Evidence, Argument and Persuasion in the Policy Process

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As politicians know only too well but social scientists too often forget, public policy is made of language. Whether in written or oral form, argument is central in all stages of the policy process. Discussion goes on in any organization, private or public, and in any political system, even a dictatorship; but it is so much at the heart of democratic politics and policy that democracy has been called a system of government by discussion. Political parties, the electorate, the legislature, the executive, the courts, the media, interest groups, and independent experts all engage in a continuous process of debate and reciprocal persuasion.

This process, as liberal theorists from John Stuart Mill and Walter Bagehot to Lord Lindsay and Ernest Barker have described it, begins with expressions of general concerns and ends in concrete decisions. Each stage of deliberation has its own function and its own organ. Parties identify issues and formulate programs; the electorate discusses issues and candidates and expresses a majority in favor of one of the programs; the legislative majority translates programs into laws, in constant debate with the opposition; finally, the discussion is carried forward to the chief executive and the cabinet, where it is translated into specific policies. Each of the stages and organs of public delib-
eration is independent, but only within the limits, and as a part, of the entire process: "the free and sovereign thing is the whole process of discussion."

This is an idealized model of democratic policy-making. It overlooks the play of power and influence, the uneven distribution of knowledge, the low level of active citizen participation, and many other factors that figure prominently in modern theories of public policy. But it emphasizes something that these theories have neglected—the extraordinary potential of persuasion and the centrality of two-way discussion to democracy.

Every politician understands that arguments are needed not only to clarify his position with respect to an issue, but to bring other people around to this position. Even when a policy is best explained by the actions of groups seeking selfish goals, those who seek to justify the policy must appeal to the public interest and the intellectual merits of the case. Perhaps these are only rationalizations, but even rationalizations are important since they become integral parts of political discourse. We miss a great deal if we try to understand policy-making solely in terms of power, influence, and bargaining, to the exclusion of debate and argument.

Argumentation is the key process through which citizens and policymakers arrive at moral judgments and policy choices. Public discussion mobilizes the knowledge, experience, and interest of many people, while focusing their attention on a limited range of issues. Each participant is encouraged to adjust his view of reality, and even to change his values, as a result of the process of reciprocal persuasion. In this way, discussion can produce results that are beyond the capabilities of authoritarian or technocratic methods of policy-making.

The Institutionalization of Discussion

However, this extraordinary potential can be realized only with the help of appropriate rules and procedures. Unregulated discussion easily ends in unending dispute and even in violence. An unorganized deliberative body is open to various forms of disruption, such as filibustering.

To avoid or reduce these dangers, public deliberation has been carefully institutionalized in all modern democracies. Today's elaborate codes of parliamentary, electoral, administrative, and judicial procedure are the fruit of centuries of experience in coping with practical problems of public deliberation. The general purpose of these procedures is to insure the hearing of many opinions without compromising the need to reach a conclusion. Their importance is such that the history of democratic government is, in a real sense, the history of various procedures devised to institutionalize and regulate public deliberation.

While rules of debate have hardened into institutions in the traditional forums of public deliberation, in newer arenas of debate such as nuclear safety, technology assessment, and environmental and health regulation appropriate procedures and standards of argument are still lacking. One reason it has proved difficult to institutionalize debate in these and other areas of policy-making is that the issues under discussion here are seldom purely technical or purely political. Rather, they often are of a type that Alvin Weinberg has called "trans-scientific"—questions of fact that can be stated in the language of science but are, in principle or in practice, unanswerable by science.

A typical example is the determination of the health effects of low-level radiation. It has been calculated that in order to determine by direct experimentation, at the 95 percent confidence level, whether a dosage of X-ray radiation of 150 millirems would increase the spontaneous mutation in mice by ½ percent, would require about eight billion mice. Time and resource con-

constraints make such an experiment practically impossible. Similarly, the choice of a dose-response function to determine the "virtually safe" dose of a toxic substance must be treated as present as a trans-scientific question. There are literally thousands of mathematical functions that fit the experimental data equally well, but no firm scientific basis now exists for choosing among the different possibilities. However, the choice of a particular function has a major effect on regulatory decisions.

When science, technology, and public policy intersect, different attitudes, perspectives, and rules of argument come into sharp conflict. Scientific criteria of truth clash with legal standards of evidence and with political notions of what constitutes sufficient ground for action. Factual conclusions are not easily separable from considerations having to do with the plausibility of the opponent's assumptions and his selection of the evidence or choice of methodology. And because there seems to be no objective way of checking the conclusions of analysis, the credibility of the expert becomes as important as his competence.

