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Policy analysis as a political activity.

Douglas J. Amy
University of Massachusetts Amherst

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POLICY ANALYSIS AS A POLITICAL ACTIVITY

A Dissertation Presented

By

DOUGLAS JAMES AMY

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

September 1981

Department of Political Science



Douglas James Amy 1981

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DOUGLAS JAMES AMY

Approved as to style and content by:

Kenneth M. Dolbeare

Kenneth M. Dolbeare, Chairperson of Committee

William Connolly

William Connolly, Member

Allan Krass

Allan Krass, Member

Glen Gordon

Glen Gordon, Department Head
Political Science

DEDICATION

To my father and mother, Glenn and Hilde

Amy, who made all this possible

ABSTRACT

Policy Analysis as a Political Activity

September, 1981

Douglas James Amy, B.A. University of Washington

M.A., University of Massachusetts, Ph.D., University of Massachusetts

Directed by: Professor Kenneth M. Dolbeare

Traditionally, the methods of public policy analysis have been thought to be neutral and apolitical. This dissertation demonstrates that policy analysis can often be politically biased. In Part I, it is shown that the assumptions built into much of policy analysis (assumptions based largely on the presumed validity of the logical-positivist approach to social science) tend to distort our perspective on public policy issues and problems. Furthermore, these distortions are found to favor certain identifiable interests and ideological positions. Examples from U.S. energy policy are used to illustrate these points. Part II of the dissertation attempts to construct a non-positivist approach to policy analysis (based largely on the assumptions rooted in the interpretive approach to social science) that not only avoids the kinds of problems described in Part I, but also encourages a more imaginative and democratic approach to our pressing policy problems.

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C H A P T E R I
THE NATURE OF POLICY ANALYSIS

The purpose of this study is to identify and explore the political biases in public policy analysis -- an activity that is conventionally thought to be politically neutral. I will investigate the source and nature of these biases and explain why they are an inherent part of current analytical approaches. I will also advance some suggestions for how these biases can be transcended.

The subject of biases in public policy analysis is not, of course, an entirely original one. For example, this study is similar in spirit to some of the work done by Guy Benveniste in The Politics of Expertise -- a book concerned with the political role of the expert planner in the modern state.¹ I share with Benveniste a concern for piercing the mask of neutrality which obscures the political dimension of the work done by professional policy analysts. However, this study differs from his in that it is less concerned with the biases resulting from the political role the policy analyst is put into in the planning process and more concerned with those political biases that are founded in the fundamental analytic assumptions and methods that inform the analyst's work.

Given these theoretical concerns, this study is much closer to the work done by observers of policy analysis like Brian Fay and Laurence Tribe.² Both of these scholars probe the basic philosophical and meth-

odological theories which help to constitute public policy analysis and seek to demonstrate how these theories interconnect and support various contemporary political ideologies. Although my general approach is similar, I hope to add a more substantive dimension to this kind of theoretical analysis. Throughout this work I shall focus on the area of National Energy Policy and will be continually exploring how the political biases in policy analysis have affected the way we in the U.S. have approached our national energy problems.

The reader may also note some resemblance between this study and some of the work done by Martin Rein in Social Science and Public Policy,³ for we are both concerned with the problems caused by the positivist underpinnings in policy analysis and are both aware of the need to develop an approach to analysis which explicitly addresses the normative and political dimensions of policy questions-- subjects that have been traditionally considered out-of-bounds in policy analysis. Rein however fails to present a well worked out scheme for approaching those questions and this is a gap I will be filling with this present study. I shall set out a detailed and systematic alternative to the positivist perspective -- an alternative that is based on recent work in the philosophy of social science and moral philosophy.

The Field of Public Policy Analysis

Let us stipulate what is meant by public policy analysis, who practices it, and what the data-base will be for this investigation. The question of what policy analysis actually is will be one of the continuing themes of this work, but for now it can be defined most

simply as the systematic study of public policy issues for the purpose of producing recommendations which will affect the decisions of policy-makers. Policy analysis is not only an intellectual endeavor, it is also a growing profession with a large number of practitioners. For the purpose of description, these practitioners can be divided into three rough categories:

1. Government Policy Analysts: those who work for government policy-makers in local, state and federal policy-making and implementing institutions. Alice Rivlin and her colleagues at the Congressional Budget Office would be typical examples.
2. Private Policy Analysts: examples are those who work in private think-tanks like the Rand Corporation, Brookings Institution, or the American Enterprise Institute, and who engage in both independent and government sponsored policy studies.
3. University-Based Policy Analysts: those analysts like Robert Dorfman and James Coleman who are based in colleges and universities and engage in contract research and/or work occasionally in think-tanks or directly with the government. Often these university-based analysts also take part in the training of new professional policy analysts.

Much of what now allows members of these three different groups to fit into the category of policy analyst is the fact that they have often gone through similar professional training and often use the same basic analytic approaches. This statement might not have been true in the 1950's and early sixties, when practically anyone dealing with policy issues could call themselves policy analysts. But in the

1970's, public policy analysis began to emerge as a specific profession, complete with its own professional organizations, professional journals, and most importantly, its own professional schools of policy analysis--like the LBJ School at the University of Texas in Austin, The Public Policy Program at the JFK School of Government at Harvard, and the Institute of Public Policy Studies at the University of Michigan. These graduate programs of Policy Analysis, Public Management, Public Administration, Economics, etc. have provided a training ground for the analysts going into the three areas of employment described above. In these programs, part of learning to be a professional involves learning the systematic methods that are characteristic of the profession: cost benefit analysis, mathematical modeling, systems analysis, and so on. In this sense, much of what now defines a policy analyst is the formal approach he or she takes to understanding policy issues and choices.

In my investigation of public policy analysis I will be using three basic kinds of literature as my data base.

1. Policy Studies. I will rely extensively on the actual reports produced by various professional policy analysts. In order to lend some consistency and focus to the investigation, I will be concentrating primarily on policy studies done in the area of National Energy Policy, although studies from other policy areas will be used when they are particularly good illustrations of a point being made.
2. Textbooks. I will also be relying on works intended to help in the training of public policy analysts. These works are particularly helpful in investigating the fundamental assump-

tions underlying policy analysis, for they tend to address those assumptions in a much more explicit way than the policy studies themselves. Works by Edith Stokey and Richard Zeckhauser,⁵ Larry Wade,⁶ E.S. Quade,⁷ and Thomas Dye⁸ are examples of books in this category.

3. Overview Books. By overviews books I mean those scholarly works which describe the state of the art and/or critically discuss the field of public policy analysis. Examples would include books by Martin Rein,⁹ Alice Rivlin,¹⁰ Richard Nelson,¹¹ and others. Those works also tend to address the basic concepts and presuppositions underlying policy analysis, and they will be used to both express and support judgements and conclusions that will be made about the field as a whole.

The Neutrality of Policy Analysis

A major defining characteristic of the practice of policy analysis is the conviction, frequently stressed, that such work is apolitical. The image of policy analysis as a neutral, technical activity has been present ever since the early days of the profession. For instances, in the halcyon days of the Planning-Programming-Budgeting movement (PPB) in the sixties, it was confidently declared that "The program budget is a neutral too. It has no politics."¹² And today it is still often claimed that even though policy analysis are in the political system, they are not of it -- they are not partisan political actors. Charles Schultz is one of those who acknowledges that analysts are participants in the political process, but insists that they are par-

tisan only in the sense of being "partisan efficiency advocates. At each level of the decision process, these participants become particular champions of efficiency and effectiveness as criteria in decision-making."¹³ It is of course very much in the interests of policy analysts to reassure policymakers that they are not a political threat, that they are simply there to help the policymaker better achieve his or her goals-- a beneficial, but essentially neutral role. As Guy Benveniste has observed, policy analysts often go out of their way to point out that "experts will not alter the political process, they will only enhance it."¹⁴

This apolitical image projected by many analysts is reinforced by the political realities of their roles in the policymaking process. Their role is not political in the sense that they wield any direct or significant power in the political system. Analysts do not make policy; they are primarily advisors and their advice can be accepted or rejected. It is widely understood-- and often resented by the policy analysis community-- that policymakers will not hesitate to reject a perfectly sound policy study if it is politically expedient for them to do so.¹⁵ In this sense, then, policy analysts could hardly be thought of as significant or powerful political actors.

Finally, this neutral image of policy analysis is also preferred by policymakers themselves. Studies have shown that policymakers insist that studies be objective, and that a lack of objectivity is one of the primary reasons for the rejection of analytic findings.¹⁶ Importantly, this lack of objectivity is usually thought not to be the fault of policy analysis itself, but the fault of particular analysts

who introduce their own personal biases, or who fail to develop an adequate study design. It is also acknowledged that policy research can be biased by the actions of policymakers themselves. They might, for instance, direct policy research away from certain kinds of social problems, or toward some political goals but not others. James Schlesinger has noted that political pressures can sometimes bias analyses in the following way:

The judgement of the decisionmaker regarding major objectives and what is or is not important is likely to feed back and influence the analysis...Specific terms of reference may indicate which scenarios are acceptable, which unacceptable, and which contingencies should or should not be considered. It is perfectly appropriate, if not obligatory, for the analysts to point out deficiencies in study assumptions or terms of reference. Yet, many will lack the perception or the inclination while others would regard such actions as personally imprudent. In these cases the analysis will only play back to the decisionmaker a more sharply defined version of what was already implicit in his assumptions. The role of analysis then becomes not so much to sharpen the intuitions of the decisionmaker as to confirm them.¹⁷

But again, in these cases, it is crucial to note that this bias is caused by the abuse of policy analysis by particular individuals, and is not caused by anything in the analytic techniques themselves, which are thought to be politically neutral. When used properly, policy analysis remains apolitical.

However, it will be shown in this study that this conventional view of policy analysis as apolitical is mistaken and misleading. There are political biases in public policy analysis, and it can be considered a political activity. To be clear, the bias in policy analysis is not the personal kind alluded to above. My interest is not in the well known fact that the personal biases of the analyst

(and the policymaker) can sometimes make their way into policy studies. Rather, I am concerned about the political biases that exist in policy analysis even in its most pure form. The focus of this work will be on the paradigmatic political biases in policy analysis-- biases that are embedded in the very nature of the analytic paradigms themselves and would thus come into play no matter who used the paradigms. These biases originate in the epistemological and methodological assumptions which inform policy analysis. Several of these assumptions distort our perspective on policy issues in such a way that certain interests and ideologies are systematically favored. It is in this sense that I will argue that policy analysis is politically biased. In order to begin to perceive this bias it is helpful to consider more carefully the terms in which we think about policy analysis itself.

Policy Analysis: Tool or Perspective?

How we conceptualize and define public policy analysis has much to do with whether we see it as neutral or biased. Conventionally, policy analysis is thought of as a set of tools like cost-benefit analysis, systems analysis, decisions trees, computer simulations, and so on, which can be applied to policy problems. Tools are phenomena which are thought to be politically neutral -- they can be used by Democrats as well as by Republicans and are considered to be "equally applicable to a socialist, capitalist, or mixed enterprise society, to a democracy or a dictatorship."¹⁸ Since the analytical tools can be used by all sorts of political actors for all kinds of political goals, any political responsibility is thought to lie with the user, not the

not the tools themselves. For example, a hammer and a saw can be used to build a hospital or a torture chamber; but it would hardly seem reasonable to lay the praise or the blame for such structures on the tools that built them.

The logic of such a position begins to wear thin, however, when we consider its expression in the campaign against gun control by the National Rifle Association: "Guns don't kill people--people kill people." The argument is basically the same as that above: blame people not their neutral tools. But is a gun a "neutral" tool? Perhaps not. Guns are only good for certain kinds of activities -- like violence. And one could certainly make the case that such "tools" do encourage violence. And while it would be fallacious to maintain that arms create violent human tendencies, it does seem likely that their proliferation would exacerbate those tendencies and make it easier to fulfill them.¹⁹ And this is, in fact, quite similar to the argument that I want to make about policy analysis, that it is a set of tools which are only good for certain kinds of political activities and they thus encourage those activities. But while I feel this is a valid line of argument, it is not the one which best illuminates the political nature of policy analysis. It continues to conceive of policy analysis techniques as "tools," and I believe that the political implications of policy analysis become much more apparent when we transcend the narrow notion of policy analysis as a tool and realize that it is better thought of as a perspective-- a way of looking at policy issues.

The notion that policy analysis is a perspective on policy problems is one that finds support from several of the more thoughtful policy analysts. For example, the eminent policy analyst, E.S. Quade, shuns the notion that systems analysis is merely a set of techniques or tools, preferring instead to think of it as an "art," an "approach," a "perspective," and even a "philosophy."²⁰ In addition, two of the leading analysts at the prestigious Kennedy School of Government at Harvard, Edith Stokey and Richard Zeckhauser, characterize policy analysis, in general, as "a framework for thinking about policy problems and making choices."²¹ In a very real way, policy analysis is a mode of thought-- a way of structuring how we think of policy problems and how we go about solving them. The extent to which these Harvard analysts believe in policy analysis as an intellectual approach to the world is made clear by their instructions to those who wish to become policy analysts.

Our perennial advice to students is "Practice!" Practice on all kinds of situations, large and small, public and private. Look regularly at the front page of the newspaper and think hard about one of the policy problems featured... Practice on your own problems and decisions, using models to get your thinking straight or to illuminate commonplace events. For example when you find yourself waiting in line, ask yourself what could be accomplished with additional service capacity, and what the benefits of such a move would be... Make up your mind that at least once every day you will deliberately apply the (policy analysis) outline to a problem you face. You'll be amazed at what it will do for your reputation for perceptiveness and good judgement.²²

While a bit overstated, the point is clear enough: policy analysis is best thought of as a mode of thought or an intellectual perspective on policy questions. This conception of analysis allows us to understand better the manner in which analysis fits into the decision-making

process. It is important to realize that analysis offers to policy-makers more than information, a model, or even specific policy recommendation; it offers a certain perspective, a characteristic way of defining and approaching policy issues. This function of analysis is at least partially confirmed in one of the few major studies done on the uses of policy analysis research by policymakers. Nathan Caplan²³ found that, while hard, empirical information sometimes did directly influence policymakers, more often they cited the major contribution of policy analyses as being "conceptual." By conceptual it is meant that the analysis primarily functioned to affect the "frame of reference" or "perspective" within which policymakers approached policies.

Evidence supporting the conceptual influence of policy analysis of policymakers and the political system can be found in the very nature of the political language that is characteristic of the modern industrial state. Many of the concepts and terms used in public policy analysis have become an integral part of our political vocabulary. Terms like "costs and benefits," "zero-based budgeting," "policy option," "cost effectiveness," "externalities," "maximizing," "programmatic planning," and so on have become a common part of political discourse in our legislatures and bureaucracies. Since we think in terms of language, this infusion of policy analysis inevitably brings with it a corresponding infusion of the policy analysis perspective on policy issues. Thus it can be stressed that the effect of policy analysis on the policy process is not solely dependent on the power of the particular analyst, but on the tendency of the terms and perspectives of

policy analysis to infiltrate our political culture and help to structure the way we think about policy questions. But let us get a bit more specific, and begin to consider just what the exact nature of this policy analysis perspective is, its defining characteristics, its assumptions, etc.

Policy Analysis as Scientific Rationality

One of the problems with identifying the perspective offered by policy analysis is the fact that we have what first appears to be many different perspectives. There are a variety of policy analysis techniques-- cost-effectiveness, operations research, systems analysis, econometric modeling, etc.-- all with apparently different approaches. This variety makes it easy to fall into a "forest for the trees" problem where too much attention to differences makes it difficult to appreciate what these methods have in common. We can, however, identify several common threads that run through most of these modes of analysis. One of the most important commonalities is a commitment to rationality. Policy analysis in its essence is the attempt to approach policy issues rationally. Carol Weiss has pointed out that for most policy analysts,

their commitment to social research is grounded in a belief in rationality. They see the world as a complex place, and they seek guideposts and directional principles to find their way through. In their view, social science provides both the theoretical directions and the empirical soundings to reach desired goals. To put these resources at the service of policymakers will increase the chances that decisions that are reached will be sound and wise.²⁴

As Weiss implies, the rationality sought by analysts is not just any kind, it is scientific rationality-- for rationality and clear

thinking in our culture are virtually synonymous with science and the scientific method. This understanding of the perspective of policy analysis as a scientific one is evident in many of the common definitions of this activity. For instance, the Policy Studies Organization, a prominent professional group, has defined policy analysis as the "application of political and social science to important policy problems." Thomas Dye, a noted analyst in academia, sees policy analysis as a "scientific approach to society's problems, . . . an effort to develop and test general propositions about the causes and consequences of public policy and to accumulate reliable research findings of general relevance."²⁵ One can also find indications of this scientific perspective in the definition of specific forms of policy analysis. For instance, "operations research is the application of scientific method to the decisions problems of government, business, and other social organizations;"²⁶ and Edward Suchman has defined program evaluation research as "the specific use of the scientific method for the purpose of making an evaluation."²⁷ And finally, the high degree of commitment to this scientific image can be seen in the self-descriptive language of analysts who insist on referring to themselves as policy scientists and to their profession as the policy sciences.²⁸

The effort to apply scientific rationality to policy questions was probably inevitable given the great appreciation our culture has for science. As Americans, we have always been enamored with the scientific method and its products, from the steam engine and the telegraph to radio, television, lasers, and other such modern miracles. And particularly impressive has been the ability of science to solve

problems. Scientific thought has been instrumental in allowing us to span rivers, cure disease, win wars, communicate over vast distances, and put a man on the moon. Given this impressive track record, it was probably only a matter of time before we turned to the scientific method in an attempt to solve the multiplying social and economic problems of industrial society. In this sense, policy analysis is the embodiment of our belief that the most serious intellectual approach to any problem is a scientific one. If you want something done right-- do it scientifically. As Brian Fay has rightly pointed out, much of the appeal of policy analysis is based on the "tacit presumption that science provides the paradigm example or proper thinking; and as long as any enterprise is not treated in a scientific way, it is being treated in an imperfect way."²⁹

It should be noted that the effort to integrate science with politics did not begin with public policy analysis, but rather is an old theme in American political thought. Policy analysis is in many ways simply the modern reincarnation of a political dream which can be traced back to the Founding Fathers. Federalists like James Madison and Alexander Hamilton were fond of thinking of their newly drafted constitution as an expression of the "new science of politics." They were children of the Enlightenment, impressed with the beauty and utility of precise and regular laws. They attempted to design a political system that was grounded upon, in the words of John Schaar, the notion that "the general laws of political motion are as precise and comprehensive in the political realm as the general laws of motion are in the physical realm."³⁵ These early attempts to scientize politics

are crude by today's standards of science and social science. The fulfillment of the desire to wed politics to science has to await the development of sophisticated methods in the management and behavioral sciences--like systems analysis and econometric modeling. But once these methods came into use, commentators were quick to label policy analysis as the "Space Age method for designing the future rationally and managing the present scientifically."³¹

But this characterization of policy analysis as a science raises an interesting question. If policy analysis is simply an embodiment of scientific rationality, where could the political bias be? Isn't scientific rationality neutral and value-free? The answer to this last question is no, and to begin to see why this is so we must remember that all perspectives--including a scientific one--are ways of organizing our perception of the world. A perspective is biased in the sense that it focuses our attention on certain phenomena and away from others. It divides up the world and directs our analytic efforts in some directions but not in others. In terms of policy analysis, a scientific perspective serves to emphasize certain dimensions of policy questions and de-emphasize others. But not only does a scientific perspective structure our perception, it does so in ways that can be faulty and misleading. As we will see, many of the methodological assumptions that lie at the heart of this scientific approach to policy are in fact flawed--they work to distort our understanding of policy issues.

My approach to the political biases in scientific rationality is in some ways similar to the work of those who have exposed the ideological dimensions of economic rationality. Many of the techniques in

policy analysis, like cost-benefit analysis, are not only examples of scientific rationality, but of economic rationality as well, and several authors have shown that the assumptions of economic rationality are in fact biased toward certain kinds of values and political positions. For example, Aaron Wildavsky, in his 1966 critique of cost-benefit analysis, demonstrated that it presumes the primacy of individualistic values, the superiority of the market economy, and the legitimacy of current distributions of income -- that, in effect, cost-benefit analysis serves as de facto liberal-capitalist ideology.³² Laurence Tribe has made a similar point in his provocative article, "Policy Sciences: Analysis or Ideology?", in which he concludes that a classical economic perspective on policy choices created identifiable normative and political biases.³³ In his words,

The policy sciences' intellectual and social heritage in the classical economics of unfettered contract, consumer sovereignty, and perfect markets...inclines them, within that paradigm, toward the exaltation of utilitarian and self-interested individualism, efficiency, and maximized production against distributive ends, procedural and historical principles, and the values (often non-monetizable, discontinuous, and of complex structure) associated with personal rights, public goods, and communitarian and ecological goals.³⁴

In the same article, Tribe suggests that a promising direction for researching the ideological dimensions of policy analysis "would be to investigate...the underlying patterns that the policy sciences' axioms and criteria reveal, (and) to study how these patterns 'interlock' with other contemporaneously developed areas of thought..."³⁵ This investigation proceeds in that spirit, but instead of economic rationality, the focus is scientific rationality.

Components of the Argument

Throughout the various chapters in Part I, the argument will proceed on three interconnected levels. First, on the theoretical level I will show how the scientific rationality in policy analysis is actually scientism³⁶ -- a faulty attempt to apply the techniques of the natural sciences to social analysis. The focus will include a brief consideration of the nature of the logical-positivist philosophy of social sciences to social analysis. The focus will include a brief consideration of the nature of the logical-positivist philosophy of social science which underlies and helps to constitute the scientific approach of policy analysis. In particular I will be examining three of the fundamental philosophical assertions of positivism which contribute to this scientific perspective:

1. The assumption of methodological unity in the sciences.

This posits that the methods of analysis appropriate to the physical sciences are appropriate for the scientific study of social phenomena as well. Thus it is necessary and justifiable to approach the analysis of policy issues in the same manner that a natural scientist would approach the study of physics.

2. The belief that the evaluation of values issues is beyond the scope of national, scientific investigation. Thus the analysis of normative questions neither can nor should be a central part of scientific policy analysis.
3. The assumption that scientific public policy analysis can and should be an apolitical activity. Thus it is thought

that there is no inherent political bias to this neutral form of analysis.

It will be shown that all of these notions are indefensible. However, I do not intend for this work to be yet another full-scale theoretical critique of positivism. Rather the point will be that the deficiencies of positivism and scientism are not merely matters of theoretical concern, but that they have real political impacts. Thus the second level of my analysis will be a consideration of how the philosophical problems of positivism are translated into political problems in policy analysis. I will examine how the positivist assumption distorts the perspective that policy analysts have on policy issues and how those distortions can have ideological implications. For example, in Chapter II, I shall show how the fact-value dichotomy in positivist thought can encourage an instrumental approach to policy issues which unduly concentrates on questions of means while neglecting more important questions of ends. I shall make clear that this perspective can be useful to those political and economic interests who want to discourage the critical analysis of current public policy goals. The specific policy example used in Chapter II will be continued growth in electricity production. This kind of example constitutes the third level of analysis -- the effect on these distorted analytic perspectives on actual energy policy decisions. The area of energy policy was chosen in part because it is one that has been characterized by continuing policy failures. It will be my contention that these failures are in part due to the faulty understandings that are reinforced or exacerbated by the distortions inherent in policy analysis.

While my approach to the problems in policy analysis is obviously

a critical one, it is also intended to be constructive. In Part II, I will show that policy analysts can play a more useful and enlightening role in the political process if they abandon the positivistic perspective, and adopt instead methodologies grounded in non-positivist traditions of social analysis. Non-positivism, of course, is a very imprecise term. There are many methodologies which could call themselves non-positivist, including Marxism, phenomenology, critical theory, and so on. In this work, the alternative to positivism that will be explored is Interpretive Theory. Interpretive Theory is a branch of English analytic philosophy which grew out of an attempt to critique and move beyond the limitations of the logical-positivism that was dominant in the earlier part of this century. Many contemporary interpretive social scientists trace their roots back to the later works of Ludwig Wittgenstein, in which he developed his "ordinary language" approach to philosophical analysis in an effort to transcend his earlier positivistic writings. Again, this work is not intended to be a full-scale nor in-depth examination of the theoretical underpinnings of the interpretive social sciences, I would refer them to the works of some of its leading contemporary practitioners-- Peter Winch,³⁸ Alistair MacIntyre,³⁹ and especially Charles Taylor⁴⁰ and William Connolly.⁴¹

In the interests of relevance and simplicity, I will be concentrating on three of the most fundamental insights derived from interpretive theory-- and how they serve to illuminate the deficiencies of positivism and indicate what an alternative approach to policy might look like. The three insights are these: (1) that there is a qualitative difference between natural and social realities which makes it

inappropriate to approach them in the same manner. For example, it is maintained in interpretive theory that human actions cannot be explained in terms of causal laws, but must be interpreted in terms of the beliefs and reasons of the actors; (2) that there is at least some rationality to the way people make value decisions, and that value choices can thus be analyzed and discussed in a rational fashion; and finally (3), that all forms of social analysis and explanation-- including policy analysis-- are inherently political in nature, and have implications for the form that politics and political discourse takes in a society. In the series of chapters that constitutes Part II, I will be extending these theoretical insights into the area of policy analysis and consider what changes they would imply for how policy analysis should be done and how analysts conceive of their role in the policymaking system. It will be argued that this alternative approach will encourage a more open, more relevant, more humanistic, and more democratic approach to public policy analysis. And finally, extending the analysis to the level of substantive policy, it will be shown, using the issue of energy growth, that this alternative perspective on policy can produce insights that traditional policy analysis perspectives cannot.

Footnotes

¹Guy Benveniste, The Politics of Expertise (Berkeley: The Glendessary Press, 1974).

²Brian Fay, Social Theory and Political Practice (London: George Allen and Unwin, 1975): Laurence Tribe, "Policy Sciences: Analysis or Ideology?" Philosophy and Public Affairs, Fall 1972.

³(New York: Penguin Books, 1976).

⁴As we will see later, not all policy analysts go through this kind of professional training-- and in fact some of the most creative policy analysis is being done by those whose perspectives have not been structured in these professional schools.

⁵Edith Stokey and Richard Zeckhauser, A Primer for Policy Analysis (New York: W.W. Norton and Company, 1978).

⁶Larry Wade, The Elements of Public Policy (Columbus, Ohio: Charles E. Merrill Publishing Co., 1975).

⁷E.S. Quade, Analysis for Public Decision (New York: American Elsevier Publishing Company, 1975).

⁸Thomas Dye, Understanding Public Policy (New York: Penguin Books, 1976).

⁹Martin Rein, Social Science and Public Policy (New York: Penguin Books, 1976).

