy design. In the simplest of terms, the received view is that theory development can best proceed inductively by generating contingency statements from case materials that illustrate the application of different instruments to policy problems (see Greenberg, et al., 1977). The evidence on instrument performance rests on the investigator's case-by-case judgments about the goodness of fit or match of instrument to problem. Presumably, the mismatched or poorly fitting instrument is one that performs well below the investigator's expectations

for a given problem. Prescriptions are thought to follow directly from the resulting inventory of satisfactory instrument-problem matches. Accordingly, as new policy problems arise they should be matched to those instruments judged to have performed adequately on roughly similar problems. Generalizations from observed patterns of instrument-problem matches not only sustain these prescriptions but also serve as the basis for any theoretical propositions about the design of policy.

A decade ago this case inventory approach to solution development drew considerable interest. Its appeal seemed to rest on two, widely-held ontological premises: first, that context was the overriding influence on performance, in effect, making each policy problem unique; and second, that the key to enhancing performance, following the logic of the contingency theories then dominating the field of organization studies, was to mold interventions to fit this context. Despite its early promise, however, this approach in practice has advanced neither the formulation of solutions nor the progress of theory. As applied to the study of implementation, for example, it has yielded contradictory propositions and low-grade prescriptions that seem to hold little attraction for policy makers (O'Toole, 1987). More importantly, the ontological assumptions behind this approach appear less tenable than they once were, in part, because of the demise of situational determinism in the behavioral sciences and the recognition that contingency theory has not fulfilled its promise for organizational design.

Once the ontological commitments to context and fit are put aside, the inventory of cases approach loses much of its rationale. The evaluative burden this approach places on the investigator, especially when added to the tedium of case collection and coding, is simply too great to compensate for the limited rewards associated with idiosyncratic detail. This approach holds the investigator responsible for classifying both problems and instruments, somehow without sacrificing contextual richness. Further, the investigator must determine whether the application of instrument to problem in a given case represents a match or mismatch, corresponding in some well-defined way to policy success or failure. In effect, the policymaker who implicitly performs these calculations in each instance is relegated to the sidelines. Not only is agency ceded to the flow of events that define each case-in-context but all reconstructive judgment is left to the investigator. If it is not the policymaker's own judgment on these matters that informs the inquiry, what reason does he or she have for attending to the results?

The alternative approach to theory construction advocated above is more phenomenological, since it places the policymaker at the center of the valuative judgments that frame the inquiry. It is the policymaker's criteria—not the investigator's—that structure judgments about instru-

ments and serve as the basis for any working taxonomy. It is the policymaker's judgments—not the investigator's—that determine whether a given instrument has succeeded or failed. Finally, it is the policymaker's biases—not the investigator's—that shape the relative influence of context and of the perceived attributes of instruments on design choices. In putting aside the premises that suppress the autonomy of the policymaker, we are better able to understand the judgments that are being made, and the mental pictures that policymakers have of the instruments they choose to employ. Understanding the subjective side of those instruments should also clarify the various meanings assigned to them, their status, and the logic (or illogic) behind their selection. In contrast to the case inventory approach, we are principally concerned with the policymaker's own criteria and subjective premises rather than with any objective characteristics that an outside investigator might wish to impute to particular instruments.

Consistent with this argument, the best way to build typologies of policy instruments is to ground them in policymakers' own views of what makes instruments operationally and symbolically comparable or unique. As with the case inventory approach, the construction of analytical typologies that are purely a product of the investigator's induction seemed to hold early promise as a path to theory development. While typologies have proliferated in the last two decades and serve as a source for our tentative enumeration of instruments, they have yet to produce a definitive middle-range theory of policy instruments worthy of empirical verification. From our perspective, progress has been slowed by the discontinuity between the perspectives of the policymaker and those of the investigator or, more generally, by the gap between the logic-in-use of the former and the reconstructive logic of the latter.

The typologies that policymakers use to organize their thinking about instruments may not have much of a theoretical basis or elaborate dimensionality, but then again may not be as simplistic as some we have discussed. The point is that—much like the workings of context—the form and content of the typologies most relevant to policy design are, in large part, empirical questions not easily dismissed by assumption or resolved by analytical fiat. The typologies underlying design choices may exist in the form of simple dichotomies—for example, market versus non-market instruments or, on a more elementary level, those perceived as available for use versus those that are not. Whatever their form, it is important for the progress of theory to understand typologies as conceptual devices that frame the point of view of the policymaker.

Despite the limited contribution that analytical typologies have made to the development of theory about instruments and design, they have played a key role in redefining the study of instruments as a *comparative*

enterprise. The alternative emphasis on in-depth study of a single instrument in a unique context may satisfy the requirements of program evaluation or impact assessment but yield only weak inferences about policy design and its constituent processes. To be able to conclude that a particular instrument has been poorly designed in a given instance can be valuable as a prelude to further inquiry into other substitutes. By itself, however, such a conclusion reveals little of the antecedent considerations that led up to the choice of instrument in the first place. We have suggested an approach to mapping the subjective elements in instrument choice and use that should provide a useful starting point for a comparative analysis of policy design. Our chosen path to theory development will join these subjective factors to an ecology of contexts likely to account for variation in instrument choice.

APPENDIX: *A Tentative Enumeration of Representative Policy Instruments and Design Criteria*

### THE SAMPLE OF POLICY INSTRUMENTS

| | | |
|---|---|---|
| cash grant | gov't-sponsored enterprise | in-kind transfer |
| loan guarantee | 'tax break' | fee/charge |
| certification/screening | gov't provision | fine |
| administered contract | quota | prohibition |
| quality standard | 'jawboning' | public promotion |
| information/demonstration | procedural 'guideline' | insurance |
| loan | license/permit | price control |
| public investment | franchise | |

### THE SAMPLE OF DESIGN CRITERIA

| ATTRIBUTES OF INSTRUMENTS | RANGE OF VARIATION |
|---|---|
| Complexity of Operation | Low ................................ High |
| Level of Public Visibility | Low ................................ High |
| Adaptability Across Uses | Low ................................ High |
| Level of Intrusiveness | Low ................................ High |
| Relative Costliness | Low ................................ High |
| Reliance on Market | Mostly ........................ Mostly |
| | Market            Government |
| Chances of Failure | Small ............................ Large |
| Precision of Targeting | Low ................................ High |

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