Increasingly, public debates about regulatory decisions, nuclear safety, technology assessment, and similar trans-scientific issues tend to resemble adversary proceedings in a court of law, but with an important difference—the lack of generally accepted rules of procedure. Some participants are able to take advantage of the relative informality of the process, but to scientists even codified adversary procedures seem inappropriate and alien to their tradition. In science the issue is not a witness's credibility but his specific competence—his ability to establish scientific truth—and this is not reliably established by an adversary debate. Hence various proposals to resolve disputes about scientific issues with policy implications by carefully breaking down a problem into purely technical and purely political components. Experts should deal only with the technical issues, turning their evaluations over to the political process for determination of the appropriate policy response.

For example, the "science court" proposed by Arthur Kantrowitz would only examine, and decide upon, questions of scientific fact. After the evidence has been presented, questioned, and defended, the panel of judges (who are established experts in areas adjacent to the dispute) issue a report in which the points of agreement among the experts are given. The report may also suggest specific research projects to clarify points that remain unsettled.6

But how can one separate the scientific from the political and value components of policy issues that encompass both? And if trans-scientific questions do not come within the purview of the scientific court, why use a quasi-judicial procedure? If the question is unambiguously scientific, then the procedures of science rather than quasi-legal ones are appropriate. Where the issues cannot be settled with existing scientific knowledge or from research that could be carried out reasonably rapidly and without excessive expense, then the answers must be trans-scientific and an adversary procedure that involves both experts and generalists seems the best alternative.6

Dialectical confrontation between generalists and experts often succeeds in bringing out unstated assumptions, conflicting interpretations of the facts, and the risks posed by new projects. Technical experts are naturally biased in the assessment of their proposals and are more likely to be skeptical of any evidence of possible adverse effects than someone less committed to that particular project. The initial assumption is that the innovation will achieve what the innovator claims for it and that it will have no negative consequences that could reduce the attractiveness of its practical implementation. For example, the consciousness of the dangers inherent in nuclear engineering in the United States and Western Europe is largely the result of public debate. Where nuclear technology has been allowed to develop according to its own logic, unhampered by criticism and public concern, as in the Soviet Union, it has produced few of the safety features (such as containment shells for pressurized water reactors) that are now standard in the West.

Thus, technological expertise cannot be relied upon to discover the characteristic risks and the social implications of new


technologies. The essential need today is an improvement in the methods and conditions of critical debate and their institutionalization at all levels of policy-making. Actually, attempts to develop methods of critical inquiry adapted to the process of public deliberation go back to the origins of democracy.

Building on the practice of government by discussion in the city-state, the Greeks developed a general technique of critical discourse which they called dialectic. This is a method of argumentation characterized not so much by the form of reasoning (though discussion by question and answer came to be regarded as its paradigmatic form) as by the nature of its premises and the social context of its applications. Logic and mathematics start from axioms, or propositions deduced from axioms, while the premises of dialectic are merely plausible. The starting point of a dialectic argument is not abstract assumptions but points of view already present in the community; its conclusion is not a formal proof, but a shared understanding of the issue under discussion; and while scientific disciplines are specialized forms of knowledge, available only to the experts, dialectic can be used by everyone since, as Aristotle put it, we all have occasion to criticize or defend an argument.

For the Greeks dialectic had three main uses. First, as a method of critical inquiry into the foundations and assumptions of the various specialized disciplines. Second, as a technique for arguing in favor of one's own opinions and a procedure for clarifying controversial issues. Finally, as an educational process that transforms the common man into an informed citizen and the specialist into a person able to communicate with his fellow citizens.

This ancient notion of dialectic is quite relevant to our inquiry into the role of analysis in public deliberation. In fact, it seems to capture the essential elements of that role much better than the stereotyped characterization of policy analysis found in current textbooks. Like dialectic, policy analysis usually starts with plausible premises, with contestable and shifting viewpoints, not with indisputable principles or hard facts. Like dialectic, it does not produce formal proofs but only persuasive arguments. The key problem facing both dialecticians and analysts is how to base plausible inferences on values or opinions when hard facts are not available. Finally, policy analysis, like dialectic, contributes to public deliberation through criticism, advocacy, and education. Good policy analysis is more than data analysis or a modeling exercise; it also provides standards of argument and an intellectual structure for public discourse. Even when its conclusions are not accepted, its categories and language, its criticism of traditional approaches, and its advocacy of new ideas affect—even condition—the policy debate.