¹⁰Alice Rivlin, Systematic Thinking for Social Action (Washington, D.C.: Brookings Institution, 1971).

¹¹Richard Nelson, The Moon and the Ghetto (New York: W.W. Norton and Co., 1977).

¹²M. Anshen, quoted in Aaron Wildavsky, "The Political Economy of Efficiency: Cost Benefit Analysis, Systems Analysis and Program Budgeting", Public Administration Review, 26 (1966), p. 308.

¹³Charles Schultz, The Politics and Economics of Public Spending (Washington, D.C.: Brookings Institution, 1968), p. 101.

¹⁴Guy Benveniste, The Politics of Expertise (Berkeley: The Glendessary Press, 1974), p. 64.

¹⁵See, for example Carol H. Weiss (ed.), Using Social Research in Public Policy-Making (Lexington, MA: Lexington Books, D.C. Heath and Co., 1977).

¹⁶Ibid., p. 192.

¹⁷Quoted in Steven Rhoads, Policy Analysis in the Federal Aviation Administration (Lexington, MA: Lexington Books, 1974), p. 7.

¹⁸Edith Stokey and Richard Zeckhauser, A Primer for Policy Analysis (New York: W.W. Norton and Company, Inc., 1978) p. 4.

¹⁹My argument here parallels in some ways the points made by David Dickson in his fascinating book in the political nature of technology, The Politics of Alternative Technology (New York: Universe Books, 1975).

²⁰E.S. Quade and W.I. Boucher, Systems Analysis and Policy Planning: Applications in Defense (New York: American Elsevier Publishing Company, Inc., 1968) pp. 1-2.

²¹Stokey and Zeckhauser, p. 4.

²²Ibid., p. 7.

²³Nathan Caplan et al. The Use of Social Science Knowledge in Policy Decisions on the National Level (Ann Arbor: Institute for Social Research, University of Michigan, 1975).

²⁴Weiss, p. 7.

²⁵Thomas Dye, Understanding Public Policy (Second edition: Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1975), pp. 7, 3.

²⁶Shiv H. Gupta and John M. Cozzolino, Fundamentals of Operation Research for Management (New York: Holden-Day, Inc., 1974), p.1.

²⁷Edward A. Suchman, Evaluative Research (New York: American Elsevier Publishing Company, Inc. 1971).

²⁸Yehezkel Dror, Design for Policy Sciences (New York: American Elsevier Publishing Company, Inc., 1971).

²⁹Brian Fay, Social Theory and Political Practice (London: George Allen and Unwin, 1975), p. 28.

³⁰John Schaar, "Some Ways of Thinking About Equality," The Journal of Politics, 26 (November 1964).

³¹Ida Hoos, Systems Analysis in Social Policy: A Critical Review (Westminster, England: Institute of Economic Affairs, 1969.), p. 16.

³²Wildavsky, p. 308.

³³Philosophy and Public Affairs (Fall, 1972).

³⁴Ibid., p. 105.

³⁵Ibid., p. 79, footnote 27.

³⁶There are many definitions of scientism. Another definition of Scientism is one given by one of its early critics Eric Voegelin. He divided it into three parts: "(1) the assumption that the mathematized science of natural phenomena is a model science to which all other sciences ought to conform; (2) that all realms of being are accessible to the methods of the sciences of phenomena; and (3) that all reality which is not accessible to science of phenomena is either irrelevant or, in the more radical form of the dogma, illusionary." (Social Research, December 1948.)

³⁷For a formal exposition of these assumptions and others which constitute the philosophy of logical-positivism see E. Nagel, The Structure of Science (London: Routledge and Kegan Paul, 1961), or C. Hempel, Aspects of Scientific Explanation, (New York: Free Press, 1965).

³⁸The Idea of a Social Science and Its Relation to Philosophy (New York: Humanities Press, 1958).

³⁹Against the Self-Images of the Age (New York: Schocken, 1971).

⁴⁰"Neutrality in Political Science," in P. Laslett and W.G. Runciman (eds.) Philosophy, Politics and Society, third ser. (New York: Barnes and Noble, 1967); and especially "Interpretation and the Sciences of Man," Review of Metaphysics (Fall, 1971), pp. 4-51.

⁴¹The Terms of Political Discourse (Lexington, MA: D.C. Heath, 1974) and "Theoretical Self-Consciousness," Polity, (Fall, 1973), pp. 5-35.

P A R T I

THE PROBLEMS OF POSITIVIST POLICY ANALYSIS

CHAPTER II

POLICY ANALYSIS AS INSTRUMENTALISM

In this chapter, I will set out the structure of the argument that will characterize all the chapters in Part I. I will consider and illustrate how the philosophical confusions contained in basic policy analysis methodologies can work to distort our understandings of various policy problems. In particular, this chapter will examine what is probably the most typical analytic distortion present in public policy analysis--instrumentalism. Instrumentalism is the tendency to narrowly conceive of policy analysis as primarily an exercise in instrumental rationality. As will soon be evident, this concern for instrumental rationality characterizes much of the policy analysis work done today, and thus forms an appropriate place to begin this investigation. My contention is that this instrumental perspective fosters an inclination on the part of policy analysis and policymakers to become so preoccupied with questions of means in public policy debates as to neglect the more important and basic task of critically reviewing the basic ends of the policy being considered.

In this chapter, I will explore the source and effects of this analytic bias. I will first examine the philosophical roots of this instrumental perspective and briefly discuss the positivistic assumptions which underlie and serve to justify this approach. Once the conceptual foundations of instrumentalism are established, I will consider how this

analytic bias has effected our perception of a specific policy issue--the question of the growth of electricity production in the United States. (This issue of growth, particularly in energy, will be a subject that recurs throughout many of the chapters of the dissertation.) Finally, to complete the argument in this chapter, I will examine the political implications of instrumentalism and consider how specific interest groups can benefit from this kind of limited perspective on policy issues.

Fact/Value and Means Ends

Much of the source and justification for an instrumental approach to policy analysis can be found in the positivist assumptions which underlie policy analysis. Among those basic assumptions is the fact-value dichotomy--more accurately known as the descriptive-evaluative dichotomy. This descriptive-evaluative dichotomy posits that in social analysis we must make a basic distinction between descriptive statements and evaluative (normative, value-laden) statements. It is argued that while descriptive statements--like "lowering inflation produces unemployment"--can be empirically tested to verify their truth or falsity, normative statements--like "unemployment is bad"--cannot be tested in the same manner. It is assumed that such value-laden statements are noncognitive--that is, cannot be proven true empirically. This assumption of noncognitivism is often accompanied by an emotivist theory of ethics which asserts that value judgments are basically irrational or merely a matter of subjective, personal preference.¹ Thus, value statements are not considered to be the legitimate subject of rational scientific inquiry, and policy analysts who wish to maintain their commitment to

the scientific method and their identity as social scientists must therefore restrict their investigations to empirical questions.

In policy analysis, this analytic commitment to the fact-value dichotomy is translated into a commitment to a dichotomy between questions of policy means and questions of policy ends. As Brian Fay explains, "policy analysts typically draw a distinction between means and ends, the idea being the simple one that the choice of ends to be pursued is thought to be a choice requiring a value judgment, but that the question as to the best means to a prescribed end is thought to be a factual question that is therefore decidable scientifically."² It is thought that, once analysts leave the normative questions of policy ends to policymakers, they are "then able to consider the more technical question of how we should pursue our objectives separately from the problem of what we should value."³

Now it is true that some analysts insist on being able to question the goals of the policymaker. But usually this is only for the purpose of clarification. Often policymakers state their goals in ambiguous and vague terms, and the analyst must seek to make them more clear and precise--to "operationalize" them--so that they can be better measured and achieved. This is much different than questioning goals on normative grounds. Not only is direct challenging of policy goals considered bad form for an objective scientist, it is also inhibited by several practical considerations as well. Any analyst who would consistently insist on addressing questions of policy ends would not only be thought to be circumventing the democratic process but would also irritate his employers by interfering with their prerogatives and authority in such matters.

Such imprudent behavior would hardly increase the analyst's job security, and thus it forms yet another reason for analysts to restrict their investigations to matters of means.

In any case, it is clear that many of the most popular types of public policy analysis, including cost-benefit analysis and cost-effectiveness analysis, are forms of instrumentalism. They embody instrumental rationality--the notion that while we cannot be fully rational about our choices of values and goals, we can devise ways of determining the most rational means to achieve those assumed ends. Questions of means are considered to be reducible in theory to questions of what is the most efficient way to achieve an end, and such questions are subject to value-neutral, empirical verification.⁴ For instance, assuming a set of values, an analyst can empirically verify the various costs and benefits associated with a set of policy options and determine which is the most efficient option.⁵ Likewise, the typical cost-effectiveness study is also an exercise in instrumental rationality. The question of how to achieve a given policy goal with the least amount of expenditure is a factual one which, in principle at least, can be determined by scientific analysis. Having established the instrumental focus of these typical forms of policy analysis, let us now turn to an examination of the ramifications of instrumental perspective by considering an area in energy policy in which it has been used extensively.

Electricity Generation Policy

On the nations energy policy agenda, one of the issues that has high priority is the question of how electricity is to be generated in

the next half century. The importance of this issue lies in the fact that not only is the overall amount of electricity use projected to increase over the next several decades, but also electricity is considered likely to represent an increasingly larger portion of our national energy budget.⁶

One of the most detailed and insightful studies done of electricity production decision-making was carried out for the National Science Foundation by a team of researchers headed by Kenneth Sayre.⁷ The team sought to uncover the basic assumptions, reasons, and values that have been informing these important policy decisions. One of their most interesting findings concerned the contents and emphasis present in the utility policy reports. They found that analysts tend to give only cursory attention to the question of whether more electricity is needed, and tend to spend much more time analyzing the question of how more electricity can best be produced.⁸ This latter question is of course a question of means, a question of efficiency, and is one ideally suited to an empirical, cost-effectiveness approach. The analysts typically consider which source of power (coal, oil, nuclear), which site, and which facility design would be the most cost-effective. As the study notes, options like solar energy are usually eliminated because of lack of technological development, geothermal and hydro are eliminated because of lack of proper geographical locations, and oil and gas are eliminated on the basis of resource depletion and the lack of reliable foreign sources.⁹ The study team found that in the end, "the proposed (policy choice) thus boils down to an economic and environmental cost

comparison of the (utilities') proposed nuclear facility and a coal plant of comparable capacity.¹⁰ Thus the choice of generation facility depended primarily on whether the empirical data indicated that the lower construction costs of a coal plant or the (allegedly) lower fuel costs of nuclear energy provided the most efficient path toward increased electricity production.

This particular approach to the policy issue of electricity generation can serve as a good example of how the instrumental approach that is characteristic of much of policy analysis can help to distort our understanding of policy issues. Specifically, the means/ends dichotomy can produce two important distortions, one of which points up a flaw in the dichotomy itself, the other of which affects the way we actually define the problem being addressed. The first concerns the fact that, though we may consider the question of how to generate electricity to be a question of means, it could hardly be thought to be a value-free question, as the philosophy of policy analysis would imply. Indeed, the massive public controversy over nuclear power has shown that such "instrumental" decisions are clearly full of many basic political and moral implications. Thus, while it is theoretically possible to draw a distinction between neutral/instrumental questions and normative/goal questions, such a dichotomy breaks down in practice. This is because it fails to acknowledge that all policy decisions, whether they be ostensibly about means or ends, inevitably affect people, their social relations, and their way of life; and this fact makes all public decisions necessarily normative in character. As Brian Fay argues:

All political decisions, even those which seem as means to an end, are social policies, and as such they embody a notion of what people ought to be required or permitted to do to others. No social policy's worth can be solely instrumental because any such policy will require that people interact with one another in certain definite ways, and for this reason it must bear social value in itself. . . . All political proposals, no matter how instrumental, will alter and shape the personal relations of at least some of the members of society, and will affect the relative welfare of various classes of people; as such they embody moral notions as to what is permissible, just, or right in human affairs. They are a species of moral statement.¹¹

Given the essentially value-laden nature of all policy decisions, the notion of value-free, instrumental policy studies and recommendations can only be described as a convenient distortion. When we begin to ask who it is convenient for, then we have begun a political analysis of policy analysis. For example, we can certainly say that such a distortion is convenient for policy analysts themselves in that it serves to circumscribe a neutral, nonpolitical area of expertise to which they are uniquely qualified. It justifies the role of the "scientist" in what is normally considered the political process of policy deliberation. Similarly, the illusion of a strict dichotomy between means and ends is clearly helpful to those administrators who want to maintain the equally questionable dichotomy between politics and administration. Thus, government and utility bureaucrats can claim not to be concerned with "political" issues, but only in the best means to produce electricity. And finally, the illusion of scientific value-free policy decision would be convenient to any decision-maker who wanted to give the appearance of rationality and objectivity to decisions made on purely political grounds. These implications will be discussed in more detail in later

chapters; but for now, let us turn our attention to the second distorting effect that the means/ends dichotomy can have on our perspective on public policies.

The Politics of Issue Definition

One of the primary reasons that analytic frameworks tend to affect the way we view issues is the natural tendency for most analysts to define the problem they address in a way which makes their techniques and expertise particularly relevant and applicable. Part of what this means in policy analysis is that policy issues have a natural tendency to be seen as primarily questions of means--because it is precisely these questions which can be properly (scientifically) addressed by the analyst. Of course, this may cause difficulties when the issue at hand is not primarily one of means. In such cases we may find ourselves in the situation of the proverbial drunkard who insists on looking for his wallet under the streetlamp, not because he lost it there but because that is the only place he can see clearly. In other words, limited analytic capacities may incline us to conveniently misdefine social problems--a process which is well illustrated in the case of electricity policy during the 1970s.

As the Sayre study indicated earlier, the issue of electricity policy in the United States has been largely defined as how we are to produce more electricity: and the public debate, often strenuous at times, has focused on whether our policy should emphasize coal or nuclear power. But as a number of leading energy critics, like Amory Lovins¹² and Barry Commoner,¹³ have pointed out, this perspective on the issue is a

misleading one because it obscures what by all rights should be the main issue in electricity policy--whether we need to produce more electricity. Both critics have observed that many of our problems in energy policy in the last decade were related to the fact that much of the energy debate was unduly hampered by a persistent tendency to ask only instrumental "how to" questions and not the more basic "what" and "why" questions. Specifically, they argue that for various reasons the desirability of energy growth has been merely assumed by policymakers and the energy policy issue reduced to a matter of how to ensure adequate supplies to meet that growth. Policymakers, policy analysts, and the public-at-large have all tended to accept, in Lovin's words, the "basic tenet of high energy projections . . . that the more energy we use, the better off we are."¹⁴ As a result, we have locked ourselves into a policy of building more and more centralized generating facilities to meet projected increases in electricity demand, without stopping to seriously consider the mounting costs of such a plan, or the viability of alternatives.

Among the social, economic, and environmental costs of increased electrification are: (1) the introduction of major health risks from coal mining, coal burning, uranium mining, reactor accidents (like Three Mile Island), radioactive fuel storage leaks (as in Hanford, Washington), and so on; (2) acceleration of environmental damages brought by subsurface and strip-mining, including pollution and depletion of water resources which are at already dangerously low levels in areas like the Southwest; (3) inequitable distribution of environmental costs to

rural areas, while affluent urban areas reap the benefits of the electricity, as has been the case in the Four Corners power complex in Arizona which feeds power to Las Vegas and Southern California; (4) the encouragement of the centralization and "Los Angelization" of settlement patterns; (5) the use of enormous amounts of capital in a time of capital shortage; (6) the resulting introduction of major economic risks (again as in the case of Three Mile Island); (7) the further concentration of economic and political power in the hands of energy companies and utilities; and (8) the increased vulnerability of the energy system to terrorism and sabotage, with the resultant possibility of increased "paramilitarization of civilian life."¹⁵

As critics like Lovins have shown, many of these problems could be avoided if we begin our analysis with a critical look at the values and goals taken for granted in energy policy. For instance, if we ceased to assume steady growth in electrical consumption and began to emphasize conservation, and if we ceased to assume that electricity is good for all tasks and restricted its use to those things for which it is appropriate, and if we emphasized development of nonelectric alternative forms of energy, like solar heating, then we could reduce our use of electricity by one-third to one-half.¹⁶ This would effectively eliminate the necessity of building any new centralized generating facilities in the near future and thus avoid most of the disadvantages and risks listed above. Obviously, however, this has not been the course of our energy or electrical policy in the 70s and 80s.

Clearly, there are a number of reasons that the assumption of increased growth was not questioned in our energy policy (and we will be examining some of them in more detail in later chapters), but it is fair to say that the instrumental orientation in policy analysis did play a part in fostering this limited perspective. A framework of analysis that concentrates on means and assumes ends does not lend itself to the questioning of basic goals. One finds volumes of government studies which compare the relative advantages and disadvantages of coal vs. nuclear power, but one searches in vain for a government report during the '70's which seriously questioned the growth of centralized electricity production. Reports done by the U.S. Bureau of Mines,¹⁷ the Atomic Energy Commission,¹⁸ The Department of the Interior,¹⁹ and the Federal Power Commission²⁰ all simply assumed sustained growth in electricity consumption and production. The typical perspective of most analysts was summed up neatly by one study which was entitled, "Energy Strategy: Not What But How."²¹

Even those studies which explicitly set out to be critical and questioning, often did so in only an instrumental manner. A good example of this was an analysis done by Alice Rivlin's Congressional Budget Office on President Carter's Energy Proposals.²² While talking a strong conservation line, Carter's plan actually called for continued energy growth, especially in the area of electricity. But the question of whether increased electricity production was desirable was not raised at all in the C.B.O. report, and the question of whether Carter's conservation policies were adequate or desirable merited only two brief

paragraphs in the 150-page study. The bulk of the report concentrated on the question of whether Carter's proposals were the best way to achieve his goal--a typical example of instrumental near-sightedness.

The Growth Assumption

It is crucial to point out that my argument is not that the instrumental bias in public policy analysis is responsible for the faults in our energy policy. As I mentioned in the first chapter, the biases in policy analysis are problematic, not because they can by themselves dominate policy decisions, but because they can exacerbate tendencies already in the policy process. This is clearly evident in the area of electricity policy. The prime reason that electricity growth has gone unquestioned is not some fault in policy analysis, but the fact that continuous growth is simply one of the most sacred goals in American society. The presumption that energy and electricity consumption must continually increase is inviolable largely because it is seen to be rooted in the more basic assumption of the necessity of continuous economic growth. One cannot question the need for more power without questioning the need for an ever-increasing G.N.P., and it is difficult to raise that question in America without appearing to be irrational. It is because this perceived need for continuous growth is considered so basic to the American way of life that our policy discussions are usually limited to debate over how this growth is best stimulated. The instrumental perspective in policy analysis does not cause this generally uncritical attitude towards the question of growth, but it certainly

dovetails quite neatly with it. (The basic assumption of growth which underlies much of American public policy and counter-arguments to it will be a topic that will be explored in more depth as the dissertation proceeds.)

It also should be mentioned at this point that this instrumental perspective is not simply a characteristic of public policy analysis, but part of our national political character as well. Americans are "practical" people who are not particularly inclined to question basic values and ways of life like growth. Kenneth Keniston, one of the most perceptive observers of American culture, has pointed out that we Americans have a cognitive predisposition to think of our problems in instrumental terms--as problems of instrumental rationality rather than problems of values or ends.

Ours is a how-to-do-it society, and not a what-to-do society. For every discussion of the ethics of love, we have a dozen manuals in every drugstore on the "techniques" of love. For every discussion of the purposes of life, industry, and society, a thousand hours are spent in discovering how to sell soap, how to peddle the image of politicians, how to propagate the "American way of life." . . . Thus our society characteristically dismisses "final questions" as either philosophically "meaningless" or--more commonly--as "irrelevant" to the pressing problems at hand. The man who insists on asking such questions is usually considered an obstructionist. Discussions of "why" and "what" are relegated to Sunday Church-going, to neurotic adolescents, and to a few artists and dissidents whose views are occasionally reported, well behind the business news in our national weeklies.²³

Keniston is attempting to describe an American habit of mind, but he also succeeds in describing in a remarkably accurate fashion the guiding spirit behind the activity of the policy analyst--whose job it is not to ask "what" or "why," but only "how to." This raises the interesting

possibility that what we have in public policy analysis is the formalization, the institutionalization of an American intellectual characteristic--a tendency to become mesmerized by the instrumental dimensions of our problems. (The notion of policy analysis as an institutionalization of American thought is another of the themes that will be explored in more detail in later chapters.)

At some point, however, we must begin to question the rationality of instrumental rationality. When we define rationality purely in instrumental terms, we run the risk of actually obscuring the fact that our policy path may be fundamentally an irrational one. We tend to mistakenly assume that a policy is rational if it achieves its goal efficiently, and neglect to question the rationality of the goal itself. An irrational goal pursued rationally is still irrational. A focus on instrumental rationality may only encourage, in the words of Yehezkel Dror, "doing more efficiently the incorrect thing, and therefore both causing damage more effectively and making the wrong policy more difficult to change."²⁴ In this sense, unless we want to risk merely compounding our policy problems, we need a kind of policy analysis which can also question the rationality of policy goals, which can put the basic value questions at the center of its analysis. But this of course is impossible within a positivist set of assumptions. However, as Kenneth Dolbeare suggests, failure to transcend this current paradigm of analysis could prove very costly: "Uncritical extensions of current research premises and approaches in policy analysis seems likely to further rigidify

available policy alternatives and institutionalize the very value premises and assumptions which have led to or now sustain existing problems."²⁵

The Political Role of Instrumentalism

This tendency to not question basic ends like energy and economic growth is, however, not merely a matter of cultural propensity. This instrumental focus is also a function of the fact that certain specific political and economic interests benefit quite directly from this uncritical attitude towards policy. In other words, instrumentalism has a definite political function. A tendency to support current dominant societal goals is also a tendency to support the interests of those who benefit from those goals. As Marx pointed out many years ago, the dominant values in a society are often a reflection of the most powerful and dominant groups in society. Thus a perspective on policy which does not question basic values can provide tacit support for those groups. In terms of energy policy, for instance, it is evident that certain financial interests stand to benefit greatly from a tendency to not question the desirability of continued growth in electricity production. Manufacturers of electrical equipment suppliers of coal and nuclear fuel, and utility companies and their investors, all profit handsomely from growth in electricity generation. If one were to allocate responsibility for creating and sustain the emphasis on energy growth, most of it would not go to the intellectual biases contained in policy analysis, but to the influence of these powerful interests in the

policymaking process. As Leon Lindberg concluded in his study of the failure of energy policies in the United States:

The present dominant criteria and political coalitions responsible for them are too narrow and undimensional to provide the basis for a desirable or politically viable long-term policy towards energy supply-side criteria and definitions of the energy problem have so far dominated agenda setting and the substance of policy. This situation reflects, among other things, the political power of a relatively small number of corporations and agencies sharing an immediate financial interest in or intellectually committed to maintaining or expanding energy consumption.²⁶

Thus, while policy analysis may not determine how policy issues are defined, it can play a supporting role to those political interests which do influence the process of issue definition to their own advantage. It is in this sense that the analytical biases inherent in policy analysis can have important political functions and ramifications. To reiterate, we are not dealing here with a simple process of the intentional political biases of analysts creeping into analysis, but with a complex chain of conceptual convergences beginning with a certain distorted perspective on policy issues dictated by analytic assumptions and ending with a biased view of specific policy issues that can directly benefit some political interests.

Footnotes

¹For a brief elucidation of the theory of noncognitivism, see "Contemporary Noncognitivism," The Encyclopedia of Philosophy (New York: MacMillan and Company, 1967), Volume 3, pp. 106-109.

²Brian Fay, Social Theory and Political Practice (London: George Allen and Unwin, 1975), p. 49.

³Edith Stokey and Richard Zeckhauser, A Primer for Policy Analysis (New York: W.W. Norton and Company, 1978), p. 259.

⁴Fay, p. 23.

⁵It can be pointed out that the very notion of efficiency is a normative one which involves a choice between the normative criteria that will constitute it--time, money, etc. But those wishing to establish questions of efficiency as empirical questions will simply argue that once those criteria are decided upon (presumably by the same leaders who decide the policy goal in the first place), the question becomes a purely empirical one once again.

⁶See U.S., President, The National Energy Plan, No. 040-000-00380-1 (Washington, D.C.: Government Printing Office, 1977).

⁷Kenneth Sayre, (ed.), Values in the Electric Power Industry (Notre Dame, Ind.: Notre Dame University Press, 1977).

⁸Ibid., p. 108.

⁹Ibid., pp. 108-109.

¹⁰Ibid., pp. 109-110.

¹¹Fay, p. 53.

¹²Amory Lovins, Soft Energy Paths: Toward a Durable Peace (Cambridge, MA: Ballinger Publishing Company, 1977).

¹³Barry Commoner, The Poverty of Power (New York: Alfred A. Knopf, 1976).

¹⁴Lovins, p. 4.

¹⁵Discussion of these points can be found in Lovins, Sections 2.9 and 9.1.

¹⁶Lovins, p. 40.

¹⁷U.S. Department of Interior, Bureau of Mines, "U.S. Energy through the Year 2000." December 1972.

¹⁸Atomic Energy Commission, "Nuclear Power Growth--1974-2000," February 1974.

¹⁹W.G. Dupree and J.A. West, "United States Energy to the Year 2000," U.S., Dept. of Interior, December 1972.

²⁰U.S., Congress, Senate, Committee on Interior and Insular Affairs, "World Energy Supply Demand Analysis," Federal Power Commission, Office of Economics, January 11, 1973.

²¹Jan A. Jarbers, Energy Strategy: Not What But How (Framingham, MA: Energy Research Group, 1977), pamphlet.

²²U.S., Congress, Budget Office, President Carter's Energy Proposals: A Perspective, No. 052-070-04044-1 (Washington, D.C.: Government Printing Office, June 1977).

²³Kenneth Keniston, The Uncommitted (New York: Harcourt, Brace, and Jovanovich, Inc., 1965), chapter 9.

²⁴Yehezkel Dror, Design for Policy Sciences (New York: American Elsevier Publishing Company, Inc., 1971.), p. 16.

²⁵Kenneth Dolbeare, "Public Policy Analysis and the Coming Struggle for the Soul of the Postbehavioral Revolution," Power and Community, Philip Green and Sanford Levison (eds.) (New York: Pantheon Books, 1973).

²⁶Leon Lindberg, (ed.), The Energy Syndrome (Lexington, MA: Lexington Books, D.C. Heath and Co., 1977), p. 5.

