The Analysis of Information Policy

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A WELL-KNOWN WRITER ON information policy once stated at a dinner speech: "In information policy everything is related to everything else." Such a viewpoint certainly does make a listener aware of the complexity that surrounds and is part of information policy, but it does nothing to enable the intelligent layperson, or even a policy analyst, to understand and evaluate analyses of information policies written by others. On what basis are we to judge policy analysis of information issues? Should our primary anchor be the Constitution, or economics, or the progress of science, or international development? Should privacy and the free flow of scientific ideas be sacrificed for national security and secrecy?

These are questions that the policy analysts and information professionals have been grappling with and continue to grapple with daily. The purpose of this article is to give the reader some background for assessing and evaluating policy analysis in the field of information; describe the various contexts in which such policy is formulated, implemented, and evaluated; and provide some predictive comments about the role of information policy analysis for the future. As an end product, it is hoped that the reader can more effectively assess a policy analysis on information.

The focus of this paper is *public policy,* which means policies made by governments on behalf of its citizenry. This focus implies that the government making the policy has some power at its disposal in order to effect a given policy. But what is public policy? One broad definition describes public policy as "a set of interrelated decisions taken by a

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political actor or group of actors concerning the selection of goals and the means of achieving them within a specified situation where these decisions should, in principle, be within the power of these actors to achieve."[1] This definition emphasizes that public policy is a decision to do something and that the decision concerns a specific area of human society. These two characteristics of public policy can therefore help to explain all the different types of analysis used by policy analysts in helping an organization to reach a decision and also explain why academics and applied analysts tend to work in specific areas of public policy such as health care, economics, civil rights, or information policy.

In order to understand the analysis of information policy four key areas will be explored: (1) the policy process itself, (2) types of policy, (3) models or assumptions about policy-making, and (4) values inherent in policy analysis. Systems analysis, queuing theory, PERT charts, and the like will not be part of this discussion. Instead, policy analysis will be viewed from a more abstract vantage point.

The Policy Process

Policy theorists have attempted to divide the process of making public policy into several stages and once these stages are defined, to explore each stage in more detail. The three stages are usually identified as policy formation, policy implementation, and policy evaluation and feedback. These stages have been given various names and different ancillary activities have been added to one or another stage. One of the reasons that these stages have emerged is that distinct types of activities and actions go on in each stage and these differences have suggested this trichotomy.

Policy Formation

Policy formation focuses on several areas. First are the policy actors themselves. In order for policy-making to take place, people must be involved. These policy actors are those who make the policy decisions and those who influence the policy-making positively or negatively. They may be in different levels of government and have different types of constraints on their activity. If they are within the bureaucratic hierarchy (as opposed to those who can, for all intents and purposes, ignore the bureaucratic constraints), they probably must follow organizational rules that limit their activity and influence. If the policy actors are elected officials, the ever-present concern of reelection may influence

their behavior and therefore the scope and strength of their influence on certain issues is altered accordingly.

Policy actors may also be outside of government altogether but have a special interest in the adoption of a specific policy by the government. These actors from outside government attempt to influence the governmental policy actors who have the authority to make policy. "Thus, policy making usually involves a diverse set of authoritative, or formal, policy makers, who operate within the government arena, plus a diverse set of special interest and other constituency groups from outside arenas, who press their demands on these formal leaders."[2]

Second, policy formation involves policy goals and instructions. In order to carry out a policy effectively, or even to make a policy, the actors presumably have a goal in mind. This goal may be technical, social, or political; it may be implicit or explicit. The difficulty with analyzing this stage of policy-making is identifying the goals implied by the policy. Some policies do not have explicitly stated goals. This, of course, will effect how the policy is implemented.

A policy without clearly defined goals can be interpreted according to those goals perceived, with or without justification, by those implementing the policy. These perceived goals of implementers and the implicit but not clearly stated goals of policymakers may not always coincide. In addition to the goals of the policy, specific directions for implementing the policy are often given. This is desirable because without specific directions about how the policy should be implemented and the authority to enforce these directions, the policy may not be implemented in a way desired by the creators of the policy. Hence, clarity in both the definition of policy goals and policy directions is essential in order to implement a policy. Without goals and specific directions, the implemented policy may not at all resemble the original intent of the policymakers.