THE ARGUMENTATIVE FUNCTION OF POLICY ANALYSIS

The purpose of this book is to discover the main implications of a dialectic conception of policy analysis. In it I attempt to develop a single idea: the notion that in a system of government by discussion, analysis—even professional analysis—has less to do with formal techniques of problem solving than with the process of argument.

The job of analysts consists in large part of producing evidence and arguments to be used in the course of public debate. Its crucial argumentative aspect is what distinguishes policy analysis from the academic social sciences on the one hand, and from problem-solving methodologies such as operations research on the other. The arguments analysts produce may be more or less technical, more or less sophisticated, but they must persuade if they are to be taken seriously in the forums of public deliberation. Thus, analysts, like lawyers, politicians, and others who make a functional use of language, will always be involved in all the technical problems of language, including rhetorical problems.

Rhetoric is the craft of persuasion, the study of all the ways of doing things with words. The Athenians used to make annual sacrifices to the goddess of persuasion (Peitho) in recognition of the extraordinary power of language. Today persuasion is often

regarded as a dishonest or merely "rationalizing" use of arguments; it is propaganda, brainwashing, manipulation of public opinion. Persuasion can indeed be used in these ways. But in free debate, persuasion is a two-way interchange, a method of mutual learning through discourse. Real debate not only lets the participants promote their own views and interests, but also encourages them to adjust their views of reality and even to change their values as a result of the process.

A persuasive argument is not a logical demonstration, but it does not become irrational or mere rationalization because of this. Most value judgments are formed in persuasive interchange. To reduce reason to logical calculation and proof about whatever does not matter enough to engage commitment is, as Wayne C. Booth has written, to create a torn picture of the world, with all our values on one side and all our rational faculties on the other. Since to say anything of importance in public policy requires value judgments, this artificial separation between values and rational capacities is a threat to all notions of public deliberation and defensible policy choices.

As I will show in the next chapter, even technical policy analysts cannot dispense with persuasion. On the one hand, facts and values are so intertwined in policy-making that factual arguments unaided by persuasion seldom play a significant role in public debate. On the other hand, persuasion is needed in order to increase both the acceptability of advice and the willingness to act on less than conclusive evidence. To explain, and defend a reasonable course of action under circumstances where the theoretical optimum is either unknown or practically unattainable, is an essential part of the analyst's job.

Feasibility analysis, to be discussed in chapter 4, is perhaps the best illustration of the necessary interplay of empirical and persuasive arguments. Fashioning mutual understandings about the boundaries of the possible in public policy is arguably the most important contribution that analysts can make to public debate. However, calculating optimal or second-best solutions within given constraints is only the static part of feasibility analysis; the dynamic and more important part is discovering means to push out the boundaries of the possible. Doing this requires both objective analysis and persuasion: what is possible often depends on what the political system considers fair or acceptable. Many policy constraints can be eased only by changing attitudes and values; as already noted, this always involves a certain amount of persuasion.

ARGUMENTATION AND EVALUATION

Persuasive arguments play an even larger role in evaluative discourse. Whenever new evaluative criteria or a reform of old criteria are being considered, it is open to anyone to put forward a proposal as to what the criteria should be and to use persuasion in order to influence others to accept the proposal.

The characteristic difficulty of policy evaluation is precisely the multiplicity of admissible standards. Citizens, legislators, administrators, judges, experts, the media—all contribute their particular perspectives and criteria. This variety of viewpoints is not only unavoidable in a pluralistic society; it is also necessary to the vitality of a system of government by discussion. Nevertheless, as Northrop Frye has remarked in the context of literary criticism, there seems to be no reason why the larger understanding of public policy to which these separate perspectives are contributing should remain forever invisible to the different evaluators, as the coral atoll is to the polyp.

Multiple policy evaluation should also be possible. It would reassert the legitimacy of the different perspectives but would also seek—by making these perspectives more aware of one another—to reach a level of understanding and appreciation that is more than the sum of the separate evaluations. The purpose is not to construct a grand model that would combine all the partial perspectives into one general criterion of good policy—a weighted average, as it were, of equity, effectiveness, legality, and any other relevant standard—but to contribute to a shared understanding of the multiple perspectives involved.
Evaluation will be discussed in detail in chapter 8. Here I will mention only one aspect of the subject—the evaluation of analysis and other types of research with policy implications. The assessment of policy arguments, like the assessment of scientific or legal arguments, necessarily involves formalities. When the issues under discussion require complex patterns of reasoning and large amounts of data of doubtful reliability and relevance, explicit rules of evidence become particularly important. A good example is the judicial law of evidence with its sophisticated distinctions among proofs of facts, testimony, hearsay, presumptions, interpretations, and other sources of information.