C H A P T E R I I I

POLICY ANALYSIS AS FACT FETISHISM

McNamara's mind was mathematical, analytical, bringing order and reason out of chaos. Always reason. And reason supported by facts, by statistics--he could prove his rationality with facts, intimidating others. He was marvelous with charts and statistics. Once, sitting at CINCPAC for eight hours watching hundreds and hundreds of slides flashed across the screen showing what was in the pipeline to Vietnam and what was already there, he finally said, after seven hours, "Stop the projector. This slide, number 869, contradicts slide 11." Slide 11 was flashed back and he was right, they did contradict each other. Everyone was impressed, and many a little frightened.

David Halberstam

The Best and the Brightest

This chapter deals with several of the problems surrounding the tendency toward fact-fetishism in public policy analysis--the tendency to over-emphasize the importance and relevance of fact-gathering to the resolution of public policy problems. This problem has been commented upon by other observers of policy analysis who have noted a tendency for modern policy problems to be defined as data-collection problems. With the help of these commentators, it will be shown that many of our current, serious policy issues are in reality problems of conflicting values and interests which are not easily resolvable on purely empirical grounds. Indeed, it will be seen that the "facts" in a given policy area often actually support a number of competing interpretations and positions in a given policy issue.

In addition, this chapter will explore how fact-fetishism lends a scientific facade to the activity of policy analysis, and how this

facade may serve a number of different political purposes. For example, this facade can lend an air of scientific legitimacy to decisions already made on other grounds. Further, this emphasis on scientific techniques and fact-gathering may also serve to structure the very nature of policy discussions in a way which indirectly supports the interests of particular sides in these policy disputes. In many places throughout the chapter, the issue of nuclear power will be used to illustrate the points being made about fact-fetishism. This persistent and controversial issue will demonstrate how this analytic tendency can result in a number of distortions in the way policy problems are understood and policy decisions are made.

Science and Facts

According to the Encyclopedia of Philosophy, the primary requirement of the scientific method is "fidelity to empirical evidence"¹--or as it is known in popular parlance, "sticking to the facts." In the same manner, a scientific decision, a rational decision, is often thought to be one based solely on the facts, not emotions. It is unsurprising then that a scientific perspective on policy decisions puts special emphasis on facts, and that many policy analysts spend much of their time and energy gathering and processing information about policy problems and options. This emphasis on fact-gathering is not only a function of the scientific perspective, but also a product of the realities of a large, centralized political system. One of the great disadvantages of political centralization is that it is very difficult

for policymakers to actually know what is happening in their society. They sit isolated in the capital and rarely have the opportunity or time to actually see and experience social problems first-hand. They are forced to rely on their aides and analysts for descriptions of the nature and extent of these problems. Who are the poor? Where do they live? How poor are they? In a sense, analysts become the eyes and ears of the policymakers, collecting the vital information needed for rational policy decisions. Fortunately, this task of fact-gathering and processing has been made immensely easier by advances in electronic information storage and processing systems. New sophisticated computer technologies have made it possible to accumulate and analyze enormous amounts of social data. Many see this as an unmitigated good. Herbert Simon, for instance, has enthusiastically observed that, "With the rapid development of information-processing technology, the corporate and public decision-making processes are becoming immensely more sophisticated and rational than they were in past eras."² In the midst of this kind of enthusiasm, very little thought has been given to the possibility of political bias. Indeed, it would seem difficult to find a more politically neutral--and innocuous--activity than data-gathering. But in fact, even this simple activity can have hidden political implications, and can distort our understanding of policy problems in subtle, but important ways. Let us see how this can be so.

The Effects of Fact-Fetishism in Analysis

One unfortunate by-product of the development of sophisticated information systems is that they have fueled some analysts' tendency to

become fascinated with the very process and technology of data-gathering itself. The enormous capacity of these systems had made it possible for data-gathering and processing to become an essentially endless activity, and for the analyst to become so immersed in it that he or she loses track of the ultimate end involved. One long-time student of public policy analysis, Ida Hoos, has described this phenomenon in this way:

Dear to the hearts of technically oriented analysts is the information gathering and processing state. In fact, so gemutlich is the occupation with data that many systems designs, purported to deal with pressing social problems, never progress beyond that point. Displaying the ingestive propensities of a snake, the information system swallows up all the resources allocated to a given project and diverts attention from its larger purposes.³

As a typical example of this problem, Hoos cites a study done for the Bay Area Transportation Study Commission.⁴ Using techniques ranging from origin-and-destination home interview surveys to aerial photography, analysts enthusiastically gathered over 10 million pieces of information, stored on 1100 reels of magnetic tape, at a cost of almost \$3,000,000. Unfortunately, despite all of this effort and expense, "interpretation of the three-million-dollar agglomeration has never been achieved; the raw data remains undigested and transportation remains the same hit-or-miss affair in the area studies as elsewhere."⁵

These kinds of incidents were most typical in the earlier days of information technology,⁶ when the enthusiasm of the data-collectors was unbounded, and when it was routinely assumed that more information was always better than less. But while such fiascos are more rare today, it is important to see that the main problem with this kind of focus on facts is not the excesses or waste that it sometimes produces, but the

slanted perspective on policy issues it can encourage. For example, an emphasis on "facts" in analysis can begin to affect the way we define and try to solve policy problems. The understandable inclination is to believe that data-gathering can actually be the key to solving our social problems. Myra Breitbart, in her study of the basic assumptions informing the practice of urban planning, noted that "while most traditional planners acknowledge the complexity of urban problems, they maintain a basic faith in science and the power of hard facts to provide solutions to these problems."⁷ A typical example of this tendency to define policy problems as data-collection problems can be found in one government report on urban planning and metropolitan development:

Information is the usual common denominator in metropolitan problem solution; it is the core of any metropolitan growth-management scheme, guidance mechanism, booster campaign, or research effort, both private and public. A tremendous range of metropolitan-oriented undertakings, private and public, operation and research-development oriented, founder for lack of data.⁸

This kind of perspective on policy problems can have a detrimental effect on our attempts to understand and solve those problems. Consider for a moment, the effect this perspective has had on the way we approach and debate environmental issues. Data-gathering has become such a central focus in this area, that it has begun to distort the nature of policy discourse concerning environmental issues. Increasingly the political struggles between business developers and environmentalists in the courts and the legislatures consists of arguments between and about rival environmental impact statements--huge volumes, full of thousands of bits of data, virtually incomprehensible to lay people. One of our

leading environmental policy analysts, Robert Socolow, sees this development as a matter of great concern. He questions the wisdom of having these debates center around such reports, and points out that these analyses often "fail to assist in the resolution of environmental controversies."⁹ These empirically-oriented technical reports are sometimes irrelevant, he argues, because "they are not about what people care about."¹⁰ What people care about are the basic values and interests that are at stake in these environmental controversies: roughly speaking, those values and interests favored by industrial and commercial developers versus those values and interests fostered by a more clean and healthy environment. Often the core of the dispute is not the exact impact of a particular project, but the clash of competing values--a subject that usually gets little direct attention in the fact-oriented policy reports.

The controversy over the Tocks Island Dam is a typical example of this problem. Between 1962 and 1975, numerous environmental studies were done of this project--the total came to over 50. The last study alone weighed sixteen pounds, came in six volumes, and was 3,600 pages long. As might be expected, much of the formal debate over Tocks Island was taken up by argument over the accuracy, reliability, scope, and methodology of these various studies. And yet observers agree that none of these reports were a crucial factor in the final decision. In the end it was policymakers values and commitments to regional interests which finally moved them to decide against the dam--factors that were rarely explicitly addressed in these statistic-filled studies.¹¹

Knowledge without Understanding

All of this is not to say that facts are not relevant to policy decisions--of course they are. But they may not be as centrally relevant as policy analysts tend to think. As Martin Rein explains, the research approach used by most policy analysts is guided by philosophical assumptions that typically overestimate the role of factual findings in resolving the normative and political controversies that are at the center of all policy issues.

Most social scientists take for granted the view that . . . social science can reduce conflict by expanding the areas of agreement on what are the facts of the situation and how they came about. If one assumes that there is a link between what is truthful (factual) and what is right (desirable), factual analysis must also improve the quality of policy decisions. Governments therefore should invest in policy-oriented research . . . I disagree with this interpretation of how policy and analysis interact The crucial issues in a policy debate are not so much matters of fact as questions of interpretation.¹²

In other words, the relevance of facts to policy decisions may have been oversold by policy analysts. Rein reminds us that "social policy is above all concerned with choice among competing values,"¹³ and that while there is some connection between facts and values, facts by themselves can rarely serve as even a general indicator of the correct value or policy path to pursue. Mere possession of information and facts on a particular policy issue does not ensure that we know what information is relevant, or how to use it effectively. We can be information rich, but perceptually poor--we can lack an appreciation of the broader social and economic context which gives meaning to this information. In other words, empirically-oriented policy analysis can easily produce knowledge without understanding.

This problem in policy analysis is similar to a more general problem afflicting empirical research as a whole that has been described by interpretive social scientists like Charles Taylor.¹⁴ They argue that isolated facts tell us very little by themselves. They have little real meaning for us until we can interpret them, until we can put them into some theoretical framework which explains their existence and significance. Moreover, facts can often be interpreted in different ways; they can often lend support to several different frameworks and perspectives. This is, in part, why discovering "the facts" will often fail to settle the issue in a policy controversy. An illustration of this is the current dispute over the meaning of the series of near-disastrous accidents in our nuclear power program. There is essential agreement over the facts of the matter--the nature of the accidents, how they occurred, etc.--but there are tremendous differences in interpretation. Nuclear opponents cite these accidents as indications of the inherent dangers involved in nuclear power, while proponents argue that the near-miss nature of the accidents demonstrates that safety procedures and equipment can keep these power plants safe.

"Facts" are not only ambiguous in this way, but often in a complex issue like nuclear power, there are enough contradictory facts to reasonably support several positions. This seems to be confirmed by a survey study done by John Reed and John Wilkes on the relationship between knowledge and support for nuclear power.¹⁵ They sought to discover whether those citizens most "knowledgeable" about nuclear power tended to support or oppose it. Some supporters and opponents have long claimed

that if only the public knew the "facts" of the situation, they would be on their side. In order to test this hypothesis, Wilkes and Reed first constructed an information test so that they could measure the extent of nuclear knowledge of those in their study group. They then compared the level of knowledge to how the respondents felt about the nuclear power issues. The results are reproduced in the table below.¹⁶

TABLE 1

ATTITUDES TOWARD BUILDING MORE NUCLEAR POWER
PLANTS IN THE U.S. BY NUCLEAR KNOWLEDGE
(in percents)

Level of Nuclear Knowledge	Attitude Toward Nuclear Power			
	Strongly Oppose	Mildly Oppose	Mildly Oppose	Strongly Oppose
Four- Five	39	14	10	37
Three	26	10	19	45
Two	27	15	14	44
One	26	11	26	37
None	24	29	24	32

As the table indicates, instead of finding a linear relationship between the two variables of knowledge and attitude on nuclear power--that more knowledge was associated with either strong support or strong opposition to nuclear power, what Wilkes and Reed found was a curvilinear relationship, which indicated a higher percentage of knowledgeable among the "strongly favor" and the "strongly oppose" groups.¹⁷ And the higher percentages of the least knowledgeable tended to be in the mildly favor and mildly oppose categories. In other words, the increase in knowledge about nuclear power was associated with the strength of opinion, but not one particular opinion.

To Wilkes and Reed this suggests that in policy areas where there are a number of competing facts which support both the pro and con positions, citizens probably select out those particular facts which tend to fit best into their preconceived notions about the issue.¹⁸ In any case, it is clear that factual knowledge about the nuclear power controversy, instead of settling the issue, seems to polarize the various sides even more. Or in the words of Wilkes, "This isn't really a debate about the facts at all, its a debate about what nuclear power means to people."

The Cultural Dimensions of the Problem

The problem we have here can be seen as another variation of one we discussed in the first chapter--the tendency of a scientific policy analysis to obscure the true, political nature of public policy decisions, and thus to inhibit the recognition (and resolution) of the conflicts over basic values and interests that lie at the heart of all serious policy disputes. As Socolow observes, this is part of a larger cultural phenomenon.

The failure of technical studies to assist in the resolution of environmental controversies is part of a larger pattern of failures of discourse in problems that put major societal values at stake. Discussion of goals, of visions of the future, are enormously inhibited. Privately, goals will be talked about readily, as one discovers in even the most casual encounter with any of the participants. But the public debate is cloaked in a formality that excludes a large part of what people most care about. Analyses are part of formal debate. We should not be surprised to learn therefore, that the disciplined analyses brought to bear on a current societal dispute hardly ever do justice to the values at stake.¹⁹

As Socolow suggests, this reluctance to debate values in public is related to how we think of "formality" in our culture. Our notion of what a "formal"--i.e., serious and rational--debate consists of is strongly informed by the scientific perspective. Science has become synonymous with a serious and rational approach to the world. Thus we tend to think of a formal and serious debate as one which focuses on the "facts," not on values; for values are thought to be purely subjective and emotional and thus not the proper subject of rational debate. This scientific bent, with its emotivist theory of ethics, has worked to limit our view of what acceptable and serious policy discourse consists of. This helps to explain why even those opposed to environmentally destructive projects on moral or aesthetic grounds end up focusing their presentations in a hearing on the more technical and empirical questions involved. People who object to projects purely on normative grounds can be made to feel that their arguments are, at best, subjective opinions, or at worst, irrelevant, emotional outbursts. To be taken seriously, one must "stick to the facts"--even if they are not the issue. In chapter seven I will outline one way to avoid this kind of problem--an approach to policy analysis that focuses on value issues and attempts to evaluate

them rationally--but for now let us continue our exploration of this problem, and in particular, its political implications.

The Political Functions of Empiricism

We are faced with the following paradox: empirical policy analyses rarely get to the heart of policy questions, yet we seem to be inundated by them. Or as Socolow has put it, although policy makers often "conclude that their time is not well spent pondering the available analyses . . . they may commission still more of them."²¹ How can this seemingly irrational behavior be explained? The explanation can only partly lie in the scientistic bent of the policy analysts, another part must lie in an understanding of the political purposes and interests that are served by this data-oriented approach. For example, one of the most plausible explanations is that these reports are sometimes not intended to serve as a guide to policy at all, but merely as ways of confirming and supporting policy decisions already made on other grounds. Empirical policy studies can be employed as a scientific facade to enhance the apparent desirability of pre-ordained policy choices.

In fact, the profession of policy analysis has long been aware that its work can serve a "legitimization function"--as the work of Carol Weiss clearly demonstrates.²² But it is important to note that this function could become increasingly important as modern policymakers find legitimacy an increasingly scarce political resource. Political commentators on both the left²³ and the right²⁴ have noted the existence of a "legitimation crisis" in western democracies, and it is against this background that much of policy analysis must be understood. Harris polls

have indicated that between 1966 and 1977 the number of people having a "great deal" of confidence in the executive branch dropped from 41% to 23%; the Supreme Court has fallen from 50% to 29%; and Congress has dropped from 42% to 17%.²⁵ In 1979, the nation heard President Carter devote a major portion of one of his television addresses to this very problem. He pointed to the "crises of confidence" in government and called it "a problem more serious than inflation or energy." The causes of this growing disillusionment are many, and it is not my purpose here to enter into the current debate about them. Rather, I would simply note that this crisis does exist and has put policymakers in a tenuous position--a position which may be reinforced by invoking the powerful symbolism inherent in scientistic policy analysis studies.

It is well understood by politicians that legitimacy is at least as much a matter of appearance as it is a matter of substance. And it is in the realm of appearances that policy studies--especially scientistic ones--can serve a useful political function to the policymaker. In an era when few sources of authority go unquestioned, science remains a respected form of authority in our culture. And so policy makers who can give the appearance of scientific procedures to their decisions are invoking a powerful legitimizing force. It is this legitimizing force which helps to explain why policy analyses are commissioned but not really used; and also why policymakers have readily adopted the language of policy analysis if not the specific recommendations of the analysts. The use of scientistic terms and statistics gives an air of rationality and precision that is unavailable elsewhere. It matters little of course, if the actual

terms or statistics are fully understood by the public, for it is the appearance they give which is the point.

The Nuclear Power Issue

The legitimization function of policy analysis can be clearly seen at work in the area of nuclear energy policy. By the beginning of the 1970s the United States Federal government not only had a large amount of financial capital invested in the development of nuclear power, but a great deal of political capital as well. The nuclear power program has been a government sponsored program from its very beginnings in the Atoms for Peace program of the Eisenhower Administration. The Atomic Energy Commission and later the Nuclear Regulatory Commission were prime movers and supporters of this form of energy. Much of this capital and prestige began to be directly threatened by the advent of the anti-nuclear movement in the late sixties. In the face of continuing criticism and increasing public concern over the safety of nuclear power, it was only natural for the government to turn to the scientific establishment in 1972 to confirm the inherent legitimacy of this program by getting at the "real facts" about safety.

The product was the famous Rasmussen report on the probability of nuclear accidents.²⁶ When it was released in 1975, it was heralded by the Nuclear Regulatory Commission as the definitive study demonstrating the safety of nuclear power. Government spokesmen were careful to point out that Professor Rasmussen was from M.I.T. and had the help of 60 experts; that the report cost \$3,000,000, and amounted to 14 volumes full of scientific calculations that demonstrated that the chance of a reactor accident killing 70 people was a million to one (per year, per reactor),

and an accident causing 2,300 deaths had a one-in-a-billion chance of occurring. Altogether an impressive display of scientific expertise, and no doubt it contributed to the efforts to allay public fears. It probably matters little that the report suffered from so many oversimplifications and gross methodological problems that after many years it was even questioned by the Department of Energy; for it is probable that much of its purpose at the time was simply symbolic--an effort to invoke the authority of science to calm the public and legitimize the long standing government support for nuclear power.²⁷

Of course, whether or not the Rasmussen study was intentionally conceived of and used by policymakers in such a cynical way is difficult, if not impossible, to prove conclusively. But there is some additional evidence that policy studies in the area of nuclear energy have been purposely used for these purely legitimizing purposes. This stronger evidence comes from investigative work done by David Burnham, a reporter for the New York Times. In 1974, Burnham discovered that between 1963 and 1973 the Atomic Energy Commission engaged in a deliberate policy of suppressing research studies "that found reactors more dangerous than officially acknowledged."²⁸ A typical incident involved a study done by the agencies own scientists on the proper location of reactors in relation to population centers. This reactor siting study revealed among other things that an accident at a nuclear site could potentially kill over 45,000 people and devastate an area the size of the state of Pennsylvania. In a meeting to consider this report, that was attended by representatives from six major private utility companies, it was decided to not make the report public because of "potentially adverse reaction on the part of the

public."²⁹ This pattern of suppression was continued in the recent case of Dr. Thomas F. Mancuso, whose work exposing the dangers of low-level radiation on nuclear plant workers led to his government research contract being cancelled.³⁰

In these cases, it is clear that nuclear power policy studies were not simply seen as ways of gathering relevant knowledge about the problems surrounding nuclear power; but rather, they were seen by at least some policy makers as a way of manufacturing support for this controversial program. As Burnham concluded, "Over and over again, the internal memos of the AEC officials indicate that they were apparently more concerned about the possible public relations impact of safety studies than the actual safety of reactors."³¹

How Fact-Fetishism Can Support Special Interests

The suppression of factual evidence discussed above is best understood as an abuse of public policy analysis. But it is important to note that even where no such abuses occur, the tendency toward fact-fetishism can still lead to distorted understandings of policy issues, understandings which can aid various special interests. I want to suggest that the very form of political debate encouraged by fact-oriented policy studies can work to the advantages of particular sides in policy disputes. As I pointed out earlier, the tendency in this style of analysis is to see policy problems as technical problems which can be resolved by adequate empirical knowledge--and it is this kind of perspective which can work to advantage of special interests. In the debate over nuclear power, for instance, this kind of perspective has created a "home court advantage" for its supporters. For until relatively recently, the major questions

surrounding nuclear power were seen as ones that could be answered by empirical studies: What is the probability of an accident? Can safety mechanisms contain such accidents? Are there real dangers posed by low-level radiation? How can we safely store nuclear wastes? This view was to the advantage of supporters in one sense because they were in a much better position to fund research that would support their position. Research is an expensive proposition, and the government and the nuclear industry clearly had more funds available than those who oppose nuclear power. And further, most of the "experts" in the area of nuclear power are either directly or indirectly dependent on the federal government or the nuclear industry for their livelihood.

But secondly, and more importantly, the emphasis on empirical issues meant that many of the most powerful arguments raised by anti-nuclear forces were relegated to a secondary status. The debate focused on studies like the Rasmussen report, with disputes over the accuracy of the methodology, and so forth. But many of the basic points of the anti-nuclear position were not technical points at all, but moral and political points. Take, for example, the apparently technical issue of risks. Many opponents argued that the central questions concerning risks were not simply a matter of how safe nuclear power is, but how safe is safe enough--what is an acceptable or desirable level of safety. These are clearly moral, value-laden questions. Amory Lovins has long argued that "whether nuclear power should be rejected is a question not of facts but of values. Facts (to the limited extent that they can be disentangled from values) are relevant but not dispositive."³² Opponents also emphasized that there are serious political questions at the heart of the risk issue--in

particular, the issue of who has the right to determine what an acceptable level of risk actually was. They questioned whether private utilities, who stood to profit handsomely from building nuclear plants had the right to accept risks for the public. They also questioned whether government institutions like the Nuclear Regulatory Commission, whose existence and growth were directly dependent on the continuation of the nuclear power program, could be trusted to make these decisions in an unbiased fashion.

However, advocates of nuclear power have been able to take the high (scientific) ground in this debate, and convince policymakers that these kinds of moral and political issues were spurious and irrelevant--the product of "political zealots" and "ecology freaks"--and only interfered with a serious and rational approach to the technical problems of nuclear power. As Dr. Ralph Lapp, a nuclear consultant, testified before Congress, " . . . opponents of nuclear power have converted a straightforward technical problem into a politicized and emotional issue."³³ The end result of this tactic was, as I.C. Bupp has pointed out, that "by the early seventies the general tendency among the Western world's business and government establishments was to accept the judgment of nuclear advocates that doubts about nuclear safety were confined to a comparative handful of noisy and misguided people."³⁴

A Technocratic Ethos

Thus a scientific approach to policy issues is not always as politically neutral as might first appear. Ironically, the effort to remain "objective" by simply focusing on "the facts" may actually serve

certain political purposes and interests. Leon Lindberg identifies this kind of approach to policy analysis as part of a "technocratic ethos: which has come to play a large role in contemporary American politics. His description of this ethos serves as a good summary of the points made in this chapter:

The technocratic "ethos" assumes the desirability of separating scientific questions from political and social value questions, and assumes further that the scientific and technical questions are more decisive and that they can be resolved on scientific grounds apart from ethical considerations, and finally by perpetuating the notion that scientific expertise is the main requirement for making reasoned choices among technological alternatives, restricts participation in such decisions and frustrates democratic control of technology. Established interests and long-standing alliances among government bureaucrats, industry technocrats and managers, and their legislative patrons are the usual beneficiaries.³⁵

Footnotes

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⁴Ida Hoos, Systems Analysis in Public Policy: A Critique (Berkeley: University of California Press, 1972), p. 200.

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⁷Myrna Breitbart and Roger E. Kasperson, Participation, Decentralization, and Advocacy Planning (Wash. D.C.: Commission on College Geography, 1974) Resource Paper #25, p. 43.

⁸Richard D. Duke, "Urban Planning and Metropolitan Development--The Role of Technology," Applying Technology to Unmet Needs, Appendix V, Technology and the American Economy, Studies prepared for the National Commission on Technology, Automation, and Economic Progress, (Wash. D.C.: U.S. Government Printing Office, February 1966), p. V-8.

⁹Robert Socolow, "Failure of Discourse," in When Values Conflict, ed. by Laurence Tribe, Corinne Schelling, and John Vass, (Cambridge, Mass.: Ballinger Publishing Company, 1976), pp. 1-2.

¹⁰Ibid.

¹¹See the rest of the articles in When Values Conflict.

¹²Martin Rein, Social Science and Public Policy (New York: Penguin Books, 1976), pp. 11-12.

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¹⁴Charles Taylor, "Neutrality in Political Science," in P. Laslett, and W.G. Runciman (eds.) Philosophy, Politics, and Society, 3rd series, (New York: Barnes and Noble, 1973).

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from John Wilkes, Worcester Polytechnic Institute, Worcester MA, 01609.).

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¹⁷Ibid., p. 14.

¹⁸Ibid., p. 14.

¹⁹Interview with Wilkes, April of 1980.

²⁰Socolow, p. 2.

²¹Ibid., p. 2.

²²Carol Weiss, (ed.), Using Social Research in Public Policy Making (Lexington MA: D.C. Heath and Co., 1977), pp. 14-15.

²³See the work of Jurgen Habermas, including Legitimation Crisis (Boston: Beacon Press, 1975).

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²⁵Louis Harris, The Harris Survey, March 14, 1977.

²⁶The full title of the Rasmussen Report is Reactor Safety Study: An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants, AEC, Document WASH-1400 (draft) (Wash. D.C.: U.S. Government Printing Office; August 1974).

²⁷For a discussion of the nature and importance of symbolic politics, see Murray Edelman, The Symbolic Uses of Politics (Champaign: Univ. of Illinois Press 1964).

²⁸New York Times, November 10, 1974, p. 1.

²⁹Ibid., p. 64.

³⁰For a somewhat oversimplified account of this case, see Anna Gyorgy, No Nukes (Boston: South End Press, 1979), pp. 92-94.

³¹New York Times, p. 64.

³²Amory Lovings, The Energy Controversy (San Francisco; Friends of the Earth, 1979), pp. 84-85.

³³See Joint Hearing before the Select Committee on Small Business and the Committee on Interior and Insular Affairs, United States Senate, "Alternative Long-range Energy Strategies," Interior Committee Serial No. (94-47) (92-137), December 9, 1976, p. 5.

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CHAPTER IV

POLICY ANALYSIS: THE USES OF COMPLEXITY

The basic issues in energy strategy, far from being too complex and technical for ordinary people to understand, are on the contrary too simple and political for experts to understand.

Amory Lovins

Soft Energy Paths

This chapter deals with another major variation of the depoliticization theme introduced in the last chapter. Here, I will examine the tendency to see public policy problems as primarily problems of social complexity--a function of the increasingly intricate and complicated industrial world we live in. Again the emphasis shifts toward technical solutions, in this case the construction of better policy analysis models which can untangle the complexity which seems to be frustrating our attempts to solve our social problems. As before, I will argue that this analytical tendency in policy analysis can have a dysfunctional effect on our understanding of the nature of our persistent socio-economic problems; in particular, it inhibits us from appreciating the political nature of these difficulties and the political obstacles that often prevent effective policy action.