Policy Implementation

Many factors have been identified that affect the implementation of policy. Making a policy does not ensure its implementation in a form intended by the policymakers. At the implementation stage, many changes can occur that often are beyond the control of the policymakers and that often cannot be foreseen by even the most astute political veteran. Groups affecting policy implementation include: (1) policymakers, (2) formal implementers, (3) lobbyists or lobby agencies, and (4) the press. The power of each of these groups varies depending on the type of policy.

Policy implementation usually involves a different set of actors. However, policymakers do get involved usually in order to ensure that their policy is implemented in a way consonant with their original intent. They may intervene in the implementation of their policy in different ways depending on their authority or power, and they may take credit (a good policy outcome is a political asset) or disclaim responsibility (a poor political outcome is a political liability) for the actual implementation.

Formal implementers are responsible for implementing a policy made by another set of people at a different level of government—the policymakers. Formal implementers include administrators within departments, agencies, bureaus, and regulatory agencies. There are also agents of these implementers, such as governmental bureaucrats at the state or municipal level.

Lobbyists also are active in this stage of the policy process. Lobbying takes place in an attempt to make the implementation of a specific policy work for the lobbyists' constituency. Coalitions of like-minded groups, or separate agencies themselves, may bank together to influence the implementation of a given policy. Finally, the press and representatives of the mass media also influence this aspect of the policy process. The well-placed story, the vitriolic editorial can and does have an effect on the implementation of specific policies.

Besides these specific actors, there are other constraints on the implementation of policy: these are organizational structures—e.g., internal operating regulations, resource allocation guidelines, and the psychological motivations of the implementers themselves. Different organizations have different assumptions about their own operations. Researchers have identified different institutional models of policy implementation: the systems management model that looks at the implementation as a "goal-directed activity"; the "bureaucratic process model" which views implementation as a routine process of continually controlling discretion; the "organizational development model" in which implementation is seen as a participatory process on behalf of the implementers; and the "conflict and bargaining model" which views implementation as a conflict and bargaining process.[3] These organizational models influence the way in which policies are implemented because of the expectations about implementation that are inherent in them. Furthermore, internal rules and regulations often dictate how policies are implemented. The rules and regulations often win adherence over the actual intent of the policy implemented. For example, during the Cuban missile crisis, President Kennedy was often frustrated

because the armed forces' standing operating procedures would auto-
matically intitiate actions, such as a specific type of alert, that interfered
with Kennedy's own executive actions to defuse the crisis.

Any organization, in spite of the policy directive ordering imple-
mentation, has to operate within the constraints of its own resources. If
a policy requires more resources than the organization possesses, the
policy will not be implemented to the extent intended by the policy.
Finally, psychological attributes of the implementer may influence the
implementation of policy.

Policy Evaluation and Feedback

Policy evaluation attempts to answer the question of how well or
how close the policy comes to achieving its original goals. For the
purpose of this discussion, however, financial evaluation through au-
dits is not considered. The evaluators can be identified as policymakers,
the policy implementers, and formal program evaluators.

Policymakers usually engage in the least formal type of evaluation
depending primarily on feedback from the policy implemented. Feed-
back consists of mail, telephone calls, and other types of communica-
tions from the policymaker's constituency, which, over time, give the
policymaker an impression of how well a given policy has been received
by constituents. The policymakers base their actions, to a major degree,
on the assumption that satisfied constituents mean reelection; reelec-
tion means power, a major goal of politicians.[4]

Policy implementers, on the other hand, have a different approach
to evaluation. Like the policymakers, policy implementers have a per-
sonal stake in the success of their policy. Their reputation and future
depend on such success. Therefore, they attempt to maintain and
increase the support of policymakers for the policy implemented.
Because of this the type of evaluation coming from implementers is apt
to be biased in favor of the policy. Policy implementers can influence
the evaluation of policy in several ways: (1) they can filter information
about the success of the policy that is intended for the policymaker;
(2) they can mobilize support from groups affected by the policy and
urge positive feedback to the policymaker; and (3) they can use resources
of the program implemented to gain support from affected groups.[5]

The political stakes are high for both makers and implementers in
the evaluation process. Both groups of actors will naturally attempt to
put the best face on any policy with which they are involved. Because of
this bias, evaluations of policy emanating from these groups may not be
the most accurate indication about the success of a specific policy.