In chapter 3 I introduce a number of distinctions (for example, among data, information, and evidence) whose main purpose is to facilitate the evaluation of policy arguments. The importance of drawing distinctions that are usually overlooked in conventional treatments of policy analysis can be illustrated with reference to the categories "evidence" and "argument." The argument is the link that connects data and information with the conclusions of an analytic study. The structure of the argument will typically be a complex blend of factual statements and subjective evaluations. Along with mathematical and logical deductions it will include statistical, empirical, and analogical inferences, references to expert opinion, estimates of benefits and costs, and caveats and provisos of different kinds. This unavoidable complexity makes any direct, informal testing of the argument quite impossible. Whatever testing is done must rely on a variety of standards that depend on the analytic methods employed, on the plausibility and robustness of the conclusions, and on agreed-upon criteria of adequacy and effectiveness.

The nature of the evidence is crucial in this kind of testing, since an incorrect assessment of its strength and suitability before it is included in the argument can lead to pitfalls in drawing conclusions. Evidence is not synonymous with data or information. It is information selected from the available stock and introduced at a specific point in the argument in order to persuade a particular audience of the truth or falsity of a statement. Selecting inappropriate data or models, placing them at a wrong point in the argument, or choosing a style of presentation that is not suitable for the intended audience, can destroy the effectiveness of information used as evidence, regardless of its intrinsic cognitive value. Thus, criteria for assessing evidence are different from those used for assessing facts. Facts can be evaluated in terms of more or less objective canons, but evidence must be evaluated in accordance with a number of factors peculiar to a given situation, such as the specific nature of the case, the type of audience, the prevailing rules of evidence, or the credibility of the analyst.

Disciplines like history and law, which depend on information that cannot automatically be assumed to be reliable or relevant, explicitly recognize evidence as an autonomous conceptual category. Policy analysis, too, often involves large amounts of data of doubtful reliability and relevance, but problems of evidence have not received the same attention here.

For instance, according to a view that is widespread among analysts, a good policy model should resemble as much as possible the formalized models of the more successful "hard" sciences. Accordingly, there is a dangerous tendency to regard model outputs as facts, rather than as evidence to be used in an argument together with other data and information. As a result, "the documentation of models and source data is in an unbelievably primitive state. . . . Poor documentation makes it next to impossible for anyone but the modeler to reproduce the modeling results and probe the effects of changes to the model. Sometimes a model is kept proprietary by its builder for commercial reasons. The customer is allowed to see only the results, not the assumptions."

Such gross disregard for the most elementary rules of evidence is a direct consequence of the failure to recognize the crucial argumentative aspect of policy analysis. In turn, this failure can be explained by the adherence of most analysts to a methodology that is more concerned with what decisions are made than with how they are made, or how they may be justified in the forums of public deliberation.

DECISIONISM

The image that lies behind this methodology has been called decisionism—the "vision of a limited number of political actors engaged in making calculated choices among clearly conceived alternatives."10 An actor’s choices are considered rational if they can be explained as the best means to achieve given objectives. In this view the economic model of choice becomes the appropriate paradigm for all policy problems.

For example, a well-known textbook on policy analysis introduces its subject matter as follows: "How choices should be made—the whole problem of allocating scarce resources among competing ends—is the stuff of economics and the subject of this book."11 Similar statements can be found in the writings of influential authors like Hitch, McKean, Enthoven, and Quade.12

In order to decide rationally the policymaker must specify his objectives; lay out the alternatives by which the objectives may be accomplished; evaluate the consequences of each alternative; and choose the action that maximizes net benefits. If the recipe sounds familiar it is because the logical structure of allocative decisions is the same whether the decisions are taken by individual consumers, by private entrepreneurs, or by public managers and policymakers. Hence the appeal to a generalized logic of choice which decisionists found ready-made in microeconomics and decision theory. Moreover, since the logic of choice has been investigated primarily in the context of market transactions, some writers have argued that the main, if not the only, object of policy analysis is to extend the principles of rational choice from the sphere of private economic transactions to that of public policy-making. In fact, rational policy-making, decision making, problem solving, and policy analysis become nearly synonymous terms. For example, the recipe for maximizing net benefits may be interpreted either as a description of ideal policymaking or as a prescription for policy analysis. The underlying notion of rationality is the same in both cases: rationality is maximizing something, choosing the best means to a given end.