Policy Failures and Modeling

Throughout the 1970's and 80's, the federal government has been frustrated in its attempt to solve many of our most important policy problems, including poverty, energy, inflation, and others. The

persistence of such problems has led some to despair over the ability of governments to actually solve problems in advanced industrial societies. President Carter stated in his 1978 State of the Union Address that "government cannot solve all our problems, set our goals, or define our vision. Government cannot eliminate poverty, provide a bountiful economy, reduce inflation, save our cities, cure illiteracy, provide energy, or mandate goodness."¹ Some, including many policy analysts, have attributed the government's inability to solve our pressing social problems to the sheer, confusing complexity of modern society. Industrial societies have simply grown to large and complex to be managed in a straightforward manner. But far from being discouraged about this state of affairs, many policy analysts are optimistic; they see their expertise and analytic techniques as the way out of this problem. One of our more prominent policy analysts, Jay W. Forrester summarizes this view in the following way:

Whether viewed from Capital Hill, Wall Street, or Middle America, the list of serious national problems is lengthening. Such problems include inflation, unemployment, recession, resource scarcity, environmental damage, instability of governments, decay in American cities, increasing food prices, and the shifting balance of international power from resource-consuming nations to resource-producing nations. The persistence of serious national problems has engendered widespread public dissatisfaction with the nations's ability to find and apply effective solutions to major difficulties. As the nation increases in complexity beyond the capacity of conventional social management, new tools are needed to aid in understanding socio-economic behavior and designing more enduring public policies.²

This perspective on our policy problems is common of many analysts today, especially those who specialize in one of the most sophisticated forms of public policy analysis, advanced computer modeling. In many ways, this is the most prestigious form of policy analysis, and those

analysts who are at the top of this field--Forrester of MIT, Lawrence Klein of Wharton Econometric Forecasting Associates, Michael Evans formerly of Chase Econometrics--are often consulted by government agencies and private business, and appear as star witnesses before congressional committees. The rising importance of this computer simulation school of policy analysis is based in large part on the assumption that in advanced industrial societies, many policy failures flow directly from our inability to understand how such a complex organization actually works. As one analyst observed, one of the inherent problems in our society is that "as the public policy decision-maker begins his investigation, . . . he confronts an extremely complex society, the complexity of which is intensified by the recognition that multiple causes and effects tie many branches together in complex social relationships."³ Thus, without a proper model of how the various parts of our vast and intricate socio-economic system interact with one another the policymaker is lost. He or she is unable to accurately diagnose the causes of our social problems, or to successfully predict the intended (and unintended) effects of his or her policy actions. Analysts like Forrester suggest that it is this inability to accurately predict policy outcomes which accounts for many of our policy failures, and produces "the pervasive sense of frustration and failure"⁴ felt by many policymakers. In effect, our policy problems are seen as modelling problems.

Obviously, this view of policy serves to justify the increased role of analysts and their computer simulations in the policymaking process. Forrester goes as far as to argue that these new tools must

replace our common modes of political thought which cannot hope to deal with the complexity we face in modern societies. Politicians have always had social, economic, and political theories to explain society and guide their policy decisions, but to the analyst these are only "intuitive" theories--and intuition, like spontaneity, is not a characteristic that is looked upon with favor by rational analysts. It is thought that the kind of intuitive theories bandied about by politicians, the press, and the public are simply too crude to be of much use, and can actually do more harm than good. They have the disadvantage of being based upon "personal experience," the kind of experience that has little utility in a complex social system which exhibits what Forrester calls "devious," "diabolic," and "counter-intuitive" behavior. As he explains:

The intuitive process will select the wrong policy solution much more often than not. A complex system behaves in many ways quite the opposite of the simple systems from which we have gained our experience . . . Intuition and judgment, generated by a lifetime of experience with the simple systems that surround one's everyday actions create a network of expectations and perceptions that could hardly be better designed to mislead the unwary when he moves into the realm of complex systems . . . Complex systems are counter-intuitive. That is, they give indications that suggest corrective action which will often be ineffective or even adverse in its results. Very often one finds that the policies that have been adopted for correcting a difficulty are actually intensifying it rather than producing a solution.⁵

As an example of this problem, Forrester points out that while "humanitarian interests and short term political pressures" may promote an urban renewal policy which includes new, low-income housing to replace the burnt out slums in central city areas, such an "intuitively sensible policy can affect adversely the very problems it is designed to alleviate." His analysis of such a policy, using a sophisticated computer simulation, indicated that increases in low-income housing

would only have the effect of attracting more low-income people to urban areas, which would in turn decrease the already weakened tax-base, and take up valuable land that could be used for new industry.⁶ Such arguments serve as good analytical ammunition against "bleeding-heart liberals," whose programs may be well intentioned, but only create more problems than they solve.

To replace this faulty "intuitive" approach to policy, policy analysts offer formal mathematical models. And it would not be an exaggeration to say that the construction and use of these kinds of models occupy a large part of many analysts' time. They come in a dizzying variety--ranging from simple supply and demand graphs and basic queuing models to more sophisticated Markov models and computer simulations. Analysts are quite willing to admit that good policy models do not have to be mathematical, they can be conceptual as well; but in practice, few analysts use conceptual models extensively. As Stokey and Zeckhauser have pointed out, "in fact, what many analysts mean when they speak of models are the formal mathematical models that describe implicitly the quantitative changes in a particular variable or system in response to various stimuli."⁷ Given the analysts' attraction to scientific rationality, the preference for this kind of model is not difficult to understand. Mathematics allows the analyst to transcend the sloppy and imprecise conceptual thinking that is typical of ordinary political discourse. Numbers offer the most precise way to measure the variables being considered, and more importantly, equations are the best way to represent the "cause and effect relationships essential to the problem being studied."⁸ These law-like, causal relationships

are crucial, because once we are able to discover and model the socio-economic laws of behavior that govern the policy area we are interested in, then we are able to successfully identify the key variables to manipulate and to predict the exact outcome of various policy options.

In many ways, modeling is the epitome of the notion of scientific rationality that animates public policy analysis. It focuses on ideas of "cause and effect" and "prediction"--the very stuff of the natural sciences. And computer models even allow the analyst to conduct complex "experiments" by allowing various policy options to be first tested in these simulation to see what their effect on the socio-economic system would be. It is in modeling that policy analysis comes the closest to being a real social science--a science cast in the image of the natural sciences. And as Brian Fay has pointed out, much of the optimism that accompanies policy analysis is rooted in the belief that once it achieves the level of a science, it will become a major factor in our attempt to overcome our many social problems.

(I)t is claimed, that just as the natural sciences have provided men with a certain kind of knowledge by which they can control their natural environment, thereby making it more hospitable and productive, so also the knowledge gained from social science will enable men to control their social environment, thereby making it more harmonious and congruent with the needs and wants of its members.⁹

Policy Failures: Complexity or Politics?

There are many problems in this modeling vision of policy analysis, both in theory and practice, and we will be considering several of them in the following chapters. For now, let us concentrate on the over-complexity argument which underlies this approach, and seek to ascertain

its accuracy and political implications. Is our society a highly complex one? In some sense this is obviously true. But the key question is not whether our society is a highly complex one, but whether, as Forrester and others suggest, that it is this complexity that accounts for much of our inability to solve our social problems. Or are there other factors which better explain the persistence of these problems. To begin to answer these questions, let us consider several problematic areas in our national energy policy.

Energy is surely one of the most complex policy areas facing us today, and virtually all observers of this area agree that in the 1970s, the U.S. failed to develop an effective and comprehensive policy program to deal with these problems. Some of the policy analysis in this area has assumed that these two facts are closely related; that one can put the blame for our energy policy failures in large part on our inability to develop a coherent and comprehensive analysis of our complex energy supply and demand system. One massive (800 page) study done by Resources for the Future for the federal government expressed this view in a typical fashion, frequently attributing policy problems to "knowledge gaps" and "disabling limitations in our data."¹⁰ Particular emphasis was put on the importance of developing more adequate models of the national and international energy system.

National energy policies and governmental energy programs have always been dependent upon, either explicitly or implicitly, models of the energy system and projections or forecasts of future events. Historically, the energy models employed have frequently been judgmental or non-quantitative

in form Despite the large and expanding effort and the availability of more data and increasingly sophisticated hardware to manipulate it, we still continue to fall short of achieving a satisfactory capability to analyze consequences or impacts of alternative policies on the various parts of the energy system or to project with an acceptable degree of reliability what will happen in the future under various assumed conditions.¹¹

We find a similar argument made by Herbert Simon:

The number of important variables involved in the energy picture is so large, and the interconnections among variables so intricate, that common sense and everyday reasoning no longer provide adequate guides to energy policies--if, indeed, they ever did Hence, the most important organizational requirement for handling energy policy in an intelligent way is the creation of one or more models--either of an optimizing or simulation type--to provide coherence to the decision-making process.¹²

But while we can always use more data and better models, the question is to what extent the lack of such things has prevented the generation of an effective energy policy. Clearly it has not prevented the formulation of a comprehensive energy plan--many individuals and groups, left, right and middle, have produced well-researched national energy plans. And many of these groups have pointed out that our inability to deal with our energy problems is not so much an analytic failure, but a political failure--the inability to pass and implement an effective policy. Indeed, in a rare instance of agreement between the left and the right, both Barry Commoner and Mobil Oil Company have asserted that much of our energy problem is political in nature. They diverge, of course, on the specifics. Commoner and other environmentalist have argued that the main political obstacle to a rational energy policy has been the power of special interests like the oil

companies who have been able to block or gut energy legislation which has not been in their interests.¹³ On the other hand, Mobil Oil Company has argued that "the energy crisis is in large measure a political crisis"¹⁴ due to over-regulation by the government and unrealistic environmental standards. Despite these differences, the point here is clear: the explanation for the persistence of our energy problems lies not so much in the areas of models, but in the area of some old and intuitive concepts like "interests" and "power." This is an important point, so let us consider an even more specific example from this problematic policy area--the deregulation of natural gas.

The Gas Deregulation Controversy

Natural gas was one of the most difficult and frustrating areas of energy policy during the 1970's. The primary issue in the prolonged and intense debate was the desirability of deregulating the well-head price of natural gas. Specifically, there was disagreement over whether low gas prices would cause a shortage of natural gas, and whether allowing the price to rise would produce more gas for the market--in short, the debate was over the elasticity of gas production. On one side were organizations like the American Gas Association which argued that the artificially low prices set for interstate gas by the Federal Power Commission had distorted the market for natural gas.¹⁵ It was contended that the regulated prices had not only made gas appear cheaper than it really was, thus stimulating an artificially high demand, but that those

low prices also made it unprofitable to drill for more natural gas--gas that is located in increasingly remote and more expensive areas. Thus regulation was directly blamed for the natural gas shortages that affected the country during the late 1970's. In support of this argument, some gas policy analysts produced models which showed that higher gas prices would make more gas available. For example, one study indicated that an increase in the price of natural gas from \$1.75 to \$2.50 per million cubic feet (mcf) would increase U.S. recoverable reserves by approximately 20%.¹⁶

On the other side of this debate were public interest groups and certain government agencies which maintained that deregulation would only produce higher prices and higher industry profits and not significantly more natural gas. The General Accounting Office, for instance, produced an analysis which indicated that few additional reserves would likely be discovered at prices above \$1.75 per mcf.¹⁷ They argued that gas supply was not very responsive to price. It is evident then, that it could be argued that this deregulation problem was actually a modeling problem--that if we could only ascertain which model of elasticity was most accurate, then the issue could be resolved in a rational fashion. For example, one of the main differences in these elasticity models concerns different assumptions about the extent of natural gas reserves and the accessibility of those reserves.¹⁸ Relatively scarce reserves that are not readily accessible means higher development and

production costs for the gas companies and that means that higher prices would be required to produce higher production. Thus it would be very helpful to be able to establish the exact extent and nature of domestic gas reserves. Unfortunately, however, because of many uncertainties, the exact nature of natural gas reserves is very difficult to ascertain precisely. Reputable geologists have been known to make estimates of natural gas reserves which differ by an order of magnitude of five.¹⁹ Thus, depending on whether one uses reputable optimistic numbers or reputable pessimistic numbers, one can produce a reputable analysis supporting either side of this debate.

Perhaps more accurate estimates of gas reserves can be developed--perhaps not. But what all of this focus on modeling questions obscures is the great possibility that all of this disagreement over models was simply a surrogate for a much more basic political conflict between the parties involved. The real issue may not have been the accuracy of the competing models, but a matter of justice and equality. As one commentator concluded, the main problem with passing natural gas legislation in the 1970's was that it was an "overwhelmingly difficult political issue, involving an objective conflict of interest among several groups and several regions, very high financial stakes--perhaps as high as \$400 billion--and correspondingly high passions."²⁰ The heart of the issue was the enormous amount of wealth that would be transferred to gas producing companies by virtue of deregulation. Many consumers saw this as a massive "rip-off," while gas producers simply saw it as good business practice. In the light of this economic and political conflict,

the issue of the exact degree of price elasticity was actually a secondary concern for many. As I.C. Bupp and Frank Schuller observed in the Harvard Business School Energy Study," as far as independent (gas producers) are concerned, alternative estimates of price and supply are beside the point. The point is that big risks should mean big rewards. So any public policy that tries to moderate such rewards in the interests of other objectives is unjust."²¹ The issue was finally resolved (at least temporarily) in October of 1978 with the passage of the Natural Gas Policy Act which provides for the increased deregulation of the price of gas--a testimony more to the power of the natural gas lobby than to the accuracy of their models, for deregulation has yet to produce any of the substantial increases in supply that were predicted.

Now all of this is not to say that insufficient models are not sometimes a problem in policymaking. There are many obstacles to effective policies, and poor models is one of them. But this explanation of our policy failures only distracts from an understanding of the primary reason why problems like energy, urban decay, environmental decay, poverty continue to persist--politics. These problems persist not because they are beyond our intellectual capacities, but because most real solutions involve some redistribution of wealth, income, and services in society, and many of the groups that would be hurt are powerful enough to block or sidetrack those policy measures which would harm their interests. Entrenched political interests--not complexity--

is at the heart of the policy paralysis which is typical in so many policy areas. In his study of our failed economic policies, MIT economist Lester C. Thurow has reached a conclusion very similar to this: "Our economic problems are solvable. For most of our problems, there are several solutions. But all of these solutions have the characteristic that someone must suffer large economic losses. No one wants to volunteer for this role, and we have a political process incapable of forcing anyone to shoulder this burden."²² Failure to appreciate this truth that politics may be the central cause of our policy failures--can only make it more difficult to solve these problems.

Depoliticizing Policy

As Richard Nelson has noted, this tendency to underplay the political dimensions of policy problems is part of the intellectual tradition of policy analysis:

All the traditions (of policy analysis) possess an enormous amount of confidence that it is possible to find technically correct answers to important policy problems; they play down or ignore that many problems may be largely political, involving real conflicts of interests that cannot be dissolved by sweet rationalism.²³

Policy analysts are certainly not unaware of the existence of these kinds of political obstacles. If quizzed, few would seriously maintain that all one needs to create an effective public policy is an accurate model. But there seems to be a discrepancy between the analyst's personal level of political awareness and the awareness embodied in their analytical frameworks and policy studies themselves. On one level, analysts are aware of the centrality of political obstacles, but there seems to little place for this awareness in their work. A study done on national energy

policy by MIT made this schizophrenia clear when it stated that "Behind every energy bottleneck and every future decision stand serious societal issues: nuclear power safety, environmental protection and many others. Such issues, though both appropriate and important to the debate now in progress throughout the nation, are beyond the scope of this report."²⁴ It seems that though policy analysts themselves are not politically naive, many of their studies are.

The inclination to see the persistence of our social problems as a function of complexity and insufficient analytic techniques is part of the general tendency to depoliticize policy problems that is characteristic of policy analysis. As we saw earlier, this tendency is partially self-serving in that it makes activities like modelling appear to be more relevant and central to policymaking. But it is also important to see that this tendency is also strongly rooted in the conception of politics that underlies much of policy analysis. For many analysts, politics as it is usually practiced is seen as irrational and corrupt. Policy decisions are often made on the basis of petty personality conflicts, or on the undue influence of selfish special interest groups. The idea of the most rational policy seems to get lost among all of the influence-peddling, back-stabbing, pork-barreling, and log-rolling that is typical in government. In this sense, most analysts tend to implicitly adopt a reason/politics split; a belief that rational analysis is a separate and superior way to approach political decisions. Sometimes this belief becomes the hope that

rational analysis will eventually replace politics as the guiding force in policy making, a hope that was best expressed by John Maynard Deynes when he said, "The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than commonly understood . . . I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas."²⁵

Importantly, there is little conception of a legitimate clash of interests, of valid political conflict, in this view of politics. There is little sense that these conflicts can be rational, or that these conflicts may be the inevitable result of the pursuit of freedom and justice in a given society. Instead, conflicts are seen as basically irrational; it is believed that "conflict is a corollary of ignorance, therefore the application of knowledge will reduce conflict."²⁶ For example, it is sometimes asserted that the better predictions produced by mathematical models will lead to the resolution of most political disagreements. As Stokey and Zeckhauser have argued, "policy disagreements would lessen--and perhaps vanish--if we could predict with certainty the safety consequences of the breeder reactor, or the costs of annual upkeep of clay courts, or whether a special shuttle bus for the elderly would be heavily used."²⁷ Of course, the problem with such an optimistic view is that most policy disagreements are not merely a function of differing predictions, but a matter of diverging values and interests. Indeed, differences in predictions are

often a function of differing value orientations. As we saw earlier, in the conflict of natural gas pricing, differences in models predictions sometimes only function as a surrogate battleground for political groups divided by more basic political and philosophical differences. In these situations, predictive models do not transcend politics, but tend to become a part of politics. In most controversies, models function less as objective arbitrators and more as ventriloquists' dummies which spout out the predictions desired by the group using the model. This need not imply any corruption on the part of the model managers, but simply reflects the fact that there is often a very wide range of reasonable assumptions that a model manager can choose from in constructing his or her model. And it is unsurprising that analysts for a consumer lobby that is opposed to deregulation of gas would build a model incorporating the more pessimistic assumptions relating to price elasticity, while the models produced by gas company analysis would favor the more optimistic assumptions.

Complexity as a Political Issue

In one sense, the question of whether the persistence of policy problems is more a function of complexity or political factors is a very misleading one; it implicitly accepts a distinction between political issues and issues of complexity. But this distinction is an artificial one which only obscures the fact that complexity itself can be thought of as a political issue. Thus even if we grant that the

over-complexity of modern societies is a major contribution to policy failures, we need not accept the depoliticizing connotations that accompany this assertion. It can be argued, for instance, that the very fact that analysts tend to accept this complexity and only strive to work within it is itself a political position. For there are those who oppose accepting the complexities of modern industrial society and would argue for a more simple and rational form of socio-economic organization. For example, many of those in the back-to-the land movement, and other counter-cultural movements of the last decades have argued that large-scale, complex industrial societies are inherently alienating and prone to a whole host of social and environmental problems. In a sense, they agree with policy analysts about the reasons for the persistence of many policy problems, but they disagree about the solutions. Instead of creating a corps of policy analysts to "manage" that complexity, they would seek a simpler society where analysts were not needed.

Marxists economists have also argued that the over-complexity of capitalist economies is primarily a political issue.²⁸ They argue that many of the complex dysfunctions afflicting the U.S. economy--like the recurring cycles of inflation and unemployment--are due to the anarchistic and irrational structure built into a capitalist economic system. In their view, our failure to solve our persistent economic problems is due to our political commitment to maintaining a capitalist economy. This commitment prevents the government from attacking these structural problems directly, and forces the

government to turn to a series of indirect and complex "fine tuning" policies which at best can only minimize these economic dysfunctions. For a Marxist economist then, the role of the analyst in a capitalist society is a very political one; their job is to manage and thus legitimize a basically irrational economic system. For example, consider the problem of inflation. This has surely been one of the most frustrating and complex policy issues to face policy analysts, and much effort has been applied to producing explanations and models of inflation that would allow us to bring it under control. Many elaborate and complicated policies have been devised and employed, including efforts to raise interest rates, slow deficit spending, encourage saving by consumers, and so on. As many of these policies have failed, analysts have gone back to the analytic drawing board to devise even more intricate ways to exert some control over prices. Radical economists are fond of pointing out that many socialist economies have not been afflicted with the same kind of spiraling inflation that has plagued capitalist economies--in part because prices are set and controlled by the government. In keeping with this, some have suggested that there is one obvious policy that would stop inflation dead in its tracks in the United States--wage and price controls.²⁹ But they point out that this relatively straight forward approach to the problem is impeded by its political implications. It is a disconcerting move away from the capitalist tradition of letting corporations and the market set prices. Wage and price controls,

if utilized over any long period of time, would inevitably disrupt some of the price signals which govern economic production; and so if production shortages and other dislocations were to be avoided, it might require the government to step in and direct production activities--and this would be a giant step toward the socialism that many fear. The point here is not so much the desirability or undesirability of wage and price controls, but the fact that if analysts are committed to maintaining control over pricing in the private sector, and to limiting government policy to complex and indirect maneuverings, this is a commitment with political implications.

One need not be a Marxist to see that, for political reasons, we often make public policies and policy problems much more complicated than need be. For instance, even Herman Daly, who is hardly a Marxist, has found in his work on population control that while many policy analysts and policymakers have begun to agree on the importance of slowing down population growth, there is a very strong tendency on their part to shy away from any simple and direct policy program to limit population growth--like Kenneth Boulding's birth license scheme. Because of the negative moral and political connotations that surround the notion of population control, policymakers prefer to indulge in a variety of complex and indirect strategies to discourage population growth, including modifying the tax laws, restricting public housing to small families, encouraging celibacy and late marriage, encouraging tolerance of homosexuality, convincing people

to spend their money on consumer durables rather than having children, making it popular to have children only between ages of twenty and thirty, and so forth. Daly explains nicely how this kind of awkward, complicated, and indirect approach to public policy can be understood as a function of the political concerns of the policymaker combined with the scientific perspective of the policy analyst.

Whence this enormous preference for indirectness? It results partly from our unwillingness to really face the issue. Limiting reproduction is still a taboo subject that must be approached in contorted and roundabout ways rather than directly. Furthermore, roundaboutness and indirectness are the bread and butter of empirical social scientists, who get grants and make their reputations by measuring the responsiveness of the birth rate to all sorts of remote "policy variables." The direct approach makes estimation of all these social parameters governing tenuous chains of cause and effect quite unnecessary.³⁰

The Political Uses of Complexity

Daly's remarks suggest an important point: that the use of elaborate modeling is popular not so much because it is effective in taming the complexity of the modern world, but because it is effective in depoliticizing policy issues--and this turning of political issues into technical issues can actually benefit certain interests. As Daly implies, one of the most obvious examples of this concerns the policy analysts themselves who have a vested interest in promoting complex and roundabout policy approaches which will ensure that their modeling expertise is indispensable. Depoliticization can also easily serve the interests of policymakers. For instance, when important policy measures fail, it is much more convenient for

policymakers to blame this on the sheer complexity of the social problems and the difficulties involved in analysis, than to admit to their own political misjudgments or administrative incompetence.

Moreover, the depoliticizing effect of this complexity argument has also been known to work to the advantage of various special interests. As David Noble has observed, analytic techniques can often be used to create or accentuate the complexities surrounding a policy issue. Tobacco companies are fond of asserting that establishing the exact causes of cancer is a difficult and complex endeavor--so complex that one cannot indisputably say that smoking causes cancer. Noble points out that a common tactic used by corporations charged with harming the environment is to bring a group of analysts to demonstrate that establishing undeniable connections between industrial activities and detrimental environmental effects is an extremely complex and debatable task. The intended effect of this is to confuse and mitigate any responsibility that any particular company might have. In Noble's view, much of the corporate funded policy research in the environmental area is "devoted to hiding the real issues of power and control in a verbal haze of obscurantist prose, driving home the industries message: Things are much more complicated than we thought."³¹ Thus the spirit of policy analysis fits quite well into a standard political strategy, one used by corporations and their environmental opponents as well: if one wants the government to not act on a certain issue, this can be best assured by demonstrating that

the issue is much too complex and confusing to act on immediately, and by insisting that more studies be done--which will hopefully take several years and end up being inconclusive.

A Depoliticized Culture

Finally, part of the appeal of the complexity argument can be traced to the peculiar nature of American political culture. The notion that social problems are matters of complexity that can be solved by applying the proper "intellectual technology" has an inherent appeal to Americans; for as Kenneth Keniston has pointed out, we like to believe that most of our difficulties are "problems" which are inherently cognitive in nature. In his words,

Indeed, the very notion that most difficulties in life are "problems" is one of the central assumptions of the (American) outlook. We normally assume that the pitfalls along life's path can best be dealt with by treating them as cognitive difficulties whose solution involves the application of "know-how."³²

In other words, the very fact that we tend to think of our policy difficulties as "problems" (as opposed to conflicts) implies that like math problems, these difficulties have an intellectual solution. Thus public policy analysis can be seen as the formal embodiment of the American preference to see ourselves as a practical people who are quite clever in solving problems. Instead of seeing politics as the arena of clashing interests and ideologies, we would rather have it reduced to a matter of "problem-solving." This is a more convenient vision of politics. For to see politics as conflict would logically

imply that citizens should actively participate, should take sides, and should passionately struggle over the policy issues of the day. But if politics is "problem-solving," then political activity can be reduced to hiring the best "problem-solvers." Unlike many Europeans, Americans do not seem to thrive on intense political participation. For us, the "pursuit of happiness" has traditionally been a private endeavor; and political activity is often thought of as a burden or an inconvenience to be avoided if at all possible. (In keeping with this, policy analysts tend to emphasize the high "costs" of political participation.) Thus the predominant, middleclass ideal of politics is simply to hire a government that will solve the problems that are getting in the way of their individual pursuits, and then leave them alone. In such a context, the appeal of a perspective which view political issues as problems due to complexity or lack of information is obvious.

An Old and Continuing Tradition

The zenith of this depoliticized view of politics was probably during the optimistic years of the Kennedy and Johnson Administrations. During this period the "End of Ideology" rhetoric was quite popular in both political and academic circles. America was thought to no longer have political or ideological problems, only technical ones. As Kennedy himself argued in 1962:

What is at stake in our economic decisions today is not some grand warfare of rival ideologies which will sweep the country to passion, but the practical management of a modern

economy. What we need are not labels and cliches, but more basic discussions of the sophisticated and technical questions involved in keeping a great economic machinery moving ahead.³³

In keeping with his views, Kennedy surrounded himself with what David Halberstam called "the best and the brightest." Men like Robert MacNamara, McGeorge Bundy, and Walt Hostow; "the new breed of thinker-doers, half of academe, half of the nation's think tanks and of policy planning; . . . men of applied intelligence who would not land us in trouble by passion and emotion."³⁴ In many ways, policy analysis is the institutionalized legacy of these intellectuals, particularly McNamara who was the first high level champion of systems analysis and cost-effectiveness in government.