Another group of evaluators, technical evaluators, can sometimes provide the corrective that is needed for biased evaluations.

Technical evaluators are usually hired by policymakers or policy implementers in order to provide an objective evaluation of a specific policy. Of course, because of the financial arrangement involved, these evaluators are subject to pressure from their benefactors to examine a policy outcome in the most favorable light. Of course, these technical evaluators also must maintain their reputation as professional evaluators. They do this by providing an evaluation that is as objective and unbiased as possible. In order for a policy to be evaluated objectively, it must meet certain basic tests:

1. Policy goals are stated clearly.
2. These goals are precise enough to be measurable.
3. Implementation activities are directed toward achieving these goals.
4. Objective measures that relate implementation activities to goals exist or can be created.
5. The data necessary to verify these measures are available.[6]

The main problem usually encountered is that the first test is not met. Often the goals of the policy are stated in language that cannot be measured. For example, in one paragraph of the statute that set up the National Science Foundation (PL81-507, sec. 3[a][5]), one goal was to "foster the interchange of scientific information among scientists in the United States and foreign countries." On reflection, one will realize how difficult it would be to assess whether this goal had been met. The discussion of goals, however, brings us to the next area of discussion—i.e., policy types or areas of policy.

Policy Types

Theodore Lowi has described four types of policy identified by their functional goals. These types are distributive, redistributive, regulatory, and constituency-based. Lowi's purpose in describing public policy in this way is so that political scientists can "develop criteria for policy choice in terms of predicted and desired impacts on the political system, just as economists, biologists, and the like attempt to predict and guide policies according to their societal impacts."[7]

Distributive policies are those that are "characterized by the ease with which they can be disaggregated and dispensed unit by small unit, each unit more or less in isolation from other units and from any general rule. 'Patronage' in the fullest meaning of the word can be taken as a synonym for 'distributive' "[8] Regulatory policies attempt to control the

action of a group of persons or a corporate body by allowing or prohibiting behavior. The decision "involves a direct choice as to who will be indulged and who deprived." Examples are allocation of television channels and truth in advertising. Redistributive policies confer benefits, much like distributive policies, but they are different because they simultaneously take away benefits from other groups. The fourth type of policy—constituency policies, referred to by others, are self-regulatory policies—are the most difficult to describe and characterize. As Salisbury explains it they "also impose constraints upon a group, but are perceived only to increase, not decrease, the beneficial options to the group."[9] Lowi includes reapportionment or setting up a new agency as examples. These are distinguished from redistributive policies by the type of group immediately affected. With constituent policies the political party is the beneficiary. With redistributive policy, nonparty groups are immediately affected such as reserve controls of credit, progressive income tax, and social security.[10]

Characterizing policies in this way helps to understand what the policy actors perceive to be the functional goal of a policy. If we know the functional goal of a specific policy as perceived by the policy actors, we may be able to predict how the policy will be influenced by different policy actors, both public and private. Also, given the historical circumstances at the time of the policy-making, the probable success of adopting a policy can be assessed.

For our purposes it is enough to realize that political scientists have attempted to classify policies according to functional goals. When applying these four classes to information policy, as Linowes and Bennett have done in their paper, it is clear that information policy-making and implementation may be more difficult to understand than are traditional public policies that can be easily classified by Lowi's four-part typology. This difficulty arises because, while many different types of policies are subsumed under the rubric of information policy, it is not clear that their common characteristic of information coincides with each of the policies' functional goals. Further, certain information policies, such as privacy policy, may belong to another as yet unnamed policy type as suggested by Linowes and Bennett.

In speaking about these four policy types, based on functional goals, the functional goal was that perceived by the policy actors. Assumptions about the perceptions of policy actors, as well as their motivations, determine to a great degree the analysis of a given policy. Analysts' assumptions about the perceptions of policy actors and the actors' behavior can be described as models of policy-making.

Models of Policy-Making

There are many models that attempt to explain the way people in organizations make decisions. Political scientists are continuously searching for the best model to apply to a given public policy. In this article only three such models will be examined—the rational actor model, the bureaucratic model, and the garbage can model. The description of these three representations will help us to understand the wide range of such models.