The view of policy analysis as decision theory "writ large" has considerable intuitive appeal and provides a useful way of formulating a variety of practical problems: whether to use a particular vaccine to halt the spread of a threatened epidemic; where to build a dam; how to reduce the response time of the fire department of a big city. Not surprisingly, these or similar examples are the standard illustrations used in conventional textbooks.

The decisionist approach was developed during the Second World War and was given emphasis and formal statement in the early 1950s at the Rand Corporation and other policy-oriented think tanks. It is a conceptual compound that includes elements from operations research and management science, from microeconomics and decision theory, and a dash of social and behavioral science. A continuous line of development runs from the wartime studies of military operations, of logistics and tactics, to the early industrial applications of new quantitative methods, to systems analysis, and then to policy analysis. Technical efficiency as a goal or criterion of choice has been replaced by economic efficiency, which in turn has been tempered by considerations of equity and political feasibility. But the original analytic framework is still clearly recognizable.

The early practitioners of this approach claimed to be able to give useful advice by applying scientific methods of analysis to data collected from actual operations. In fact the situations investigated by operations researchers during the war fit the natural science paradigm rather well. Military operations could be regarded as representative of a class of repetitive situations where models built up in response to earlier examples of the
situation could be checked against later examples, monitored while proposals for improved actions were in use, and used to detect their own dwindling validity as the situation changed.13

An important characteristic of early studies of military and industrial operations was a reasonable clarity in the definition of the role of analysts and decision makers. Whether the users of analysis were high-level military officers or high-level managers, analysis was done primarily or even (because of the requirement of military or industrial secrecy) exclusively for them. The analyst did not have to address any audience other than the decision maker, or a small group of decision makers, who had commissioned the study. Problems of communication and implementation could be safely assumed to be the responsibility of a well-defined hierarchical authority, and the same authority would ensure legitimacy and provide criteria of quality and effectiveness.

By the 1960s, however, the nature of the problems analysts were investigating, and the organizational and political context in which they operated, had radically changed. The problems claiming analytic attention were becoming broader and more complex. Strategic, rather than tactical, issues loomed increasingly important, while subjective uncertainty was seen to be more crucial than the statistical regularities assumed in earlier models. At the same time, the growing role of analysis in public debates meant that analysis—no longer discreet advisors to the prince but actors in a political process in which advocacy and persuasion could not be neatly separated from objective analysis—had to pay attention to questions of equity and political feasibility.

In the early 1970s policy analysis came to replace systems analysis as the professional label denoting the activity of analysts who were concerned with public issues. This terminological change was meant to suggest a synthesis of the conflicting logics of economic and political rationality. In practice, since political science seemed unable to provide a set of concepts and analytic techniques comparable to the strong normative structure of micro-


economics, the majority of policy analysts remained firmly committed to a decisionist methodology.

THE LIMITATIONS OF DECISIONISM

The limitations and biases of the decisionist approach are perhaps less obvious than its merits, but they affect almost every aspect of the teaching and practice of policy analysis. However, I shall restrict my critical remarks to a few points of particular relevance for my subsequent discussion. The purpose is to illustrate the kinds of issues and arguments that this approach tends to exclude from analysis.

To begin with, the decisionist approach assumes that the decision maker, or a group acting as a unit, and is not immediately applicable to situations involving two or more actors with different objectives. The model of rational choice that underlies this approach has been developed for an individual who wishes to be consistent and expresses this consistency in the way he orders his preferences and evaluates the probabilities of uncertain events. When several individuals are involved, the model does not require them to agree on their orderings and evaluations; each may be rational (that is, consistent) in holding quite divergent views. If a joint decision is required, they will have to resolve their differences through interactive processes like negotiation and persuasion, about which the model is silent.

A fortiori, this methodology ignores conflicts between the interests and perceptions of different government agencies. But whenever such conflicts are present, important questions arise about the appropriate assumptions regarding the behavior of other public agencies in the formulation of policy by any particular agency. As I argue in chapter 6, all policy instruments are effectively constrained within certain ranges by political and administrative considerations. Therefore, it is important for policymakers to know which variables are in fact within their control and to what extent, and in this respect a unitary model of policymaking is not very useful.