The naive kind of optimism that accompanied policy analysis in its early days has long since waned. In part this was due to the disturbing role that policy analysis and systems analysis had in the Vietnam War. In many ways, it was the first systems analysis war. The war was seen by some as being primarily an exercise in technical expertise, and volumes and volumes of statistics were gathered to measure its progress and effectiveness. This view reinforced the belief that Vietnam was primarily a military struggle; one that could be won with more troops and more bombs. And the data--the body counts--always seemed to indicate that we were winning. But all of this only obscured the fact that Vietnam was primarily a political struggle. Unable to see this, the United States continually underestimated the determination and strength of the Vietcong and

and North Vietnamese. There were, of course, those in the government who suspected this kind of mistake, but often it was only expressed as a kind of intuition, a notion that is rarely taken very seriously by some in the analytic community. As Halberstam pointed out:

When the doubters about Vietnam began to express themselves, they at first tended to be people who did not talk (McNamara's) language . . . They did not think in terms of statistics or rationalizing systems, and they did not support their judgments with facts as he knew them, but rather by saying that it did not smell right, or that it just did not feel right; he would trust his facts and statistics and instincts against theirs just as he had before at Ford when confronted by the businessmen who had doubted his facts and charts.³⁵

The mixed successes and alleged failures of urban renewal and other "Great Society" policy programs of the 1960s also added to the disillusionment about the effectiveness of policy analysis, and our ability to solve our social problems through "intellectual technology."³⁶ This disillusionment, however, has not signaled the disappearance of this kind of technocratic approach from policy analysis or the political sphere. In part, this is because the purpose of this technocratic approach has not simply been to solve social problems, but also to give the impression that these problems are merely technical ones and not basic political divisions which reflect deep-seated conflicts of interest in our society. Thus technocratic analysis has failed only in one sense--not ridding society of its pressing problems--but has been relatively more successful in fulfilling its political purposes. As we have seen, policy analysis can be helpful in depoliticizing policy issues. And this kind of depolitization not only serves

various interests, it also fits in well with the subcurrent of de-politicization that runs throughout our political culture. For these reasons, despite the fact that many analysts and policymakers are now more "realistic" about the effectiveness of public policy analysis, this does not necessarily mean that the tendency to see policy problems as problems of complexity is likely to disappear.

Furthermore, if there is a persistent failure to recognize that policy problems are in many cases essentially political in nature, then policy analysts may find themselves in undesirable political positions. At best it means that policy analysts and their studies will often wind up being largely irrelevant to the resolution of these problems, and at worst it means that analysts could simply become unwitting participants in the political struggles surrounding public policies, with their studies being used for unforeseen political purposes. It is worth our while then to seek a way out of this technocratic perspective. At a minimum, this would require a conceptual move beyond the rationality/politics dichotomy that lies at the heart of this perspective. It requires, for instance, that analysts become more sensitive to the political implications of their supposedly neutral scientific rationality. In part, these first chapters are a step in that direction. But analysts must also begin to make a more serious attempt to address the normative and political issues involved in policy decisions. Just how that can be done will be the subject of Chapter IX.

Footnotes

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²¹Ibid., pp. 72-73.

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²³Robert Nelson, The Moon and the Ghetto (New York: W.W. Norton and Co., 1977), p. 75.

²⁴"Energy Self-Sufficiency: An Economic Evaluation," The Policy Study Group of the MIT Energy Laboratory, Technological Review, May 1974, pp. 24.

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C H A P T E R V
POLICY ANALYSIS AS PREDICTION

The success of mathematical physics led to the social scientists to be jealous of its power without quite understanding the intellectual attitudes that had contributed to this power. The use of mathematical formulae had accompanied the development of the natural sciences and become the mode in the social sciences. Just as primitive peoples adopt the Western modes of denationalized clothing and of parliamentarism out of a vague feeling that these magic rites and vestments will at once put them abreast of modern culture and technique, so the economists have developed the habit of dressing up their rather imprecise ideas in the language of the infinitesimal calculus . . . To assign what purports to be precise values to such essentially vague quantities is neither useful nor honest, and any pretense of applying precise formulae to these loosely defined quantities is a sham and a waste of time.

Norbert Wiener
in God and Golem

Econometric models have been helpful, indeed necessary, tools in the design of macro-economic policy in the United States for many years now. The interrelated problems of inflation, money supply, growth, recession, etc., are simply too vast and complicated to deal with without models to help us predict the consequences--both intended and unintended--of various economic policy options. As Jay W. Forrester argues, if models can be developed to dependably represent and predict the cause and effect relationships that characterize our socio-economic world, they would be tremendous aids in almost every area of policy-making.¹

Nevertheless, there is one important question that must be examined in detail: just how reliable are these sophisticated

mathematical models? In this chapter we shall examine not how modelling can be a depoliticizing distraction, but some of the internal limitations that affect these modelling efforts. While analysts and policymakers have come to rely increasingly on such models to guide crucial policy decisions, there are real questions emerging as to their accuracy and reliability. On the one hand, there are some modellers who are typically quite enthusiastic about the relevance and reliability of these models.² But there are also those who have begun to seriously question dependence on these elaborate constructs. Nowhere is the disillusionment about the reliability of these complex models more evident than in the area of econometric modelling. These models were once thought to be the prototype for all policy models, but in the 1970's there had been increasing concern over their adequacy. Fully 75% of the college economics professors polled in a recent survey said that they have "increasing doubts about the accuracy of macro-economic models."³ These doubts have been founded on the very real failures of these models; for example, the failure of econometric models to predict or to even explain the kinds of inflation and stagflation that have afflicted the economy during the last decade. One economist summed up the situation in this way:

The influence of economists has never been greater . . . yet the public esteem of economists has never been lower . . . Economic forecasting has become a multi-million dollar business . . . Yet the economy is widely perceived as out of control with the economists having little of value to contribute . . . mathematical models and their empirical analogue--econometric models--have now become the standard tools of economics . . . Econometric models proved not up to the task.⁴

Another policy area in which the adequacy of current models has come into question is that of energy policy. In a recent study of leading energy system models done by Sergio Koreisha and Robert Stobaugh, it is not only concluded that "a models prediction may be quite imprecise and therefore not particularly useful for policymakers," but it was also found that many energy models actually helped to distort our view of our energy problems.⁵ As a specific example, they point out that many of these models only fed the illusion that our energy problems were not serious.

The major studies since 1973 have given us predictions about the U. S. energy situation that have been consistently more optimistic than the reality proved to be, especially in regard to energy supplies. Some of these models were published without receiving much notice and had virtually no lasting impact. Nevertheless, it seems abundantly clear that some of the optimistic forecasts issued did influence--and mislead--both the energy policymakers and the informed public about the causes and possible solutions for the energy problem.⁶

These generally recognized failures in the area of policy modelling have raised the question of whether and how these models can be improved and made a more reliable guide for policymaking. But this potential for improvement depends greatly, of course, on the nature and source of these current failures. Are these failures due to unique technical problems located in particular models, or are these failures caused by a more basic philosophical shortcoming in the nature of these models which limits their predictive abilities? Let us consider each of these explanations in turn, for each gives us a quite different understanding of the possibilities inherent in these models.

Modelling Failures: A Technical Explanation

Technical explanations of model failures are those which focus primarily on the technical aspects of the models themselves, and in general attempt to lay the blame for predictive failures on the fact that current models are too simple to adequately predict the complex workings of our energy system or economic system. In order to construct a workable model, all model builders must make a number of simplifying assumptions which can lead to some inaccuracies. For example, The Kennedy-Houthakker World Oil Model incorporated the assumption that rising oil prices would lead industry and utilities to switch to coal.⁷ They based this assumption on the fact in the past price differences had led these institutions to switch from coal to oil. However, it turned out that while it is easy to convert coal handling equipment into oil burners, it is much more difficult to convert equipment originally designed to be fueled by oil into coal burners. One problem is that oil burners typically have much smaller fire-boxes than coal burners, and thus can only be converted to coal at the loss of substantial capacity. As the result of such oversights, the model's prediction of the conversion rate was much too optimistic.

In the area of econometric modelling, there have been many attempts to explain the inadequacy of these models in terms of their failure to incorporate some important characteristics of the economic system. One common argument has been that models have been based on Keynesian assumptions which have ignored the supply side of the economy, and focused too much on controlling the economy through regulation of demand.⁸

Others have argued that an equilibrium model of the economy is oversimplified and inaccurate; that models must begin to assume that disequilibrium is the prevailing condition of a capitalist economic system.⁹ The details of these arguments are not as important as their general thrust: that problems with current models are primarily technical in nature and can be overcome by making them more complex and more accurate representations of the system under consideration.

There is certainly some truth in this perspective--there is room for the technical improvement of policy models. But some critics of policy analysis have argued that these models will always suffer from problems of oversimplification. As Martin Rein has observed:

While simplified models of economic and social reality can be developed, based upon stylized facts and heroic assumptions, none of the insights derived from these exercises provides secure basis for the design of social policies . . . There are too many variables and we seem to be unable to isolate a few crucial inputs. Moreover, there is an inherent paucity of reliable information about these variables.¹⁰

This point is reiterated by Ida Hoos:

. . . complete models [may be possible] in designing missiles and rockets but not in the realm of social affairs where the multiplicity of unqualifiable, if not unidentifiable, variables make prediction at best a statistical exercise . . . This often leads to oversimplifications, neglect of vital facts, and inappropriate or unwarranted recommendations and conclusions.¹¹

These critics and others contend that social systems are simply too vast and "essentially complex" to be captured accurately in models.¹² Accurate predictions are possible in the physical sciences because we can reduce the number of important variables to a manageable few. But this is not possible in society, where there are too many variables, too many bits of information that we would need to collect to produce accurate

social predictions. One critic, Amory Lovins, takes this point to its logical extreme by arguing that even if we were able to somehow reproduce the essential complexity of socio-economic phenomena in a model, it would probably do us little good. As he explains it:

One makes a model, presumably, because some system is too complex for its behavior to be apprehended intuitively. The same, unfortunately, is then bound to be true of the model, and one will never know whether to believe it or not, nor how far it can be used for guidance, since one does not understand it and has no way to validate it.¹³

But most of these kinds of criticism of modelling have had little effect on that activity. Indeed, there is little reason to believe that this kind of over-complexity argument would discourage modellers. For as we saw in the last chapter, it is exactly this argument--that it is the complexity of social reality that makes prediction so difficult--that modelling advocates use to justify their work. Critics may charge that models tend to be incomplete. But incompleteness is not a fatal flaw; the cure is all too obvious--one simply makes the models more complete. Science is not easily intimidated by mere complexity, especially with the advent of sophisticated computer technologies. And so it seems that the primary effect of this line of criticism has been to simply spur on analysts--like J.W. Forrester and others--into collecting more and more data, devising more ways to quantify previously ignored variables, and creating more complex computer simulations of our economic and energy systems. In this sense, the efforts of some critics to undermine the basic faith and optimism underlying modelling have backfired.

Modelling Failures: The Philosophical Explanation

There is, however, an explanation for the predictive failures of descriptive mathematical models which goes beyond these technical kinds of criticisms. It is at its core a philosophical or epistemological explanation that applies not just to econometric and energy models, but to all social science models which are based on positivist assumptions. This explanation begins by pointing out that policy analysis shares its predictive problems with all of the social sciences. It is argued that the predictive ability of the social sciences has always been poor because of their inability to develop a basic set of rigorous casual laws as the natural sciences have done.¹⁴ Laws which express casual relationships which are constant over time are the crucial ingredient in effective predictive models. The positivist explanation for this failure is essentially the same as the one discussed above: social reality is so much more complicated than natural reality that social laws are necessarily more rough and probabilistic than physical ones. However, during recent years there has evolved a different explanation for this problem of insufficient laws in the social sciences--one which explicitly rejects the positivist argument. One of the first formulations of this counter-argument is found in the work of Peter Winch. Winch can be considered a founding member of the Interpretive School of Social Science, a post-positive approach to social analysis having its conceptual roots in English analytic philosophy and the later work of Ludwig Wittgenstein.¹⁵ In 1958, Winch produced his

now famous short monograph, The Idea of a Social Science, in which he put forth a provocative philosophical critique of the positivist conception of knowledge and social inquiry.¹⁶ For our purposes, one of his most important arguments concerns the inability of the social sciences to produce reliable laws and predictions as the physical sciences have done. Rejecting the positivist explanation, he argued instead that this failure to produce reliable socio-economic laws is not due simply to the sheer complexity of social phenomena, but to the basic qualities of social phenomena which separate them from natural phenomena.¹⁷ Winch rejected John Stuart Mill's classic argument that social phenomena are "just very much more complicated" than natural phenomena, and insisted that the difference between them is not so much "a difference in degree, but a difference in kind."¹⁸ In other words, there is a basic qualitative difference between natural and social reality which makes scientific prediction of social phenomena problematic. Let us consider for a moment just what this difference is.

According to Winch, the essential difference between social and natural phenomena is that the behavior of the latter is dictated by the laws of physics, while the behavior of human beings is governed by the beliefs that are held by them.¹⁹ Or to put it another way, social phenomena are constituted in part by human beliefs, but natural phenomena are not. Thus while the behavior of natural objects proceeds according to constant natural laws which operate independent of human beliefs about them, social practices and institutions (like the economy) can exist and proceed only if certain beliefs and rules are held by the participants

in those institutions. A natural process like water evaporating on the ocean will occur quite independent of our beliefs about it, but a social institution like the economy could literally not exist without certain beliefs about what exchange is, what a price is, what money is worth, and so on. It is in this sense that social institutions and practices are constituted in part by human beliefs.

It is this fact that human actions are governed by beliefs and not laws which makes social prediction so difficult. For beliefs are inherently more variable than laws. Accurate prediction requires a vision of social life as determined by laws of behavior. Thus the predictive ability of policy models rests on the positivist presumption that there is an essential similarity between natural and social phenomena, and thus a similarity between the methods of understanding appropriate to both. (This is the assumption of the methodological unity of the science cited in the introduction.) But if human activity is actually constituted by beliefs then the constancy needed for accurate forecasting is undermined. Beliefs are not necessarily constant, they can be consciously changed. In other words, as human beings our actions are not determined by constant laws, we have the capacity of choice, the ability to choose between the beliefs that inform our actions. It is this ability that frustrates the deterministic vision that would make prediction easy, and helps account for why mathematical, law-like policy models are subject to failure.

A consideration of some of the elements frustrating energy policy predictions provides some support for Winch's arguments. For example, most policy analysts have been consistently overly-optimistic in their

predictions about the price and availability of foreign oil resources. During much of the 1970s, various administrations expressed the belief that the OPEC cartel could not maintain its strangle hold on oil prices; and one administration official, referring to one large computer model, confidently asserted in 1975 that "We expect oil prices to level out between \$4 and \$6 a barrel."²⁰ Clearly part of the problem here is the analyst's inability to anticipate the changing views and beliefs of those who make decisions for the member countries of OPEC.

In addition, the work of several young economists like Robert Lucas²¹ and Robert Barro also lends support to some of Winch's arguments. They argue that the failure of traditional econometric models can be traced to the fact that these models do not incorporate the ability of economic actors to change their beliefs and therefore their actions. They point out that these models assume that people will react the same way to similar economic situations. But this is not always true. People can learn from their experience, change their beliefs, and react differently. For example, the government may increase the money stock in order to stimulate the economy. People find themselves with more money and so go out and spend it on more goods, and so on. But eventually, as the inflation caused by increased money stocks makes itself felt, people realize that they have overspent and overborrowed, that their increased wealth was just an illusion, and they become more wary. So when the government tries the same tactic again, the response is far different. As Lucas explains, "When expansionary monetary policy is used repeatedly over time, it no longer accomplishes its purposes.

There is no stimulating effect on spending and output. Expected expansions come out as inflation and nothing else."²² Thomas Sargent adds that "People recognize the truth and stop making the same mistakes. When they do, they eliminate the planned effects of the policy."²³

Despite such problems, these economists remain enthusiastic about the use of models, insisting that we should be able to predict these changes in beliefs and behavior, and incorporate them into our models. They argue that we need only assume that "people tend to act rationally and intelligently in their own interest,"²⁴ and that this kind of behavior can be predicted with accuracy. It is thought that if there is any "law" of human behavior it is that people will always try to act in their own self-interest. If this "rational expectations" theory is true, then reliable models and predictions along the lines of the natural sciences might still be a real possibility. But there are of course some problems with this theory. For instance, there is the questionable assumption that people do act rationally--irrationality is not an uncommon human characteristic. Economists like Lucas dismiss this problem by arguing that to dwell on it would get in the way of making good models. "Irrational behavior can't be predicted. You can't model it, just because it is irrational. But good models have to assume that people act rationally."²⁵ This is a classic example of how the requirements of their models, not the characteristics of human social reality tend to inform the perspectives of policy analysts. But even if, for the sake of argument, we were to grant the assumption that

all people act rationally, non-positivist critics like Winch would still maintain that prediction can be problematic.

Interpretation and Fallibility

Winch argues that even if people act rationally, even if we know the beliefs and rules that inform their actions, we may not be able to predict their behavior. This is because social action, in contrast to natural events, require interpretations by the actor. To follow a rule, to act on a belief requires that the actor interpret how that rule applies in a given situation. For example, what it means to act rationally may not always be entirely clear, especially when the actor faces a situation that is new to him or her. There may be a number of possible interpretations. For instance, consider a group of workers confronted with a new Presidential request to keep wage increases below 7% in order to slow down inflation. Some workers might interpret acting rationally in their self-interest as meaning that they should support this measure, and thus encourage others to do so, eventually curbing the inflation which is eating away at their standard of living. Other workers may think that it is rational to oppose the wage cap, and strive for wage increases that will keep up with inflation. We have a situation of conflicting interpretations, in which both groups are attempting to act rationally in their own interests, and in which neither interpretation is obviously wrong. Thus because the concept of "rationality" is subject to various

interpretations and definitions, an analyst can assume that all people act rationally, and still mis-predict the public's reaction to public policies.²⁶

This understanding of the inherent problems surrounding the prediction of "rational" action is supported by the work of Phillip Green. His book, the now classic Deadly Logic, is a critique of the models and predictions used to justify our policies toward nuclear confrontation and wars.²⁷ Much of our strategic policy is based on the analytic framework of game theory--which attempts to predict the behavior of various rational "players" in confrontation situations. In a critique very similar to Winch's, Green points out that much of our strategic thinking mistakenly assumes that what "rational action" is in these situations will always be clear. Green argues that in situations of nuclear confrontation, the crucial attempt to predict the enemy's rational actions and reactions depends directly upon our ability to accurately determine the values that enemy policymakers are seeking to maximize through those actions. However, at best, game theory can give us only a static representation of those values. Even assuming that this initial representation is correct, it is quite likely that these "values will undergo change during the drawn-out decision-making process" that one would find in such a situation.²⁸ Green points out that to assume, as game theory does, that "we (can have) in hand some kind of quantified and unvarying national value estimate, a sort of operational version of the Preamble of the Constitution . . . (is) simply anti-empirical."²⁹ Given these sorts of problems, Green

concludes that game theory models can foster overconfidence in our ability to correctly predict the rationality and acts of enemy planners, and that this can lend a false air of precision and accuracy to the deterrence model that was relied on so heavily in our defense planning at the time.

For Winch, there is also another unique characteristic of human behavior that makes social prediction problematic--human fallibility. The argument here is that even if we had perfect knowledge of the beliefs and motives of the public and even if through some miracle everyone had the same interpretation of those beliefs, we still might be unable to accurately predict the behavior of citizens--because they might make mistakes. Beliefs and rules, unlike natural laws, can be followed either correctly or incorrectly, and so there is always the possibility that someone will make a mistake while trying to follow a rule. A citizen, for example, may very well intend to support or follow a certain government policy, but makes a mistake and actually undermines it with his or her actions. At first glance, a factor like fallibility may seem to be an insignificant problem in policy analysis, but in fact, one of the most controversial policies of the last decade was so largely because of the failure of policy analysts to fully take into account the factor of human fallibility. Critics of nuclear power have argued that many of the safety analyses done on nuclear power plants underestimate the risks involved because they fail to adequately incorporate the possibility of human error. For example, the most famous safety study, the Rasmussen Report,³⁰ focused most of its attention on the

question of whether the reactor design and the operating procedures were adequate to ensure safe operation of these facilities. But while these factors may be adequate in theory, what the report failed to adequately assess was the possibility of human error--either in the construction of the reactor, or in its operation. It underplays, for example, the possibility that an accident could be initiated by an error on the part of a plant employee, or that an operator attempting to follow normal procedures during an "incident" makes a mistake and aggravates the situation, or that an employee inadvertently disables a piece of equipment during maintenance making it unavailable during an accident.³¹ Omissions like these can be crucial. The last two factors mentioned were major contributors to the accident at Three Mile Island. One major review of Rasmussen's Report--which finally led to its being repudiated by the Energy Department--cited the fact that "operators and other employees might make matters much worse during an accident in ways which are intrinsically hard to analyze."³² And more significantly, it concluded that even though this human factor was "one of the major contributors to the general problem faced by the (Rasmussen Report) in making quantitative risk estimates . . . we don't know of any specific way in which the methodology in this difficult area could have been improved."³³ And this, of course is exactly Winch's point, that no improvements in methodology can circumvent the problem of human agency and failure in human affairs. Nor can it produce the kind of extremely reliable predictions needed in an area like nuclear power.

Human Creativity and Social Change

Part of this problem of fallibility is related to the final characteristic of human action that Winch feels makes precise social prediction difficult--human creativity. Human beings are blessed with the unique ability to act and mis-act in new and creative ways. We can invent new beliefs, new rules, new ideologies to guide our actions. And Winch argues that the development of these new ways of thinking and acting may be impossible to predict, in principle. As he explains:

Think of the way in which the game of football was revolutionized by the Rugby boy who picked up the ball and ran. It would certainly not have been possible to predict that revolution from knowledge of the preceding state of the game any more than it would have been possible to predict the philosophy of Hume from the philosophies of his predecessors. It may help to recall Humphrey Lyttleton's rejoinder to someone who asked him where Jazz was going: "If I knew where Jazz was going, I'd be there already."

Maurice Cranston makes essentially the same point when he notices that to predict the writing of a piece of poetry or the making of a new invention would involve writing the poem or making the invention oneself. And if one has already done this oneself, then it is impossible to predict that someone else will make up that poem or discover that invention. "He could not predict it because he could not say it was going to happen before it happened."

It would be a mistake, though tempting, to regard this as a piece of trivial logic-chopping. One appears to be attempting an impossible task of a priori legislation against a purely empirical possibility. What in fact one is showing, however, is that the central concepts which belong to our understanding of social life are incompatible with concepts central to the activity of scientific prediction. When we speak of the possibility of scientific prediction as social developments of this sort, we literally do not understand what we are saying. We cannot understand it, because it has no sense.³⁴

A good example of how creativity may interfere with public policies and policy analysis is the entrance of new beliefs and belief systems

into the political arena. The unexpected evolution of the environmental movement is an instance of this. Up until the late 1960's, the environmental movement consisted of a relatively small number of people whose main interests were largely aesthetic--the preservation of untouched wilderness areas. However, during the sixties, environmentalism took an unforeseen turn and became focused on issues of health and the maintenance of the earth's eco-sphere on which all of human life is dependent. Environmentalism moved beyond being a club and became a significant social and political movement. Looking back, this development may seem inevitable, but few, if any, people actually predicted this change in environmental consciousness. In many ways, this was the emergence of a truly new political force, and it eventually wreaked havoc with many of the predictions made by analysts in the energy field. Because analysts had not foreseen the growing strength and commitment of this movement, many of the predictions made during the seventies about how quickly new sources of energy could be utilized were overly optimistic. Unexpectedly strong environmentalist opposition to projects like oil pipelines and nuclear reactors was a significant factor in frustrating analysts and policymakers attempts to develop an effective energy policy.

Another way to say all of this is that policy models and predictions tend to become less reliable in times of socio-political ferment and change. During periods of relative socio-political stability and tranquility, where there are widely shared ideological frameworks and set patterns of social behavior, predictive models are

more likely to be successful. But ironically, it is when quiet times yield to more chaotic and volatile times that the reliability of these constructs begin to ebb--at exactly the time when the security afforded by reliable predictions is most desired by policymakers. Our conceptual footing becomes slippery just when we desire it to be steady and firm--but such is the nature of social change and the role that human creativity plays in it.

Discouraging Over-Reliance on Models

This interpretive understanding of the inherent limitations of prediction and modelling gives us additional insights into the nature of policy model failures. Most importantly, it shows that there are good reasons to believe that public policy analysis cannot, in principle, provide the same kind of accurate and reliable predictions that the natural sciences are famous for. Because of such factors as human creativity and fallibility, human relations are at best only quasi-casual in form, and the enterprise of social prediction will always be a problematic one. Now this does not mean that we cannot ever predict social behavior, or that models are useless, or that models can't be technically improved. It means primarily that analysts and policymakers had best adopt an attitude of humility towards the capabilities of these mathematical tools--an attitude somewhat closer to that reflected in a recent poll which showed that public respect for economic forecasters is only marginally ahead of that for stockbrokers and astrologers.³⁵ All too often, analysts typically acknowledge the limits of

models in theory, and then conveniently forget about them in practice--especially when they are enthusiastically promoting their own individual models. But instead of assuming (as one analyst does) that computer models will form the "ultimate authority for public officials,"³⁶ it would be better if analysts erred on the side of caution and made sure that policymakers did not become over-reliant on these models. Admittedly, this kind of humility goes against the self-interest of the model builder, and it requires resisting the policymakers desire for a clear, scientific answer to policy problems. But one can hope that the analysts integrity and commitment to truth will win out over these more political considerations.

If taken seriously, this kind of humility could have some impact on the way we approach policy. It implies, for example, that we cannot rely on accurate models to circumvent disagreements over policies, as some analysts have hoped. Milton Friedman expressed the beliefs of many analysts when he argued that "differences about economic policy among disinterested citizens derive predominately from different predictions about the economic consequences of taking action--differences that in principle can be eliminated by the progress of positive economics."³⁷ Assuming for the sake of argument that policy disputes are predictive rather than normative and political, we have seen in this chapter that positive economics probably cannot produce the kinds of clear, undisputable predictions that could solve these disputes once and for all. This helps to make it clear that there are no easy ways out of policy conflicts, and reemphasizes the fundamentally political nature of these decisions.

Finally, a sense of humility about the power of modelling suggests that we be wary of entering into risky or dangerous policy projects that rely significantly on the presumed accuracy of these models. A prime example of this is the nuclear power program. As we saw earlier, the case for the desirability and safety of nuclear power has rested heavily on a series of studies which have given very optimistic predictions of the unlikelihood of a serious nuclear accident. Given the potentially disastrous consequences associated with this policy, we must ask whether the analyst is justified in attaching the appearance of science and rationality to predictions which are ultimately based on debatable assumptions. Analysts would be doing more of a service to policymakers and the public by abandoning the mystifying cloak of science and acknowledging that social prediction is a very human activity, in the most fallible sense of the word. As Kenneth Boulding has warned us: "Deciding under uncertainty is bad enough, but deciding under the illusion of certainty is catastrophic."