The rational actor model assumes that policy formulators and implementers are rational and are able to act unencumbered by external events. The main guide for action and decision-making is rationality. Hence the decision-making process involves the following steps: (1) identification of the problem; (2) consideration and description of all facets of the problem; (3) offering several solutions for the problem based on the constraints delineated in the second step; (4) outlining the advantages and disadvantages of each solution; and (5) choosing one of the solutions based on the assumption of achieving maximum benefit. The model carries with it some assumptions: there is enough time to carry out the process outlined; no interfering variables arise during the decision-making process; and once the decision is made for action, the desired result will be achieved.

Although this model of organizational decision-making is often used as a straw man by analysts, the assumptions that make up the model can still be seen in many public media accounts of policy choice and tragic events. When this model is applied one of two things happens. Either failure of the policy is attributed to the failure of the rational actors to consider all the alternatives and make the right choice (the events leading up to the bombing of the U.S. Marine barracks in Beirut is but one example), or the analyst is bewildered as to why the policy implementation did not turn out as was planned. The contention in this latter case is that the policy implementers followed the dictates of rationality but still were foiled.

The second decision-making model is the so-called bureaucratic model. This model assumes that in spite of the intent of those formulating the policy, once it moves to the implementation stage, certain phenomena affect the policy in possibly undesirable ways. The person using the bureaucratic model assumes that the bureaucracy is essentially a rule-governed system. People within the system make decisions on the basis of clearly established rules and modes of conduct. Any policy that is to be implemented by a bureaucracy must be transformed in such a way that whatever the intent of the policymakers about the implementa-

tion of the policy, the bureaucratic rules of the implementing organiza-
tion will be more powerful. In this type of implementation, rules, not
policy goals or rationality, carry the day.

The third decision-making model is called the garbage can model.
This is at the other end of the spectrum from the rational actor model.
This model applies to decisions where the goals may be far from clear
and the methods and constraints on implementation are assumed to
affect the final policy outcome. In this model the decision-making
process is pictured as a garbage can into which policy goals, organiza-
tional rules and constraints, the "right climate," and other often unex-
pected variables are thrown together. The resulting policy outcome is
often unpredictable and because of the ambiguous nature of the policy
goals itself, often unrecognizable.

The reader of a policy analysis should be aware that analysts have
certain assumptions about how decisions are made in government.
These assumptions are often not explicit, but they certainly affect the
conclusions of the policy analysis. One way of testing the credibility or
legitimacy of a given analysis is to ask what assumptions about organi-
zational choice the writer makes. If the assumptions are in doubt then
the entire analysis may come into question. Finally, there is one related
area of any given policy that may be more difficult to ascertain than the
writer's assumptions about decision-making. This is the area of
assumed values of the analyst.

Values Inherent in Policy Analysis

Carlyle Marney has stated: "All institutional loyalties are value
judgments. Institutionalism becomes a structure native to prejudice
precisely because the institution exists to mark the edges of a valu-
able."[11] All analysts have some type of institutional affiliation. These
affiliations and loyalties inhere in the analyst's judgment about a spe-
cific policy. For example, the analyst who works for the Environmental
Protection Agency (EPA) can be expected to have a different analysis of
an EPA policy than would the analyst who is employed by a waste
disposal firm. These types of institutional loyalties are strong and
probably the most visible. But there are other types of institutional
loyalties that are stronger and that are often more difficult to perceive—
i.e., the institutions of law, economics, politics, science, and religion.
These types of institutions, as much as those mentioned earlier, have
more power and influence on the conduct of policy analysis and on the
conclusions reached as a result of that analysis.

For example, the scientist arguing for the absence of any control on scientific communication will certainly and obviously be in conflict with a politician who claims that such unimpeded free access will damage the security of the United States. The creationist's claim that his beliefs are scientific will have an argument from a scientist who will attempt to dispute that claim, or from a district judge who will dispute it on legal grounds. These are cases where the conflict between the values of these institutions are easily discernible. But in other cases the conflict may not be readily perceivable because the reader adheres to the values of both institutions. For example, there is much publicity today about the technological race between the Americans and the Japanese. A book by Ezra Vogel at Harvard, entitled *Japan as Number One*, makes four recommendations for catching up with and surpassing the Japanese in high technology. One of these urges a deemphasis on individualism in this country for the good of the larger whole. It may be necessary, suggests Vogel, to curb civil liberties in order to achieve our goal of being number one.[12]

Although this may be oversimplifying Vogel's argument, we are faced here with a conflict in value institutions in which most of us are caught. On the one hand is the institution of economic security and supremacy and on the other is the American ideal of liberty guaranteed in the Bill of Rights. This type of value-laden analysis is more difficult to deal with because we have allegiance to both institutions of value. It is in this area of public-policy analysis, the resolution of ambiguity in decision-making and policy choice, that more work remains to be done.