Another key assumption is that there is no essential distinction
for which, given clear goals and sufficient information, correct solutions always exist and can be found by calculation rather than by the exercise of political skills. Hence, policy-making can be intelligent or rational only if it is preceded by systematic analysis of the alternatives in all their implications. To act rationally is, according to this view, always to do two things: to work out a plan of action and to put into practice what the plan prescribes. It is, in Gilbert Ryle's phrase, to do a bit of theory and then to do a bit of practice.\(^{21}\)

But it is notoriously possible to plan well and to implement the plan stupidly. Moreover, by the original assumption, in order to be rational the planning process itself would have to be preceded by yet another process of planning to plan. This infinite regress reduces to absurdity the notion that for a decision or policy to be intelligent it must be guided by a prior intellectual operation. "Intelligent" cannot be defined in terms of "intellectual" or "knowing how" in terms of "knowing that."\(^{22}\)

Someone without a knowledge of medicine can hardly be a good surgeon, but excellence at surgery is not the same thing as knowledge of medical science, nor is it a direct result of it. Like surgery, the making of policy and the giving of policy advice are exercises of skills, and we do not judge skillful performance by the amount of information stored in the head of the performer or by the amount of formal planning. Rather, we judge it by criteria like good timing and attention to details; by the capacity to recognize the limits of the possible, to use limitations creatively, and to learn from one's mistakes; by the ability not only to show what should be done, but to persuade people to do what they know should be done.\(^{23}\)

Perhaps the most serious limitation of the decisionist view is not that it is wrong per se, but that it has led to a serious imbalance in the way we think about policy-making. The following chapters will attempt to provide a more realistic view of the uses of knowledge and analysis in policy deliberation and a better appreciation of the skills needed to transform ideas into actions.

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22. Ibid., 32.
dence, to keep many threads in hand, to draw for an argument from many disparate sources, to communicate effectively. He recognizes that to say anything of importance in public policy requires value judgments, which must be explained and justified, and is willing to apply his skills to any topic relevant to public discussion.

The image of the analyst as problem solver is misleading because the conclusions of policy analysis seldom can be rigorously proved. Demonstrative proof that a particular alternative ought to be chosen in a particular situation is possible only if the context of the policy problem is artificially restricted. One must assume that there is no disagreement about the appropriate formulation of the problem, no conflict of values and interests, and that the solution is, somehow, self-executing. Also, the analyst should have all the relevant information, including full knowledge of present and future preferences and of all consequences of all possible alternatives.

The impossibility of proving what the correct action is in most practical situations weakens the credibility of analysis as problem solving, but it does not imply that information, discussion, and argument are irrelevant. We reason even when we do not calculate—in setting norms and formulating problems, in presenting evidence for or against a proposal, in offering or rejecting criticism. In all these cases we do not demonstrate, but argue.

Argumentation differs from formal demonstration in three important respects. First, demonstration is possible only within a formalized system of axioms and rules of inference. Argumentation does not start from axioms but from opinions, values, or contestable viewpoints; it makes use of logical inferences but is not exhausted in deductive systems of formal statements. Second, a demonstration is designed to convince anybody who has the requisite technical knowledge, while argumentation is always directed to a particular audience and attempts to elicit or increase the adherence of the members of the audience to the theses that are presented for their consent. Finally, argumentation does not aim at gaining purely intellectual agreement but at inciting action, or at least at creating a disposition to act at the appropriate moment.¹

It will be noticed that the distinctive features of argumentation are precisely those which characterize dialectic and rhetorical reasoning. Thus, to recognize that policy analysis has less to do with proof and computation than with the process of argument is to make contact with an old philosophical tradition that defines rationality not in instrumental terms, but as the ability to provide acceptable reasons for one's choices and actions. By restricting the role of reason to discovering appropriate means to given ends, instrumental rationality relegates values, criteria, judgments, and opinions to the domain of the irrational or the purely subjective. Analysis-as-argument holds that this narrowing of discourse goes against the grain of a system of government by discussion. In order to influence public deliberation in significant ways, analysts must open themselves to a wider range of argument than is allowed by the methodology of decisionism.

It is true that practicing policy analysts often engage in argumentative discourse: they debate values, question objectives, agree or disagree about assumptions, and advocate or justify courses of action on the basis of less-than-conclusive evidence. What is problematic about these practices is not their content but the fact that they remain unexamined and that in consequence crucial aspects of analysis escape critical evaluation. In this chapter I discuss some of the most significant rhetorical uses of policy analysis.

NORM SETTING

It is widely assumed that public deliberation and public policy are primarily concerned with setting goals and finding the means to achieve them. Actually, the most important function both of public deliberation and of policy-making is defining the norms