Footnotes

¹See for example, "The Systems Dynamics National Model: Understanding Socio-economic Behavior and Policy Alternatives," Technological Forecasting and Social Change 9. (New York: American Elsevier Publishing Co. Inc., 1976)

²Juan Cameron, "The Economic Modelers Vie for Washington's Ear," Fortune, November 20, 1978, pp. 103-108.

³Cited in Walter Guzzardi, "The New Down-to-Earth Economics," Fortune, December 31, 1978. p. 77.

⁴Lester C. Thurow, "Economics," Daedalus, Vol. 106, No. 4, Fall 1977, pp. 79-94.

⁵"Limits to Models," in Energy Future, ed. by Robert Stobaugh and Daniel Yergin, (New York, Random House, 1979).

⁶Ibid., p. 235.

⁷See Michael Kennedy, "An Economic Model of the World Oil Market," The Bell Journal of Economic and Management Science, 5 (Autumn 1974), pp. 540-577. Conversion example adapted from Stobaugh and Koreisha.

⁸For examples, see Guzzardi.

⁹See, for example, Alfred. S. Eichner, ed., A Guide to Post-Keynesian Economics, (New York: M.E. Sharpe, 1979).

¹⁰Martin Rein, Social Science and Public Policy, (New York, Penguin Books, 1976) p. 53.

¹¹Ida Hoos, Systems Analysis in Social Policy: A Critical Review, (Westminster, England: Institute of Economic Affairs, 1969) p. 23.

¹²A particularly good example of this argument is in Friedrich A. Hayek, Unemployment and Monetary Policy, (San Francisco; Cato Institute, 1979) pp. 21-36.

¹³Amory Lovins, Soft Energy Paths, (Cambridge, MA: Ballinger Publishing Co., 1977) p. 64, footnote 6.

¹⁴For an exposition of this argument, see Richard J. Bernstein, The Restructuring of Social and Political Theory, (Philadelphia, PA: University of Pennsylvania Press, 1978), pp. 24-45.

¹⁵*Ibid.*, pp. 63-74.

¹⁶(New York: Humanities Press, 1958).

¹⁷*Ibid.*, pp. 71-94.

¹⁸*Ibid.*, p. 71.

¹⁹For a more extensive version of this argument see Charles Taylor, "Interpretation and the Sciences of Man," Review of Metaphysics, (Fall, 1971) pp. 4-51.

²⁰Stobaugh and Yergin, Appendix, p. 236.

²¹See Robert Lucas, "Econometric Policy Evaluation: A Critique," The Phillips Curve and Labor Markets, ed. Karl Brunner and Allan Meltzer (New York: North-Holland, 1976).

²²See Guzzardi, p. 73.

²³*Ibid.*

²⁴*Ibid.*, p. 72.

²⁵*Ibid.*, pp. 75-76.

²⁶I should point out that not only is the concept of rationality open to interpretation--but virtually all public motives and values, like freedom and equality, are also open to competing interpretations. For a better understanding of the effect of this phenomena on politics and political analysis see William Connolly, The Terms of Political Discourse (Lexington: D.C. Heath, 1974).

²⁷Phillip Green, Deadly Logic (Columbus, Ohio: Ohio State University Press, 1966).

²⁸*Ibid.*, p. 99.

²⁹*Ibid.*, p. 108.

³⁰Rasmussen Report, better known as Reactor Safety Study: An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants, AEC, Document WASH-1400 (draft) (Wash.D.C.: U.S. Government Printing Office; August 1974).

³¹H.W. Lewis, et.al., Risk Assessment review: Group Report to the U.S. Nuclear Regulatory Commission, NUREG/CR-0400, (Springfield, Virginia: National Technical Information Service, Sept. 1978) p. 29.

³²Ibid., p. 31.

³³Ibid., p. 31.

³⁴Winch, pp. 93-94.

³⁵Cited in "Confessions of an Economic Forecaster," by Michael K. Evans, The New York Times, February 17, 1980, Section 3, page 18.

³⁶F. Gerald Adams, quoted in Juan Cameron's "The Economic Modelers Vie for Washington's Ear," Fortune, November 20, 1978, p. 104.

³⁷Milton Friedman, Essays in Positive Economics, (Chicago: University of Chicago Press, 1953) p. 5.

CHAPTER VI

POLICY ANALYSIS AS CONTROL

Each new power won by man is a power over man as well. Each advance leaves him weaker as well as stronger. In every victory, besides being the general who triumphs, he is also the prisoner who follows the triumphal car.

C. S. Lewis

"The Abolition of Man"

This chapter is concerned with one of the most subtle, yet disturbing political biases that is present in positivistic policy analysis--its manipulative, and perhaps even authoritarian, tendencies. The authoritarian implications of the emerging importance of policy analysis expertise in the policy process is not a new subject. Indeed, much has been written about this in the context of the problem of technocracy: the vision of politics in which authority is constituted by expertise instead of more democratic means.¹ Since the dangers of this kind of political perspective are relatively well known, this chapter will focus not on technocracy, but on another authoritarian potential in policy analysis. This other potential is a direct function of the notion of scientific rationality that is so central to policy analysis, and the ideas of manipulation and control that are an inherent part of this rationality. The first section of this chapter will establish a conceptual connection between this scientific perspective and the tendency for policy analysts (and policymakers) to conceptualize

public policies as the top-down manipulation of the social system. Once these connections are established, I will briefly consider these authoritarian implications in the context of our contemporary political climate, and the ongoing debate about the viability of democratic approaches to policy-making. Next I will illustrate how this control-oriented perspective manifested itself in several of the key policies in the Carter administration's energy program. In the final section of the chapter I will introduce an alternative to this control-oriented approach to policy--a more bottom-up approach that will be developed further in Part II.

Science as Control; People as Material

As we saw in the prior chapter, many policy models may be too simple to reflect the complexities and unpredictabilities of modern social life. There are several ways this problem tends to be dealt with. One can, as we saw earlier, attempt to make the models more complex, or one can try to manipulate and reorganize society to fit into the simplified assumptions of the model. In other words, one can try to make social behavior more predictable. This latter possibility was a matter of concern to Hannah Arendt. One of the most insightful modern political theorists, Arendt was a non-positivist who shared Winch's belief that unpredictability is an inevitable characteristic of all social and political life.² But she was concerned that the inevitable frustrations accompanying this unpredictability would drive political

actors into seeking more direct ways to exert more control over social life. She was afraid that this drive to eliminate unpredictability would encourage tendencies toward authoritarian control over society. She was also concerned that scientific rationality could have an important role to play in this process. Specifically, she argued that modern policymakers when faced with the "authentic perplexities inherent in the human capacity for action," can fall prey to the "strength of the temptation to eliminate the risks and dangers by introducing into the web of human relationships the much more reliable and solid categories inherent in activities with which we confront nature."³ In other words, Arendt was concerned that policymakers will be tempted to make the same scientific mistake we discussed in the last chapter--the attempt to approach social reality in the same way that a scientist approaches natural reality. Like Winch, Arendt warns us that this attempt to "bestow solidity upon the realm of human affairs" is based upon a mistaken assumption--"the delusion that we can 'make' something in the realm of human affairs--'make' institutions or laws, for instance, as we make tables and chairs, or make men 'better' or 'worse' . . . coupled with the utopian hope that it may be possible to treat men as one treats other material."⁴

Arendt's primary concern then was not so much with the methodological problems surrounding scientism, but its disturbing political implications. She correctly discerned that there is an inherent connection between scientific rationality and the notions of "making" or "manipulating" things in human affairs. This is what makes her thought relevant

to our analysis of public policy analysis. It is quite possible that the political tendencies that Arendt was concerned about are represented in the work of policy analysts. At least a strong conceptual connection can be made between policy analysis and the notions of scientific control and manipulation. Much of the appeal of public policy analysis is that it is based on the assumption that just as scientific rationality has been "successful" in the realm of natural phenomena, it will also be "successful" in the realm of human social phenomena. The implicit hope is that just as the natural sciences have provided the kind of knowledge that allows us to successfully control our natural environment, the policy sciences will allow us to better control our social environment. But the word "environment" only serves to mask the disturbing political implications of this kind of approach. For while the natural environment is made up of "material", the social environment is made up of people. And while manipulation of material may not evoke second thoughts, the manipulation of people should. Scientific rationality may indeed be an effective way to approach the control of phenomena. But we must question whether this kind of effectiveness is desirable, for effectiveness at social control has serious authoritarian implications.

While some policy analysts, like Larry Wade, are candid enough to admit that they think it is "obvious" that the "manipulation of human behavior is what politics is about,"⁵ it is probably unfair to characterize analysts as insensitive social engineers whose goal is

to manipulate and control the public. Most analysts have better intentions. But the case for policy analysis as social control does not rest on the assertion that analysts are intentionally interested in manipulation of the public. Rather, it rests on the argument that irrespective of the individual analysts intentions, the notions of prediction and manipulative control are an inevitable and essential part of the paradigm of scientific rationality that is imbedded in policy analysis. As Brian Fay explains, the idea of manipulation is intimately bound up in the very notion of explanation, that is characteristic of positivistic, scientific methodologies:

Underlying and informing the (positivist) theory of explanation are deeper assumptions as to the nature of truth and reality, and these deeper assumptions are rooted in the notion of manipulative control. So the conclusion is not merely that scientific knowledge provides the basis for manipulative control, but also, and more importantly, that what can count as scientific knowledge is that which gives us the means by which one can in principle control phenomena . . . The scientist says that he knows what happened when he knows the causes of an event, and he means by this when he knows the mechanism in terms of which he himself can in theory produce the event in an experimental situation. All of this means that the notion of understanding in science is intimately bound up with the notion of control, for it is our ability to control events, at least in principle, which constitutes one of the criteria in virtue of which one can be said to have given a valid scientific explanation. It is in this way that the possibility of manipulative control is a constitutive element of the scientific enterprise . . . ⁶

This logic of manipulation is most easily seen in the models used by analysts. As we saw earlier, the whole purpose of policy models is the attempt to embody the law-like relation in society in a way that makes accurate prediction possible. And the primary reason that one wants

to predict is so that one can control.⁷ Through models, politics itself becomes conceptualized in scientific terms: policies become "independent variables" which cause certain effects on the "dependent variable"--i.e., the public.⁸ Inevitably, the notion of control becomes one of the dominant concerns in this vision of politics. We find, for example, policy analysts who seriously argue that "modern politics are confronted with a vast range of problems the management of which" depends on "successful strategies of control" and a "clear-headed understanding of what is wanted in the way of behavior modification."⁹ Such a perspective on politics and policies would certainly not be out of place in an authoritarian state.

While the conceptual connections between the notions of prediction and control in policy analysis are clear, it is more difficult to cite unambiguous examples of authoritarian/control tendencies in actual policy studies. While analysts seem willing to talk explicitly about the need for behavior control and modification in a theoretical context (i.e., among themselves), there seems to be an understandable reluctance to publicly state these concerns in specific policy studies. Nonetheless, there are several examples of control-oriented studies that can be cited. One of the best examples is a policy study done by Space-General Corporation for the state of California on the prevention and control of crime.¹⁰ The stated objectives of the study were:

Analyze the California system of criminal justice utilizing the techniques of systems engineering and operations analysis, and thereby explore the feasibility of application of these techniques to social problems.

Recommend a California program directed toward more effective prevention and control of crime and delinquency.¹¹

The language of this study makes clear from the very beginning its assumption that one can approach social problems in the same way as other "engineering" problems. It is unsurprising then that an examination of the study reveals tendencies toward authoritarian policy measures. In fact, after a careful look at this study, Ida Hoos concluded that its proposed approach embodied a significant threat to the liberty and privacy of large groups of citizens.¹² To see how this might be so, one must first consider the specific approaches that the study recommended to control crime. Among other things, the study suggested "a systematic study of persons involved in criminal activity and an identification of crime-susceptible groups," and a "carefully selected program directed towards the susceptible offender groups."¹³ Here the move from prediction to control becomes clear. The study seeks first to predict criminal activity by identifying certain categories of people who are considered most likely to commit crimes. As Hoos points out, "high-lighted were individual characteristics of the offenders, e.g., age, sex, colour, education, employment status, etc."¹⁴ Then those categories of citizens were to receive increased "attention" from the law enforcement system. The obvious danger in this kind of approach to controlling crime is that innocent individuals that happened to fall into certain suspect categories could be subject to unwarranted harrassment. In Hoos' words, an individual "could be tabbed by the system as a potential member of some designated 'risk' population, such, for example, as criminal, welfare, or even politically subversive, and

thus be subject to unwelcome attention if not discrimination and persecution."¹⁵ One can easily imagine a person who is unemployed and living in a high-crime neighborhood being subject to arbitrary surveillance or questioning. Given such obvious potential abuses, Hoos concluded that

control, or immediate reduction of the kinds of crime regarded as important in this study, could only lead to severe repressive measures, perhaps more dangerous for society than the offenses If applied, the conclusions of the study would have resulted in a "system of criminal justice" which would have embodied a disastrous attack on the human liberty of the least protected sectors of the population.¹⁶

Once the Space-General study is seen through Hoos' eyes, the authoritarian implications of this heavy-handed, control-oriented perspective becomes clear. However, often these implications are obscured or made more palatable by the very nature of the language used in policy analysis--a language which tends to desensitize its users to the human consequences of this control-orientation. Because analysts spend much of their time working with statistics and models, the public can easily come to be thought of and talked of in very abstract terms. Instead of speaking of unemployed people and the harsh reality they live in, analysts tend to speak of the "unemployment rate." Deliberately throwing people out of work can be thought of as "creating an upward response in the dependent variable of unemployment," or more simply, as a "Philips Curve trade-off." This kind of sanitized language does little to stimulate the policy analyst to the authoritarian implications of a control-oriented perspective, or the human effects resulting

from the manipulation of "policy variables." As Arendt noted, people tend to become objectified, thought of as "material." Again, it may seem a bit far-fetched to assert that analysts could actually begin to think of real people as objects--but we need not go too far into the literature of public policy analysis to find an analyst who defines public policy as involving "a desired course of events, a particular sequence of behavior in a particular object or set of objects."¹⁷ This kind of scientistic, analytic language is not only an apt expression of the control-oriented perspective of policy analysis, its rational and objective sound serves to disguise its troubling human and political implications.

A Growing Impatience with Democracy

Before considering several more examples of this control-oriented policy perspective, it is important to first locate this tendency in the context of our current political climate; for while there is a definite concern for manipulation and control running throughout public policy analysis, it would be a serious mistake to think that this kind of analysis is, by itself, any kind of authoritarian threat. Similarly it would be mistaken to argue that this kind of scientific rationality is responsible for the governments increasing concern for regulating and controlling our economic and social system. Indeed, the opposite is quite probably the case. The emergence of policy analysis with its manipulative perspective on politics is the product of a political system already highly concerned with extending control over society. It is hardly a coincidence, for example, that we find the beginnings of

scientific policy analysis in the depression of the 1930's, a time when the industrial world had gone out of control and political leaders were desperately looking for ways to increase their control over the economy. The growth of public policy analysis has paralleled quite closely the growth of big government, and in many ways it symbolizes the concern for technical control, regulation, market manipulation,¹⁸ and planning that is characteristic of the modern state.

It is not sufficient then to simply identify the tendency toward social engineering and manipulation in policy analysis; this has been done before. What is crucial is to locate this authoritarian potential within our current political context so that we may assess whether any political threat actually exists here. The disturbing potentials in policy analysis become a serious matter of concern only when they intersect and support similar tendencies in the society at large. For example, as Arendt and others have pointed out, notions of authoritarian control tend to surface during times of disorder when policies seem unable to deal with persistent social problems.¹⁹ In such times, there is a tendency for those in power to strengthen the reins of control in an attempt to ensure that their policies have the effect they intended. There is usually an accompanying tendency to complain about the inefficiencies of democratic procedures, and a call for strong and decisive leadership. As Guy Benveniste has pointed out, policy analysts sometimes echo these same kinds of concerns. He notes that conditions of social disorder "lead the expert to believe that planning has to be

imposed from the top because the beneficiaries at the bottom cannot perceive the outcome of their own actions. He becomes increasingly impatient with democratic politics and insists that in times of crisis leadership has to be reaffirmed."²⁰

In other words, when there is a conflict between democracy and control, or as it is usually put, between democracy and efficiency, there is an inherent tendency for the analyst to support the latter. This kind of political bias could have a part to play in the debate over democracy vs. efficiency that is going on today.²¹ Some influential organizations involved in policy analysis have already taken the side of efficiency and authority. Take, for example the policy studies done by the Trilateral Commission. This organization was originally created by David Rockefeller to study and make policy recommendations concerning the many economic and social problems facing Western Europe, the United States and Japan.²² It is composed not only of leading policy analysts, but also of bankers, corporation executives, politicians, and scholars from the three regions. Former members include President Jimmy Carter, Vice President Mondale, Zbigniew Brzezinski, and six members of the Carter Cabinet. In other words, the commission is a good example of policy analysis as it is done at the highest levels.

Several of the studies produced by analysts of the Trilateral Commission have displayed marked tendencies toward reliance on top-down control mechanisms to deal with persistent policy problems. One study, for instance, was completed by the Trilateral Task Force on the Political and International Implications of the Energy Crisis, consisting of

two high-level policy analysts, John C. Campbell (senior research fellow at the Council on Foreign Relations), Guy de Carmoy (professor at the European Institute of Business Administration, Fontainebleau), and a former Japanese ambassador, Shinichi Kondo.²³ In their report, they observed that adapting to the changing international energy situation would require "acceptance, voluntarily or involuntarily, of governmental regulation of an increased sector of personal life."²⁴ They were concerned that because democracies are sensitive to the wishes of the public, that these government may not be able to impose on the public the kinds of policies needed to deal with our energy problems. In their words, "it is a real question whether the necessary sacrifices will in fact be accepted by powerful elements of the body politic . . ."²⁵ They fear a "growing extremism . . . instability and turmoil" in Western democracies as a result of these political difficulties.²⁶ They finally conclude that a coordinated and effective approach to our energy policy problems will only be possible with an increased emphasis on "social discipline and government control."²⁷

A more wide ranging and more disturbing attack on the viability of democratic procedures and values can be found in another Trilateral report, The Governability of Democracies.²⁸ Its subject is a familiar one: the inability of modern governments to solve the persistent socio-economic problems which they face. The report concluded that one of the major impediments to effective government action was the democratic process itself. In the words of the report's authors:

. . . some of the problems of governance in the United States stem from an "excess of democracy"

. . . the operations of the democratic process do indeed appear to have generated a breakdown of traditional means of social control, a delegitimation of political and other forms of authority, and an overload of demands on government, exceeding its capacity to respond.²⁹

The report argues that the explosion of political activity and demands that begin in the 1960s has led to a "democratic distemper," which has undermined the legitimacy and effectiveness of modern government. The cure for this distemper, according to one of the report's authors, Samuel Huntington, must begin with a realization that there are "potentially desirable limits to the extension of political democracy."³⁰

The effective operation of a democratic political system usually requires some measure of apathy and non-involvement on the part of some individuals and groups. In the past, every democratic society has had a marginal population, of greater or lesser size which has not actively participated in politics. In itself, this marginality on the part of some groups is inherently undemocratic, but it has also been one of the factors which has enabled democracy to function effectively.³¹

In effect, Huntington's arguments are a version of a point made in earlier chapters of this work: that it is political conflict--conflict amplified and made more explicit by our democratic form of politics--that often interferes with effective policy actions. Put simply, his conclusion is that if we limit participation in policymaking, this will in turn limit these conflicts, and the product will be more effective public policies--a line of reasoning we will question in

a few moments. For now, it is interesting to note that this kind of undemocratic rhetoric is really nothing new in American politics. In many ways, Huntington's arguments are merely a modern reincarnation of the political philosophy of James Madison who argued in Number 10 of the Federalist Papers that only a centralized federal government could overcome the evils of political factions. And we should remember that the idea that "the evils we experience flow from the excess of democracy" did not originate with the Trilateral Commission, but was voiced nearly two hundred years earlier by Elbridge Gerry of Massachusetts.³² But the fact that these undemocratic and authoritarian sentiments are part of the American political tradition should not serve to mitigate their ominous political implications--especially considering that these views have begun to be expressed in concrete policy proposals. Several recent policy proposals in the area of energy have been clearly informed by the belief that democracy and public participation have been getting in the way of effective policies to solve our energy problems.

Making the Reactors Run On Time

One good example is a bill introduced by the Carter Administration (with the backing of the utility industry) that would have reduced the number of public hearings and court challenges related to the licensing of nuclear reactors.³³ Among other things, the bill would have authorized and encouraged utilities, reactor vendors, and the

government to agree on standardized nuclear plant designs, which would then receive near-automatic government approval, regardless of where they were located. It eliminated some public hearings altogether, and cut down on the rest by mandating that if an opportunity once existed in any hearing for discussion of an issue, that issue could not be raised at later hearings unless significant new information had surfaced in the interim. Also, it would have authorized the granting of limited work authorizations which would allow construction on reactors to begin before formal hearings were held on the construction permit.

Administration backers of the bill insisted that these changes were simply procedural ones, and were only intended to make the licensing process more rational and efficient. But opponents pointed out that the purpose of public hearings is to provide the opportunity for public participation in an issue of great concern, and to fully air all the issues involved, not to license reactors as quickly as possible. At a hearing on the bill, Anthony Z. Roisman of the National Resources Defense Council complained that the only values being discussed were how to build reactors faster. "(T)he licensing process is designed to decide whether to build and operate nuclear reactors, not how quickly . . . ," he said.³⁴ Opponents saw this measure not so much as an attempt to make the licensing process more rational and efficient, but as an attempt to minimize the kind of public participation that has frustrated the move toward nuclear power--a move strongly backed

by the government and the utilities. As John O'Leary of the Energy Department commented, "Democracy is not the most efficient system in the world."³⁵

Another example of the undemocratic trends surfacing in energy policy proposals was the Energy Mobilization Board proposed by the Carter administration. The Board was designed to expedite the development of a number of specific, needed energy projects like oil pipelines, syn-fuel plants, etc. Among the provisions and powers included in various versions of this bill were the following:

1. The EMB would have the power to set project timetables for all federal, state, and local agencies. This would take precedence over timetables in other laws and regulations.
2. On its own authority, EMB could order a federal agency to streamline a specific list of procedures--hearing consolidation, etc. State and local agencies may be ordered by court to employ streamline lists if they miss or are likely to miss a deadline.
3. EMB could require single, consolidated federal environmental impact statements.
4. EMB could permanently waive any new requirements (environmental, etc.) if it judges requirements may be impediment to implementation of project. Findings and decision not reviewable by court, except for Constitutional Violations.

5. EMB could recommend waiver of any federal or state or local law it considers an impediment to project development, even if it was not related to delays in agency decision-making.³⁶

This board was an unprecedented attempt to consolidate power in a policy area in one, small, centralized, federal board. Particularly disturbing was its ability to over-ride or sidestep federal, state, and local environmental laws--laws which were arrived at after years of debate in those democratic institutions. This drastic attempt to make an end-run around the democratic process was obviously rooted in the frustrations experienced by the Carter administration and others in their attempt to implement the kind of energy policy they desire. As Carter himself said in his speech introducing this proposal, the purpose of the Energy Mobilization Board was to ensure that "nothing stands in the way of achieving (our energy) goals." And clearly, this "nothing" included the public and the democratic procedures they cherish. Clearly it should be a matter of concern when we find policy-makers so willing to sacrifice democratic procedure simply because they are thought to be interfering with the "efficient" management of our society. We must ask whether it is really worth this price to make sure that the trains or nuclear reactors run on time.

Of course, the defeat of the EMB bill during the summer of 1980, and the election of the Reagan administration could be interpreted as movements away from a centralized, control oriented perspective.

Indeed, the early rhetoric of the Reagan administration appears to be very hostile to this perspective and any form of big-government regulation of social and economic life. However, even a cursory examination of the proposed policy actions of this administration reveals that it is hardly immune to the powerful, control-oriented forces at work in the polity. For example, in the area of energy policy where the Reagan administration claims to be committed to "getting the government out of the energy business" and letting the market work its wonders, one finds plans to provide large subsidies to certain forms of energy that the administration feels are desirable, but which have had problems competing in the marketplace. The Reagan budget promises to double subsidies for the ailing breeder reactor program, for instance. In addition, the administration seems committed to using decision techniques in energy policy which discourage democratic debate and citizen input. The most obvious example of this control-oriented tendency is the Nuclear Regulatory Commission's proposal to reduce the right of the public to gather information from the commission to use in licensing hearings. This proposal would make it possible for the NRC to refuse to provide public groups with the documents and testimony that these groups often use to gather the detailed information that is necessary to participate effectively in formal hearings. As one environmental spokesman described the proposal: "Basically, they will take away the tools citizens have in a democratic proceeding."³⁷

As this example indicates, this new administration is little different than the previous one, in that it is more than willing to

circumvent democratic safeguards and public participation when those procedures get in the way of desired policies--like nuclear power development. This kind of early evidence indicates that even an administration that is initially opposed to a government control-oriented perspective can quickly find itself embracing techniques of regulation (like import restrictions on foreign automobiles), subsidy, and control when these appear necessary to achieve their ends. Noting this, some political analysts, like Sheldon Wolin, have argued that as the Reagan administration becomes increasingly frustrated by its inability to revive our faltering economy, it could easily be forced to take an increasingly control-oriented approach to economic policy--one which would ultimately be based on a technocratic justification.

If the American political economy, like the economics of West Germany and France, has entered a period of low economic growth that will compel state authorities to impose even more severe wage restraints, cut-backs in services, anti-inflationary measures at the expense of employment, and a list of similar measures, it will find itself in a true crisis of legitimacy. . . . The Reagan years promise a political economy in which the state will seek to ground its legitimacy in the authority of technical and scientific knowledge rather than in "democratic" consent, and the economy will be able to count on a more trackable, less backward-looking population who will have the President's amiable moralizing to distract them.³⁸

Naturally, if the Reagan administration does find itself basing its policy proposals on technical and scientific knowledge, then the kinds of policy analysis described in this chapter will play an increasing role in this administration--despite all the initial appearances.

Is a Top-Down Approach Really Effective?