Information Policy

How are the attributes of policy analysis applicable to information policy? Can these same categories be applied to information policy, and if so, why isn't more progress made in the analysis of information policy itself? One answer lies in an area to which most of the writers in this volume have drawn attention—the impact of technology on the transmission, reception, and use of information. Technology has rendered former policies governing information obsolete. These former policies were based on assumptions about information transfer and use in a predominantly print culture. Our culture is now no longer predominantly print. Whether we are in a transition stage from a print culture to an electronic culture, as many would maintain, is a matter of debate. But at the very least, the influence of electronic communication devices and computers has altered the base upon which previous policies were formulated. It is also this rapid introduction of new technology that is

responsible for the piecemeal character of information policy. For example, a policy is made in response to a new technology. Soon after implementation of the policy a new technological application is invented that requires modification of the existing policy or promulgation of another policy to cover this new aspect. Furthermore, with change occurring so rapidly, it is difficult to predict the characteristics of new changes that will require new policy. As a result, planning for information policy in order to have a coherent and sensible program is thwarted because of our inability to be prescient.

What is needed now is an intensive amount of work in information-policy analysis from a political science perspective given the categories of the analysis described earlier. We must move beyond the merely descriptive studies of information policy, as valuable as these are, to analytical and prescriptive studies of information policies. In spite of the burgeoning literature about information policy, we are still in a quandary about what information policy really is. What kind of policy is information policy? Is it a redistributive policy, a regulatory policy, or some new breed not yet described? Can we really speak of information policy at all or is it simply an umbrella term for problematic policies spawned by the advent of the new electronic communication devices and computers?

These are all urgent and difficult questions, but perhaps the most difficult ones will revolve around competing value systems. In formulating and implementing information policies, we as a society are going to have to make some difficult choices or the choices will be made for us by the momentum of the existing structures and values of policy formation and implementation. The process does not promise to be a cooly rational and calm one but is likely to be divisive and inflammatory. The outcome and the choices we make may eventually determine whether individual liberty and the freedoms guaranteed by the Bill of Rights will persist or, for the sake of an economically supreme and politically stable society, some of these rights will be curtailed. It is not too strident or alarmist to state that the present and future information-policy activity is central to our survival as a democracy. Hence, it is of the utmost importance that the greatest number of citizens be able to understand and critique information policies.

References

1. Jenkins, W.I. *Policy Analysis: A Political and Organizational Perspective.* New York: St. Martin's Press, 1978, p. 15.

2. Nakamura, Robert T., and Smallwood, Frank. *The Politics of Policy Implementation*. New York: St. Martin's Press, 1980, p. 32.

3. Ibid., p. 54.

4. Ibid., pp. 68-70.

5. Ibid., p. 70.

6. Ibid., p. 72.

7. Lowi, Theodore J. "Four Systems of Policy, Politics, and Choice." *Public Administration Review* 32(July/Aug. 1972):307.

8. —————— . "American Business, Public Policy, Case Studies, and Political Theory." *World Politics* 16(July 1964):690.

9. Salisbury, Robert H. "The Analysis of Public Policy: A Search for Theories and Roles." In *Political Science and Public Policy*, edited by Austin Ranney, p. 158. Chicago: Markham Publishing Co., 1968. Apparently this fourth type of policy is still vaguely conceived, even among political theorists. See, Ripley, Randal B., and Franklin, Grace. *Congress, the Bureaucracy and Public Policy*, 3d ed. Homewood, Ill.: Dorsey Press, 1984 for example, do not even have such a category (see esp. pp. 21-30).

10. Lowi, "Four Systems of Policy, Politics, and Choice," p. 300.

11. Marney, Carlyle. *Structures of Prejudice*. New York: Abingdon Press, 1961, p. 17.

12. Vogel, Ezra F. *Japan as Number One*. Cambridge: Harvard University Press, 1979, pp. 234-36.