Again, the point is not that policy planners and analysts are incipient fascists, but that their traditional, control-oriented perspective fits very easily into any move toward more centralized, authoritarian forms of policymaking and implementation. As Benveniste observed, "There is a conventional notion that planners and government need strong power to plan; . . . that short of centralization and strong executive control to impose the plan, it will fail."³⁹ As Hannah Arendt has pointed out, the rationale for this kind of approach to policy is as old as politics itself. It is the belief that the only way to escape from uncertainty in human affairs is to impose order upon society from the top-down. In this view, human order is something created and maintained through hierarchical rule. As Arendt explains it:

Escape from the frailty of human affairs into the solidity of quiet and order has in fact so much to recommend it that the greater part of political philosophy since Plato could easily be interpreted as various attempts to find theoretical foundations and practical ways for an escape from politics altogether. The hallmark of all such escapes is the concept of rule, that is, the notion that men can lawfully and politically live together only when some are entitled to command and the others forced to obey.⁴⁰

In some sense, the notion that a top-down approach to policy is the most efficient and effective one is simply the modern descendent of the traditional political desire to create order through rule. But it is possible, indeed necessary for those committed to democracy,

to question this assertion. Is a top-down, control-oriented approach to public policies truly the most effective one?

In considering this question, let us begin by assuming as Huntington does, that much of the appeal of this top-down approach lies in its ability to overcome the kind of political conflicts and interest group squabbles that often get in the way of the formulation and implementation of effective policies. But is this approach actually an effective way of dealing with or eliminating these kinds of conflicts? I think not--for this approach does not really address those conflicts at all. To limit participation in the policy process, as Huntington suggests, would not eliminate these conflicts, but only eliminate one avenue of their expression. It would kill the messenger of social discord, but not the social discord itself. A top-down approach does not try to solve conflicts, but rather, attempts to overpower them by imposing a policy plan on the participants. And while this kind of strategy can sometimes be effective in the short run, its failure to eliminate the basic conflict itself can backfire in the long run. Reconsider, for example, the nuclear licensing and the Energy Mobilization Board policy proposals that were discussed earlier. These were certainly good examples of a top-down approach to our energy policy problems. But if those bills would have been passed, would they have been effective? There is reason to doubt that they would--for these bills, even in the proposal stage, did more to heighten opposition to these projects than to dampen it.

Environmentalists and other groups were angered that the government, instead of addressing their legitimate concerns, was attempting to eliminate their participation in the decision process and to over-ride environmental regulations. The governments high-handed approach only served to provoke these opposition groups even more, and to contribute to their determination to oppose these projects by what ever means were available: court fights, demonstrations, occupations, etc. This could hardly be considered "efficient."

Those who advocate more top-down approaches to public policy tend to underestimate the importance of public support to the success of public policies. Truly effective public policies are a combination of government authority and public acceptance, with the latter being the most important ingredient.⁴¹ After all, most policies are finally carried out by some segment of the public itself. As we saw with the energy bills, hints of authoritarianism may only serve to undermine this necessary public support, by arousing political suspicions and by stimulating more indignant opposition to those policies. One of the major political flaws in the scientistic approach to policy is the fact that citizens understandably resent being treated as "dependent variables" or "objects" to be manipulated. The resentment often surfaces in the form of stubborn resistance to government policies that the public feels are being imposed on them. Even when the government is "successful" in using its authority to ensure compliance with a policy, it can often be only a hollow victory. For the use of authority and

coercion to implement policies often only encourages the public to search for ways to circumvent or evade those laws. At best a disgruntled public tends to only obey the letter of a law that is imposed on them--not the spirit--and it is difficult for policies to be truly effective if their spirit and purpose do not have public support. In this sense, it could be argued that top-down approaches to public policy are actually inefficient in that they tend to alienate the public support necessary to ensure that they are carried out.

An Alternative Perspective: Policy as Promising

Despite these kinds of problems in the top-down approach to policy, it is a fact that this can be a popular approach and it can work. Political control is one way to maintain order and to implement policies in a society. And if there were not other ways to create order and effective policies, accepting this control-oriented vision would be quite understandable. But as Arendt points out, there is another option, another way in which human beings can create order in their affairs and implement effective public policies. Human order, she explains, can also be a product of the "promises" that we make to each other. For her, promising is a unique human capacity which "at least partially dispels . . . the unpredictability of human affairs;"⁴² and she maintains that the "power of stabilization inherent in the faculty of making promises (is) the only alternative to mastery which relies on . . . rule over others."⁴³ Arendt sees mutual promises or

contracts as a more democratic approach to creating order in human societies.

Interpretive social scientists would no doubt take Arendt's ideas one step further and point out that not only are mutual promises desirable ways to organize human activity, they are in fact much of the way order is maintained in society already. Peter Winch argued that social reality differs from physical reality in that it is ordered by the mutually held beliefs of those who live in that reality. In a sense, Arendt's "mutual promises" are simply a more conscious version of the intersubjective beliefs which play a central role in ordering all societies.⁴⁴ Mutual agreements and beliefs are the "glue" which hold social life together and allows it to exist and function in a smooth way. This understanding of the sources of social order can inform the way we think about "effective" policies. It implies that if policies are to be effective, they must become part of the web of intersubjective beliefs--they must be accepted by the public as part of the rules which will govern behavior. If policies fail to become part of this mutually held belief system, it quickly becomes clear that power and control are by themselves very inefficient tools for ensuring compliance with policies. For example, consider a society that is in a revolutionary situation, where most of the citizens no longer believe in the legitimacy of the government or its policies. If that society refuses to function normally, if citizens take part in a general strike, it is extremely difficult to force that society work. Even if the government has a virtual monopoly on coercion and

violence, it is often impossible to make that society function normally. This is an extreme demonstration of the fact that social order is ultimately a function of the public's agreements to act in certain organized ways.

More importantly, the notion that order is a function of intersubjective beliefs or "promising" lays the philosophical groundwork for a more democratic vision of public policy--one which is not rooted in the notion of people as material to be manipulated, but which is built upon the unique capacity of human beings to order their world through shared beliefs and mutual agreements. This in turn implies that effective policies are not something which is imposed on the public, but something which requires the active support and participation of the public. "Policy as promising" suggests a view of policy coming from the bottom-up--as a product of public understanding and agreement as to the correct course of action to take to solve social problems. This suggests that policy formulation and implementation cannot ignore or try to overpower conflicts in the policy, but must be a process which attempts to resolve those conflicts and integrate opposing viewpoints. In this sense, public policies would be policies which came from and were embodied in the public.

All of these are important suggestions and implications of Arendt's views, and we will be considering them in much more detail in the last chapters when we explore what an "integrative approach" to policy and policy analysis would look like. For now, however, the

important point is that this more public vision of policy does not occupy a central place in the current practice and perspective of public policy analysis. Indeed, it seems that the ideal public for the positivist policy analyst is not one which is active, but one which only reacts in predictable ways. In the current view, policies can only be effective when the public acts like a good "dependent variable." As one non-positivist social theorist, Jurgen Habermas, has observed, a passion for democracy is not a characteristic of modern policy analysis. In the activity of devising rational public policies, "the public body of citizens conferring in an unrestricted fashion about matters of the commonwealth does not play an essential role."⁴⁵ For Habermas this lack of concern for democracy in public policy analysis is simply a manifestation of the disturbing change in the function of political thought and social analysis that has been brought about in modern industrial societies.

Emancipation by means of enlightenment (has been) replaced by instruction in control over objective and objectified processes. Socially effective theory is no longer directed to the consciousness of human beings who live together and discuss matters with each other, but to the behavior of human beings who manipulate . . . No attempt is made to attain a rational consensus on the part of citizens concerning the practical control of their destiny. Its place is taken by the attempt to attain technical control over history by perfecting the administration of society.⁴⁶

Footnotes

¹Jeffrey Straussman, "Technocratic Counsel and Societal Guidance," in Leon Lindberg, (ed.), Politics and the Future of Industrial Society (New York: David McKay, Co., 1976); Zbigniew Brzezinski, Between Two Ages (New York: Viking Press, 1970); and Jacques Ellul, The Technological Society (New York: Vintage Books, 1964).

²The Human Condition (Garden City, NY: Doubleday Anchor Books, 1959), especially Chapter V.

³Ibid., pp. 206-207.

⁴Ibid., pp. 168, 202.

⁵Larry L. Wade, The Elements of Public Policy (Columbus, Ohio: Charles E. Merrill Publishing Co., 1972), p. 88.

⁶Brian Fay, Social Theory and Political Practice, (Boston: George Allen & Unwin, 1975) pp. 43, 45.

⁷As Allan Krass, a physicist at Hampshire College, pointed out in a conversation with me, the notion that control is the whole purpose of the scientific method is not one that many physical scientists agree with. Science has many purposes, one of which is prediction and control. The fact that social scientists and policy analysts have focused on this aspect of science is more a function of the fact that the notion of control has its political uses. For many natural scientists, this is merely another example of the tendency of social scientists to vulgarize and distort the methods of science.

⁸Wade, p. 17.

⁹Wade, p. 90.

¹⁰Space-General Corporation, Prevention and Control of Crime and Delinquency: Final Report, PCCD-7, 29 July, 1965.

¹¹Ibid., p. 4.

¹²Ida Hoos, Systems Analysis in Social Policy: A Critical Review (Westminster, England: Institute of Economic Affairs, 1969), pp. 26-30.

¹³Space-General, p. 5.

¹⁴Hoos, p. 29.

¹⁵Ibid., p. 27.

¹⁶Ibid., pp. 30, 51.

¹⁷Austin Ranney, quoted by David Schuman in Bureaucracies, Organizations, and Administration (New York: MacMillan Publishing Co., 1976), p. 157.

¹⁸In recent political debates, some have argued that market relationships are voluntary, and thus an alternative to coercive government measures. I disagree. As the rise in gas prices has shown, market forces can be just as manipulative and coercive as more overt government decisions. Thus I include market "incentives" as a technique of manipulative control.

¹⁹Robert Heilbroner, An Inquiry into the Human Prospect (New York: W.W. Norton Publishing Co., 1974), and Kenneth Dolbeare, "Alternatives to the New Fascism," The Massachusetts Review, Vol. VII, No. 1 (Spring, 1976).

²⁰Guy Benveniste, The Politics of Expertise (Berkeley: The Glendessary Press, 1972), p. 15.

²¹This debate is going on, for example, in the discipline of political science. See Thomas Dye and Harmon Zeigler, The Irony of Democracy (North Scituate, MA: Duxbury Press, 1975); also see Peter Bachrach, The Theory of Democratic Elitism: A Critique (New York: Little Brown and Co., 1967). In economics, see Robert Heilbroner, An Inquiry into the Human Prospect (New York: W.W. Norton, 1974). In the field of ecology, a provocative example in William Ophuls, Ecology and the Politics of Scarcity San Francisco: W.H. Freeman and Co. 1975).

²²For a more general discussion of the Trilateral Commission see Alan Wolfe, The Limits of Legitimacy (New York: Free Press, 1977).

²³Energy: A Strategy for International Action (New York: The Trilateral Commission, 1974).

²⁴Ibid., p. 38.

²⁵Ibid., p. 39.

²⁶Ibid., p. 39.

²⁷Ibid., p. 39.

²⁸Michel Crozier, Samuel Huntington, and Joji Watunuki, The Governability of Democracies (New York: New York University Press, 1975).

²⁹Ibid., p. 7.

³⁰Ibid., p. 115.

³¹Ibid., p. 114.

³²Quoted in Richard Hofstadter, "The Founding Fathers," in Michael Leiserson, The End of Politics in America (Boston: Little, Brown and Company, 1972), p. 31.

³³Formally called the Nuclear Regulatory Reform Act, this bill was introduced into Congress in March 1978.

³⁴Cited in Energy Policy (Washington D.C.: Congressional Quarterly inc., 1979) p. 114.

³⁵Ibid., p. 112.

³⁶Bill provisions taken from report on version of House EMB bills done by The Bureau of National Affairs, Inc. Washington, D.C. (0148-8155/79)

³⁷"Rule Would Aid Nuclear Power Plants," The Lorain Journal, March 18, 1981, p. 3.

³⁸Sheldon Wolin, "Reagan Country," The New York Review of Books, XXVII, Number 20 (December 18, 1980), p. 11.

³⁹Benveniste, p. 53.

⁴⁰Arendt, p. 198.

⁴¹Much of the academic literature concerned with the citizen participation movement supports this point. It stresses the fact that one of the main rationales for citizen participation in government is that it encourages the kind of public support that is necessary if policies are to be successfully implemented. See Carol Pateman, Participation and Democratic Theory (Cambridge, England: Cambridge University Press, 1970) pp. 45-85.

⁴²Arendt, p. 219.

⁴³Ibid., p. 220.

⁴⁴For an exposition of this point, see Charles Taylor, "Interpretation and the Sciences of Man," Review of Metaphysics, Fall, 1971.

⁴⁵Jurgen Habermas, "Dogmatism, Reason, and Decision: On Theory and Practice in Our Scientific Civilization," in Theory and Practice (Boston: Beacon Press, 1973) pp. 254-255.

⁴⁶Ibid.

C H A P T E R VII

POLICY ANALYSIS AS CONSERVATISM

Perhaps the most important role of the intellectual since the enlightenment has been that of unmasking ideology We can confidently expect this role to be abandoned as the intellectual becomes the administrator of a new society.

Noam Chomsky

"Philosophers and Public Policy"

The last bias in policy analysis that will be considered is a tendency toward conservatism--meaning that some policy analysis methods tend to assume and conserve the status quo in society. One important source of this conservative bias lies within positivist thought and the deterministic vision of the world that it encourages. The main focus of the chapter is on the manner in which this conservative bias has distorted our perspective on United States energy policy and constrained our choices in this area. I will focus in particular on the questionable relationship between energy and economic growth, which is in many ways the key issue animating many current energy policy decisions. In the final sections of the chapter I will attempt to illuminate the power of this conservative bias by locating it within the broader cultural proclivity that supports it--the human tendency to believe that certain social problems are normal, natural and inevitable. I will argue that this perspective is dysfunctional in that it puts artificial and undesirable constraints on policy-making creativity. However, before proceeding to address these questions, I will begin with a consideration of the nature of this conservative bias.

The Conservative Bias in Analysis

"Policy analysis," according to Edith Stokey and Richard Zeckhauser, "is a discipline for working within a political and economic system, not for changing it."¹ They are quite right; and it would be difficult to find a better description of the conservative bias that afflicts public policy analysis. In its essence, this conservative bias is a tendency to take current socio-economic arrangements as given, and thus lend tacit support to those arrangements. Or to put it conversely, there is an inclination in policy analysis to ignore approaches and solutions to policy problems which would require questioning or changing the current structure of our American socio-economic system. As Robert Bish admitted in his discussion of the public choice approach to policy analysis, policy analysis techniques often prove to be most useful to "those who wish to discover recommendations for improving the present structure and functioning of the American . . . public economy."² In one sense, whether this tendency to conserve the status-quo is good or bad depends entirely on whether the status-quo is considered desirable or not. If one feels satisfied with current arrangements, this conservative bias would probably be seen as a healthy one. But I believe that a good case can be made that this kind of perspective on policy is dysfunctional in a more general sense--in the sense that it inevitably works to artificially constrain our search for solutions to present and future social and economic problems. As we will see, this dulling of our political imaginations can cripple our abilities to respond adequately and appropriately to our changing world.

Before beginning to consider the sources and effects of this bias, several potentially confusing points should be cleared up. First of all, the conservative methodological bias in policy analysis should not be assumed to always support politically conservative (right-wing) positions--although, as will be evident later, this potential is certainly present. It is important to note that this conservative methodology could also easily support liberal positions, in that it could work to conserve elements in the status quo that are amenable to liberal interests. It is quite conceivable, for instance, that this conservative bias could assume (and thus support) the continuation of government intervention into the economic system--a current and basic tenet of liberal politics. Thus the key point to remember about this conservative tendency is that it is a methodological phenomenon that works to support the current socio-economic structure of society, irrespective of the particular political perspective embodied in that structure.³

It would also be misleading to assume that this conservative bias is always opposed to change. Oddly enough, the conservative bias in analysis can actually assume change, if that change is a constant characteristic of the present socio-economic system. For example, as Robert Ayers has pointed out, analyses done for mainstream social institutions like government and large private corporations typically portray the future as the present writ large--higher productivity, more energy consumption, more income, more technological breakthroughs, and so on.⁴ This is an example of what he calls conservative or "alpha" forecasting --a deterministic approach to the future in which the analyst simply forecasts the future as the extrapolation of the trends and changes

currently at work in society.⁵ Thus, assuming the continuation of the status quo could easily mean assuming the continuation of certain characteristic forms of change.

Finally, though some policy analysts are obviously aware of the conservative bias built into analysis, it is not my contention that this bias is an intentional or premeditated one. This bias, like many of the others we have explored, is a systemic one--one that is built into the system of analysis itself. It is in part a function of the positivistic assumptions that lie at the heart of policy analysis, and thus operates without the conscious effort of analysts themselves. Let us consider what it is about policy analysis that builds in this conservative bias.

Descriptive Models: Objectifying Our Social World

As we have seen, the construction and use of descriptive models is in many ways the essence of policy analysis. The purpose of these models is to "describe the way the world operates."⁶ Or as Buchanan and Tullock, the fathers of public choice analysis put it, "We seek to learn how the world works in order to make it work better, to improve things."⁷ This is a laudable goal, and one which would seem to have little bias attached to it. But in fact, it is this conception of the analyst's work that forms the philosophical foundations of the conservative bias in analysis. The bias is again rooted in the mistaken tendency to equate the social world with the physical world--an equation that is evident in the statement by Buchanan and Tullock. Note the language used; note that our social world is referred to as "the" world--the implication being that just as there is only one physical world, there is only one social world.

But this, however, represents a mistaken understanding of the unique nature of human social reality, for while it may be valid to assert that there is one physical world, constituted and ordered by one set of immutable natural laws, the same does not hold true for social reality. As I have argued, social reality is constituted in large part by the shared beliefs of those who participate in it--and since beliefs can differ greatly, so too can social worlds. Indeed, the staggering diversity of social systems that can be seen in human history is in large part due to the variety of possible human belief systems. Thus it is accurate to say that there is not one social world, but many possible social worlds. We do not live in the world, but in our particular world, governed by the particular beliefs that order our lives. And therefore when modelers claim to be "describing the way the world operates," they are in fact simply describing the way our current social system operates.

There is more than a semantic difference here. The positivist tendency to think of our world as the world is much of what creates the conservative bias in analysis; for the variety, creativity, and possibility that is such a unique and basic part of human existence tends to get factored out in the use of these policy models. Descriptive models restrict themselves to describing how our current social system works, and as a result, the rules and requirements of our particular way of life tend to become objectified, tend to become considered the natural, objective requirements of the world. These objectified assumptions become part of the criteria by which policy options are judged feasible or not, and those policy options which violate or challenge current requirements are considered to be unrealistic and tend to be dismissed out of hand.

But let us move beyond a theoretical understanding of how this conservative bias works, and consider in some detail how it has affected our national energy policy.

Constraining Energy Policy Choices

It is generally agreed now that national energy policy in the 1970's was unduly constrained by an over-emphasis on supply-side solutions and an under-emphasis on demand-side solutions, like conservation.⁸ In part this was because virtually all energy analysts and their models assumed that the demand for energy would naturally have to keep rising as it had in the past. For most private and public analysts, the energy crisis was defined as a problem in finding enough new and reliable supplies to meet our ever-increasing demand. This assumption had a very direct effect on our energy policy efforts. It meant that we would have to stay dependent on foreign oil to supply at least part of this growing demand, which has proved to not only be expensive, but a direct threat to our national security. We were also led to exploit more remote and expensive supplies of domestic energy (off-shore and Alaskan oil), which contributed to inflationary pressures. The assumptions of growing demand also meant increasing use of coal and nuclear power, despite the very real environmental and health risks associated with these forms of energy. The need for growing supplies was also instrumental in supporting efforts to undermine and rollback the environmental standards that were passed in the earlier part of the decade. In short, the assumption of increasing energy demand carried with it a number of quite important consequences, and played an important part in shaping our energy choices.

The typical reasoning underlying the prediction of increasing energy demand was expressed well in an analysis done by the Energy Economics Division of the Chase Manhattan Bank:

With growing economic activity and a rising standard of living, the per capita use of energy has increased steadily in the past. It has doubled within the last 30 years. And evidence that it will continue to grow at even a faster rate is unmistakable. . . . It has been recommended in some quarters that the United States should curb its use of energy as a means of alleviating the shortage of supply. However, an analysis of the uses of energy reveals little scope for major reductions without harm to the nation's economy and its standard of living.⁹

This statement captures the three main assumptions that informed virtually all national energy models: first, that since energy demand has grown steadily in the past, it was likely to do so in the future; second that there is an "iron" link between energy growth and economic growth; and third, that continuous economic growth was necessary and desirable. All of these assumptions appeared quite reasonable. There was strong empirical evidence that energy growth and economic growth were directly linked. For example, the figure below was sometimes used to illustrate the striking parallel between the growth in GNP and the growth of energy consumption in the United States during this century. Thus there seems to be little question of the direct connection between continual economic growth and increased energy growth. Further, it was uniformly assumed that continuous economic growth was a systematic requirement of all advanced capitalist states, including the United States. The structure of such economies requires them to grow in order to survive and prosper; lack of growth can only mean increasing unemployment, recession, and eventual depression.

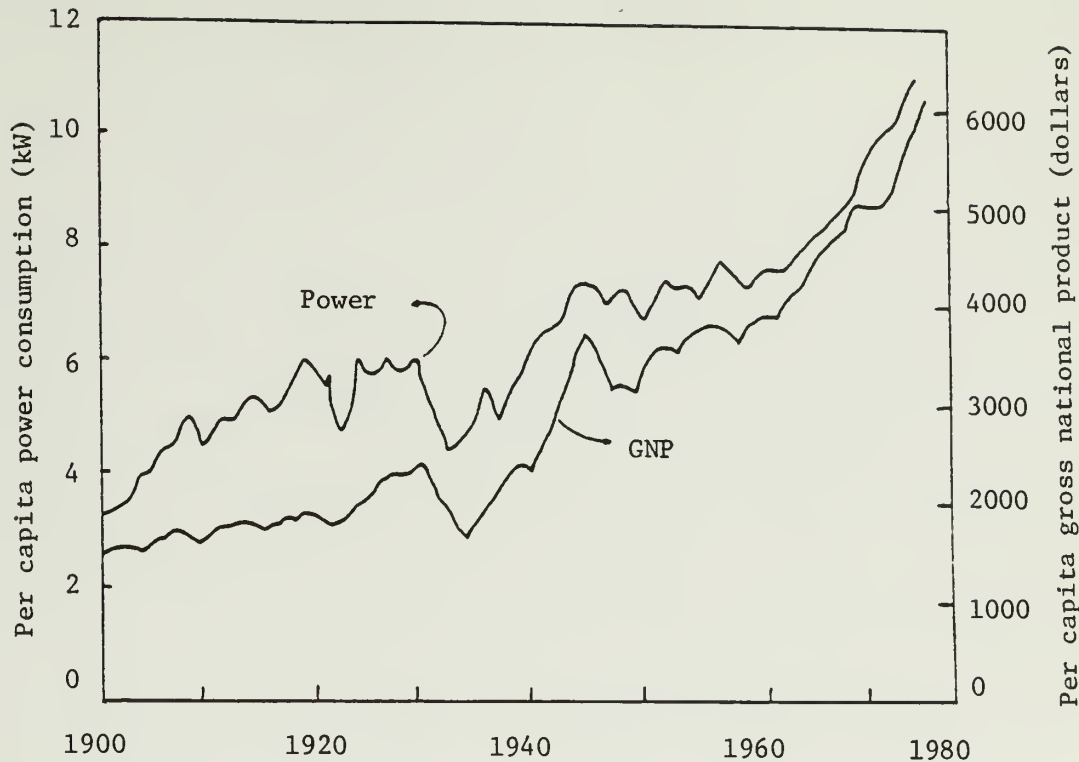


Fig. 1. Per capita average power consumption and per capita gross national product in the United States. (Gross national product figures are given in 1973 dollars, dollar figures for previous years have been increased to take account of inflation.)¹⁰

Given this model of the energy-economic system, any policy advocating vigorous conservation of major reductions in energy demand would understandably be considered unrealistic, if not dangerous. To slow energy growth would imply slowing the economy, with all the economic and social dislocations that would accompany that slowdown. In this context, a slow or no growth energy policy proposal could only be considered irrational. This is a nice illustration of one of the main purposes of policy models: to specify which policy options are feasible,

given the systemic characteristics and requirements that are incorporated into the model. Analysts like J. W. Forrester, designer of the Systems Dynamics National Model has argued forcefully that computer models should play this kind of role in informing national policy decisions.

Many expectations for the future are not consistent with current realities. By showing how assumptions and policies bring about future consequences, the National Model should help to distinguish between unjustified hopes and possible futures. Any aspirations about the future should reflect a realistic understanding of the structure of society and a set of viable policies capable of leading to that future. When the National Model becomes a sound basis for judging the merit of future alternatives, national leaders and the general public may be able to use the Model to help set achievable national goals and choose feasible futures.¹¹

It is exactly this kind of perspective that resulted in the labeling of serious conservation efforts as unfeasible and undesirable. A "realistic understanding" of the structure of our current society revealed an energy-GNP link and an economic growth requirement that could not be violated.

In recent years, however, the necessity of increasing energy demand and the models which supported that notion have come under increasing attack. The first chink in the armor of increasing demand was a persuasive critique of the "iron link" between energy growth and economic growth. There is now a growing consensus that the energy-GNP link is much looser than once thought, and that strong conservation measures could be applied without slowing down the economy. Even the Carter administration admitted that energy growth could be reduced to 2% a year without adversely affecting the economy.¹² This is possible largely because of the tremendous amount of energy that is currently being

wasted in the economy--many analysts estimate the waste figure at approximately 30%.¹³ If this waste could be eliminated through increased energy conservation and efficiency, the growing demand for energy could be slowed without hurting the prospects for economic growth--and in fact, this has been the reasoning underlying the push toward more conservation in recent years.

Thus it would appear that by incorporating a true description of the energy-GNP link (i.e. a loose relationship), the systemic bias against a strong conservation policy would be eliminated from our energy models and analysis. But in fact this is only partly true; for as long as we assume and promote a continually growing economy, a slow or no growth energy policy must eventually be considered irrational. For energy growth and economic growth can only be decoupled temporarily --until all of the 'slack' in the currently loose relationship caused by waste is used up. Once this slack is taken up, the energy-GNP relationship will again be a tight one, and energy growth would have to again keep pace with the ever-growing economy. William Ophuls' analysis has indicated that even the best conservation program--one that would save up to 50%--would only buy us "a decade or two of time" before we would again have to face the task of finding vast new sources of energy to keep up with increasing demand.¹⁴ In short, ensuring economic growth is the bottom line in most energy analyses, and is the central assumption which necessitates a commitment to ever-growing supplies of energy.

Questioning Continuous Economic Growth

Thus if conservation and limited energy growth are to be considered as serious, long-range energy options, one must begin to question the assumption of continuous economic growth. And in fact, during recent years, several social and economic analysts have begun to criticize this most hallowed American goal. Some of the most prominent and persuasive of these critics include Herman Daly, Fred Hirsch, and William Ophuls.¹⁵ This is not the place to examine the growth critique in depth (the issue of growth will be addressed in more detail in the last chapter), but the essence of the arguments is easily grasped. Criticisms of continual economic growth fall roughly into two categories. The first is concerned with the social limits to growth and the second focuses on the ecological limits.

Fred Hirsch represents one form of the social critique. In his book, The Social Limits to Growth, Hirsch argues that while economic growth has been successful in allowing large segments of the U.S. population to share in the enjoyment of material goods, this growth will necessarily fail to fulfill everyone's social needs.¹⁶ Hirsch identifies a set of social goods (including privacy, exclusive higher education, and good jobs) as "positional goods"--goods that are inherently scarce in that they can only be enjoyed by those few people who occupy the higher positions in society. General use only deteriorates these goods, thus they will always be relatively scarce; not even economic growth can change that fact. Indeed, as material prosperity makes these social goods more attractive to large numbers of people, frustration and

competition will only increase. In short, economic growth contains a false premise of social affluence for everyone--a kind of general affluence that can never be achieved.

The ecological critique of economic growth takes a different tack, one which not only questions the promise of growth but also its very possibility. Critics like Daly and Ophuls focus on the inevitable environmental and health damages that result from the increasing use of natural resources and the increasing pollution that is the unavoidable by-product of this growth of resource consumption. Rather than seeing our energy problems as a matter of finding more supplies to feed our growing demand, they perceive it as a good example of the kinds of problems that are caused by an economic structure which requires continuous economic growth.¹⁷ In essence, they argue that a policy of unlimited growth is fundamentally incompatible with a world of limited resources. These authors are good examples of the kind of analyst that will be discussed in Part II--analysts who begin to avoid the positivist traps built into present forms of analysis. Rather than routinely accepting the assumptions and relationships that dominate our current socio-economic system, they are willing to explore alternative assumptions and the alternative policy paths they imply. In this case, both Ophuls and Daly argue that in the place of an economy which requires reliance on increasingly scarce, expensive, and risky energy sources, we should be moving towards a no-growth or steady-state economy--one which requires a low or constant supply of energy, much of which could be supplied by renewable energy resources.¹⁸

Needless to say, this steady-state vision of the economy has met with little acceptance among mainstream policy analysts and policymakers. Indeed, for many, the notion of zero-growth is so ridiculous that it is used as a slur against political opponents. In a speech attacking environmentalists, Hollis W. Dole, former U.S. Assistant Secretary of the Interior, thought it sufficient to refer to them as "stop-everything zealots whose real cause is not environmental protection, but the zero-growth society."¹⁹ And when Craig Hosmer, President of the American Nuclear Council, wanted to condemn a group of White House energy advisors, he called them "bad guys" whose aim was to "convert the country into a drab, energyless, no-growth, sleeping-bag society. That is their goddamned transcendental notion of a great future for the U.S.A."²⁰

The failure of the steady-state proposal to become a legitimate part of the debate over economic and energy policy is in part due to the conservative bias in policy analysis. The growth requirement characteristic to a particular economy has become objectified and used as the unquestioned standard by which policy proposals are evaluated. According to this standard, no-growth is the same as failed growth, with all the economic dislocations that accompany that failure. This kind of thinking was best exemplified by an analysis in Fortune, which argued that the severe recession of 1973-1975 was in fact "a real life tryout of zero growth." But as Herman Daly points out, this kind of reasoning is faulty:

Fortune identifies a steady-state economy with a failed growth economy. A condition of nongrowth can come about in two ways: as the failure of a growth economy, or as the success of a

steady-state economy. The two cases are as different as night and day. No one denies that the failure of a growth economy to grow brings unemployment and suffering. It is precisely to avoid the suffering of a failed growth economy (we know growth cannot continue forever) that we advocate a steady-state economy. The fact that an airplane fails to ground if it tries to remain stationary in the air simply reflects the fact that airplanes are designed for forward motion. It certainly does not imply that a helicopter cannot remain stationary. A growth economy and a steady-state economy are as different as an airplane and a helicopter. (The growth assumption) remains supreme when even the failures of a growth economy become arguments in its defense.²¹

Daly's point is straightforward: what may be a requirement for one socio-economic system may not be for another; and that it is a serious mistake to evaluate all policy options according to current systemic criteria. The current structure of our socio-economic system may require continuous economic growth--but it does not necessarily have to always be so. As Daly demonstrates, it is quite possible to envision a steady-state economy which is healthy and prosperous, with full employment and all basic material needs adequately met. But such an economy would have to be structured according to much different values and beliefs than are at work today. Among other things, a steady-state society would require a commitment to zero population growth; a move away from self-indulgent consumerism and materialism and a commitment to the development of non-materialistic values; a commitment to producing more durable goods in a manner that was less energy intensive and more labor intensive; a system for limiting the amount of resources consumed by the economy; and a limit on corporate growth and profits. Given the assumptions and values of Daly's perspective, not only is a steady-state economy rational and possible, the currently dominant

notion of an ever-growing economy becomes seen as irrational and irresponsible.

One need not agree with Daly's specific prescriptions to see the basic validity of the theoretical point being made here; that the notions of "necessity," "feasibility," and "rationality" that serve to limit policy analysis and discourse are not neutral or objective terms, but system-bound terms--terms relative to the system of values and theories that we assume. In policy analysis, the tendency is to assume the values and theories characteristic of the current social system--in the name of being descriptive. The result is the elevation of these assumptions to the status of natural laws--as exemplified by the economist who reportedly supported the notion of economic growth by arguing that "it is a law of nature, either grow or die." First of all, this statement shows a mistaken understanding of nature--very few things in nature, besides cancer, grow continuously; plants and animals spend most of their lives in a mature, steady-state condition. But more importantly, it displays a typical lack of appreciation for the differences between natural and social reality and the fact that beliefs that order human societies are much more relative than the laws which order nature. This distorted perspective inhibits our ability to see that what is irrational, unfeasible, and impractical in one context may actually be reasonable in another context. All too often in policy analysis the powerful notions of rationality and necessity are used to eliminate some policy options and justify certain choices--without any reference to the potential relativity or questionability of those standards. A typical example has been the debate over nuclear power policy, where

the concept of "necessity" has occurred again and again as one of the key justifications for the advancement of this program. Because of the acknowledged risks, few analysts and policymakers enthusiastically embrace nuclear power; instead, they usually argue that whether we like it or not, nuclear power is "necessary" if we are not to freeze in the dark in the future. As one report typically put it, ". . . commitments to nuclear power will continue to grow out of necessity."²² And it is significant that Hans Bethe, a distinguished physicist, chose to call his article on nuclear energy in the Scientific American, "The Necessity of Fission Power."²³ Of course, what is usually not mentioned in these arguments is that nuclear power is only necessary given a system of increasing energy demand and the neglect of conservation and alternative forms of energy. Thus the illusion of necessity, supported by "neutral" descriptive models, has served to advance the development of nuclear power.

The Political Advantages of the Conservative Bias

The conservative bias in policy analysis exists and persists not simply because of the positivistic assumptions characteristic of analysis, but because it is advantageous to certain groups in society. For example, it has certainly proved convenient to policy analysts themselves. The artificial limits this perspective puts on policy choices certainly serves to make the analyst's job much easier. If the policy analyst's job is to simplify a complex world of innumerable choices, then a conservative bias can be quite helpful in that process. As Charles Lindblom has pointed out, taking for granted the prevailing

belief system or ideology automatically eliminates a whole set of policy options from consideration, and thus serves as an "enormous and indispensable aid to the analysis of public policy."

A working commitment . . . to a pluralistic democracy and corporate enterprise, for example, permits a policy analyst greatly to restrict his search for policies and generally to simplify his analysis so that he can better grasp it. In effect, an ideology takes certain beliefs out of the gunfire of criticism. These beliefs . . . can therefore be introduced into policy analysis as though they were settled facts.²⁴

Thus ideology--values and theories--gets introduced into policy discourse as "facts"--not as a matter of deception, but simply because it is convenient to analysts to do so. Intellectually, it is much easier to restrict one's attention to "conventional" or "realistic" alternatives, than to have to critically assess the whole range of options. Kenneth Boulding has described this kind of dogmatism as intellectual agoraphobia (fear of open spaces)--in this case, a "fear of open spaces of the mind" which is characterized by a "tendency to retreat into the cozy, closed spaces of limited agendas and responsibilities."²⁵

But all of this discussion of the conservative bias as a function of policy analysis and policy analysts can be very misleading for the primary force behind this perspective on policy is political, not intellectual. In the real world of policymaking, policy agendas are limited and policy options are ignored largely for political reasons, not analytic ones. And the tendency in policymaking to preserve the status quo is primarily due to the fact that certain specific interests benefit from the preservation of current socio-economic arrangements. Thus the conservative bias in policy analysis is important, not because it by itself serves to limit our policy options, but because it can

play a supporting role to political groups who promote and benefit from those limits. For example, the main reason conservation has not been considered a viable energy option is not simply the models used in analysis, but the ability of energy suppliers to focus the attention of policymakers on supply-side options. The oil and gas lobbies are widely recognized as two of the most effective forces in Congress. As the Harvard Business School study pointed out, there were few powerful economic groups supporting conservation. "What economic entity has an interest--economic or otherwise--in promoting (conservation), lobbying Congress, spending millions to advertise the case? Thus the energy suppliers pretty much shaped the terms of the debate, and established what was important and what was not."²⁶ And what was not important, of course, was conservation; a view that was helped along by the "neutral" energy policy models discussed earlier.

Thus the conservative bias in policy analysis can often lend explicit support to various special interest groups--not through any conspiracy between analysts and special interests, but simply because they both share the same systemic or ideological assumptions. A good example of this process can be found in our petroleum policy. Virtually all energy analysis models assume, in Lindblom's words, "a working commitment to corporate enterprise;" the presumption that private oil companies have the inherent right to own, develop, and profit from oil resources. Even the analyses done for President Carter, clearly one of the most outspoken critics of the oil industry to ever inhabit the White House, presumed that "the private sector will continue its primary role as the major producers of energy resources." The

prevalence of this assumption is of course primarily due to the fact that the right of private ownership and profit are two of the most basic systemic characteristics of the American economy--two of the essential elements of capitalist ideology.

However, these kinds of assumptions may have the uncomfortable effect of supporting oil company interests when they conflict with the public interest. Analyses which assume the right of corporate ownership and profit implicitly lend support to the right of oil companies to "hold oil for ransom"--to refuse to produce vitally needed oil until they are ensured a high enough profit margin. Thus if one presumes the continuation of present economic arrangements in the oil industry, one must logically support oil industry proposals for decontrol and enormous profits. For given a system of production for profit, the only "realistic" and "viable" way to increase oil production is decontrol. Thus the systemic assumptions built into most energy policy analyses can work very much in the private interests of the energy industry. They effectively eliminate from serious consideration the option of nationalization--despite the fact that we are now the only major industrial nation which does not have a nationally owned oil company.

Naturalness and Apathy

Acquiescence to the prevailing ideology is, of course, not a unique characteristic of public policy analysis--it is a common feature of all societies. All cultures tend to be ethnocentric in the sense that they think of their own way of life as being natural and inevitable. The conservative bias in policy analysis is simply a more formalized

version of this perspective. The persistence of this bias is partially a function of the fact that it matches a bias already present in the culture at large. A bias which matches one's own seems not to be a bias at all.

However, as Barrington Moore Jr. has observed, this kind of ethnocentricity--this tendency to think of our particular social world as natural--can have some detrimental effects on politics that we have not yet considered. It can, he argues, contribute to the view that certain kinds of social and economic problems are "natural" or "inevitable" and therefore do not deserve serious policy attention. In his study, called Injustice, Moore examined examples of people who have been the victims of injustice, from the Hindu Untouchables to the Jews of Nazi Germany and found that "people so often put up with being the victims of society," because they believe that "the portion of human misery caused by the workings of social institutions" are not really man-made, but "part of the natural order of the universe."²⁷ Thus a positivistic perspective on our social world may only serve to produce or reinforce apathetic attitudes toward persistent social problems.

One good example of this phenomena is the problem of structural unemployment. It has been common for modern economic analysts to maintain that a certain level of unemployment--4.5% is now a popular figure--is normal or natural. In fact, some have suggested that we officially redefine full-employment to mean 4.5% unemployment or less. In effect this would "solve" the problem by declaring it normal--by defining it away. But of course this level of unemployment is simply a characteristic of our particular economy and not an objective

necessity. Indeed, many socialist states and even some Western European states do not consider 4.5% to be normal, and this level would be considered a matter which would demand immediate attention. But if some analysts have their way, once unemployment here is down to 4.5%, it would cease to exist as an issue at all.

Again, this acquiescent attitude in policy analysis would not be so worrisome if it did not dovetail so neatly with developing public sentiments. As numerous opinion polls have indicated, the public seems to be becoming increasingly pessimistic about the future and especially our ability to solve many of our persistent social and economic problems. On the policymaking level, this kind of pessimistic perspective was best expressed in President Carter's famous observation that "government cannot solve all our problems, . . . cannot eliminate poverty, provide a bountiful economy, reduce inflation, save our cities, cure illiteracy, provide energy, or mandate goodness."²⁸ Positivist policy analysis can help legitimize this kind of resignation by portraying our socio-economic problems as natural and inevitable--as simply "facts of life." As "realistic" policy analysts are fond of pointing out, "the descriptive approach (to policy analysis) accepts the facts of life."²⁹ To be fair, it may be true that certain problems are indeed inevitable--our limited supplies of natural resources might be a good example. But the false air of naturalness that positivistic analysis can lend to problems can only do a disservice to policymakers and the public by obscuring the issue of which of these problems are indeed "facts of life," and which are simply a function of the present structure and operation of our particular socio-economic system, and

thus may be potentially solvable.

Normalizing Risks

The final form of the conservative bias that we will consider is also one of its most currently popular forms: comparative risk analysis. Typically, this technique involves comparing the risks of some new activity--say the production of a new chemical that may have carcinogenic effects--with the "normal" risks taken by people in our society. First one identifies a series of risks that people normally accept. Automobiles are a favorite example: thousands of people die every year in car accidents and yet people continue to buy and drive cars. Also although dams are known to burst, people continue to voluntarily build houses downstream from them. People normally climb ladders despite the risks, and so forth. One then calculates the probabilities for these kinds of accidents and these figures become the standard of acceptability for new public projects. One calculates the cancer risks involved with the new chemical, and if those risks are similar or lower to the "normal" risks, the chemical is approved.

This kind of reasoning is typical in policy analyses which have tried to minimize the health risks associated with complex energy technologies like synthetic fuels and nuclear reactors. The Rasmussen Report,³⁰ for example, included a table comparing the estimated probabilities of a nuclear fatality with those for auto accidents, falls, fires, tornadoes, etc., in an effort to show that nuclear reactors are more innocent of risk than most of life's hazards. And in his article arguing the "relative safety of nuclear reactors," Hans Bethe invoked

this same technique, arguing that "A reactor accident . . . is less serious than many minor wars."³²

There are of course a number of different problems with this approach to risk evaluation. For example, this approach seems to have a very questionable method for ascertaining whether the public accepts a risk. For instance, from past public behavior, it is simply inferred that Americans accept the fact that 50,000 people a year will die in auto accidents? Do people really "accept" this? When did they "decide" to accept this risk? Acceptance implies that there is some kind of voluntary choice involved, but in fact most people have very little choice about driving a car. If there are no viable alternatives to the car--say, extensive mass transit systems--people can do little but "accept" the risks associated with driving. In short, observing behavior often tells us little about whether public acquiescence to a risk is conscious or voluntary; and would thus seem to be a poor way to make those crucial value judgments about risks. It would make more sense to consult the public directly, and let them express their views of risks through democratic political processes.

For our purpose, though, the most telling criticism of this approach is the following: even if people accepted one risk in the past--say, living downstream from a dam--it is faulty to assume that they would be willing to accept additional numbers of comparable risks --let's say, living close to a nuclear reactor also. Could not a rational person accept one of those risks, but not both? Is there not a limit to the number of comparative risks that a person would want to accept? It is one thing to accept one potentially carcinogenic food

additive, but it is quite another to accept scores of them. Comparative risk analysis makes the mistake of assuming that values are stable--that past risk choices are a legitimate indication of future choices--which leaves out the distinct possibility that the public could change its mind on what an acceptable risk is, or on the number of risks it is willing to take. This is another example in analysis of the tendency to see the future as merely an extrapolation of the past. It is also another argument for why risks decisions should be made directly by the public, instead of through analytic technique--the political approach could more easily express changing public sentiments on the acceptability of the risks of modern industrial life.

These shortcomings in comparative risks analysis would only be of theoretical concern, if not for the fact that they quickly translate into political problems. Because of its tendency to rationalize the acceptance of risks, this method of analysis has quickly been seized upon by numerous political and economic groups who wish to promote products and projects that serve their own interests, but have been impeded by the fact that they expose the public to significant risks. The nuclear industry is only one example; as David Noble points out, the chemical industry has also gotten heavily into this method as a way of dismissing public concern over the safety of its products.

In the past when regulators identified a chemical as carcinogenic, that charge alone was enough to alarm the public, rally support behind the regulation, and put the chemical industry on the defensive. Today corporations like Union Carbide have begun to shift the very nature of the debate. They now readily concede that their products are carcinogenic, but blandly insist that the acknowledged risk of cancer be put in "perspective," that it be compared with other risks and traded off against product benefits. Life after all, is risky. . . . Horrified by the

consequences of carcinogenic pollutants? You take a greater risk driving to work every day. So what's all the fuss about?³²

Unfortunately, this kind of argument can be very effective, not because it is rational, but because people usually get tired of thinking about all the risks they face in their food, water, and air. One cannot live with continual fear; and so if risks continue long enough, they begin to be thought of as normal--or more accurately, not thought of at all. And so it is quite possible that the public will eventually get bored with the risks of carcinogenic chemicals or nuclear power, the same way they have become bored by the 50,000 deaths a year on our highways, or the hundreds of thousands who die each year from cancer caused by smoking. What is worrisome about this is not just the risks and dangers that are being ignored--but how deadened and insensitive we can become as human beings.

The Necessity of Flexibility

Finally, it is worth reiterating the point that one does not have to be anti-nuclear, anti-corporate, or anti-growth to conclude that the various forms of conservative bias we have discussed are undesirable ways to approach public policy. For irrespective of the particular interests and policies that this bias supports or undermines, it can be considered dysfunctional simply because it stifles policy creativity and puts artificial limits on our policy options. It limits our vision to those policies which are compatible with current systemic characteristics and ideology--a process which introduced undue inflexibility and narrowness to our political considerations.

Flexibility is an extremely important value in policymaking. It enables a society to respond to the unpredictable and ever-changing developments that it inevitably faces. As we saw earlier, part of the problems we are experiencing in energy policy stem from an inability to adapt our socio-economic system to the developing scarcity of energy resources. A blind commitment on the part of policy analysts to "working within our political and economic system" only serves to worsen this problem. If a society is to remain healthy and prosperous, it must be able to question its own assumptions and to adapt and change its structure in the face of changing conditions. Thus, if there is any law of nature that is to serve as a guide for public policy analysis, it should be the one that mandates that any organism or eco-system which cannot adapt itself to a changing environment faces sure extinction.

FOOTNOTES

¹A Primer for Policy Analysis (New York: W. W. Norton and Co., 1978), p. 4.

²Robert Bish, The Public Economy of Metropolitan Areas (Chicago: Markham Publishing Co., 1981), p. 16, emphasis added.

³For a more elaborate treatment of the political variability of this conservative bias, see Robert U. Ayres, Uncertain Futures (New York: John Wiley and Sons, 1979), pp. 3-6.

⁴*Ibid.*, p. 2.

⁵*Ibid.*, p. 3.

⁶Stokey and Zeckhauser, Chapter 2.

⁷James M. Buchanan and Gordon Tullock, The Calculus of Consent (Ann Arbor: The University of Michigan Press, 1962), p. 15.

⁸See for example, Energy Future: Report of the Energy Project At the Harvard Business School, Robert Stobaugh and Daniel Yergin, eds. (New York: Random House, 1979). See especially Chapter 6.

⁹Outlook for Energy in the United States to 1985 (New York: Chase Manhattan Bank, 1973), pp. 11, 52.

¹⁰The source for this figure (and other helpful information about energy) is Robert Romer, Energy: An Introduction to Physics (San Francisco: W. H. Freeman and Company, 1976), Appendix I.

¹¹J. W. Forrester, et al., "The Systems Dynamics National Model: Understanding Socio-economic Behavior and Policy Alternatives," Technologies Forecasting and Social Change 9 (New York: Elsevier Publishing Company, Inc., 1976), p. 61.

¹²Jimmy Carter, National Energy Policy (Washington, D.C.: U.S. Printing Office, 1977), p. XIII.

¹³Stobaugh and Yergin, p. 136.

¹⁴William Ophuls, Ecology and the Politics of Scarcity (San Francisco: W. H. Freeman Co., 1977), p. 113.

¹⁵Herman Daly, Steady-State Economics (San Francisco: W. H. Freeman and Company, 1977); Fred Hirsch, The Social Limits to Growth

(Cambridge, MA: Harvard University Press, 1976); William Ophuls, Ecology.

¹⁶Hirsch, pp. 15-70.

¹⁷Daly, pp. 129-147.

¹⁸Ibid., pp. 2-97.

¹⁹Hollis M. Dole, "The Real Energy Crisis," Vital Speeches of the Day, November 12, 1979, p. 648.

²⁰Quote from speech given to the Atomic Industrial Forum on November 28, 1977.

²¹Daly, p. 126.

²²Ian A. Forbes, "Energy Strategy: Not What But How" (Framingham, MA: Energy Research Group, 1977), p. 26.

²³Scientific American, January 1976, pp. 21-31.

²⁴Charles Lindblom, The Policy-Making Process (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968), p. 23.

²⁵Kenneth Boulding, "The Ethics of Rational Decisions," Management Science 12 (1966), pp. 161-169.

²⁶Stobaugh and Yergin, p. 140.

²⁷Barrington Moore, Jr., Injustice (White Plains, New York: M. E. Sharpe Inc., 1978), Chapter 14, "Inevitability and the Sense of Justice."

²⁸Quoted in Ira Katznelson and Mark Kesselman, The Politics of Power (New York: Harcourt, Brace, Jovanovich, 1979), p. 294.

²⁹Robert Dorfman and Henry B. Jacoby, in their article "A Public-Decision Model Applied to a Local Pollution Problem," in Robert Dorfman and Nancy Dorfman (eds.) Economics of the Environment (New York: W. W. Norton & Company, 1972).

³⁰Reactor Safety Study: An Assessment of the Accident Risks in U.S. Commercial Nuclear Power Plants, AEC Document WASH-1400 (draft) (Washington, D.C.: U.S. Government Printing Office; August 1974).

³¹Scientific American, p. 26.

³²David Noble, "The Chemistry of Risk." Seven Days, June 5, 1979, p. 26.

P A R T I I

THE PROMISE OF NON-POSITIVIST POLICY ANALYSIS

CHAPTER VIII

POLICY ANALYSIS AS PROMOTING POSSIBILITIES

Normal politics is indeed "the art of the possible"; it consists in working as best one can for valued objectives "within the system"--that is, inside the current political paradigm. However, politiking (to give it its true name) is only one part of politics, and the lesser part of that; in its truest sense, politics is the art of creating new possibilities for human progress.

William Ophuls
Ecology and the
Politics of Scarcity

As the previous chapters have shown, many of the problems affecting public policy analysis are rooted in its conceptual structure, in the positivistic assumptions and quest for scientific rationality that underlie this perspective on policy. Therefore any attempts to overcome these problems must necessarily begin with an effort to modify this analytic perspective. That is the subject of Part II of this dissertation.

It is important to note, however, that a non-positivist approach to policy analysis is more than simply an attempt to not make the positivist mistakes described in the previous chapters. The non-positivist approach to be discussed in the next chapters in an attempt to bring a new perspective to policy analysis--one based on the insights of the interpretive approach to social analysis. This interpretive approach will add something to policy analysis; a new understanding of

the nature of social reality and nature of policy decisions that will give us a fresh perspective on issues like energy and growth. Probably the most crucial element that a non-positivist/interpretive approach will add to policy analysis is a humanism; for in many ways the central problem with the positivist perspective is its denial of some of the most basic characteristics of human reality. Often the scientific approach obscures the intensely human nature of the subject being studied. For example, the positivistic assumption of the methodological unity of the natural and social sciences (a notion explored in chapters V and VII above) explicitly denies the uniqueness of human reality. It ignores the fact that human reality is constituted in part by our mutually held beliefs, whereas physical reality is not. A humanistic approach to policy analysis would necessarily attempt to incorporate this new interpretive understanding of the unique nature of human reality into its approach to policy studies. As will soon be evident, this new analytic assumption brings with it new implications for how we perceive policy choices.

In these next five chapters, I will build an alternative approach to positivistic policy analysis--a humanistic approach to policy analysis. I will discuss not only the essential elements of this approach, but also consider how these elements can be incorporated into actual policy studies. This discussion will also include a consideration of the extent to which some policy analysts have begun to do studies which embody this humanistic model. The approach consists of three basic elements:

1. As mentioned above, one of the elements of a humanistic perspective is the assumption that human reality is constituted by the beliefs of those who participate in it. In the rest of this chapter, I will show that this assumption carries with it some important implications for how we should perceive policy options. In particular, this assumption implies a more serious development and exploration of a wider range of policy possibilities than is typical in positivistic policy analysis.
2. Another key assumption in a humanistic approach to policy analysis is that values lie at the heart of all human decisions, and that analysts can and should begin to bring rationality to these value choices. This notion stands in contrast to the positivist assumption that a consideration of values is basically inappropriate in rational policy analysis. In Chapter IX, I will use the work of modern moral philosophers to support my argument that the rational analysis of normative issues deserves a key position in policy studies; in Chapter X. I will illustrate how this value-oriented policy analysis can impact on specific policy decisions.
3. The final animating assumption of the humanistic approach is that policy analysis is an inherently political activity. Given that human policy decisions are inherently political in nature, a humanistic perspective necessarily acknowledges that the activity of recommending policy choices has strong

political implications. In Chapter XI, I will explore the political ramifications of an approach to analysis that focuses on values, and delineate how this perspective logically supports a more participatory mode of policy analysis and policy decisions.

To finish my consideration of this humanistic approach to policy analysis, there will be a final chapter in which I will return more explicitly to the subject of energy growth and illustrate how this humanistic analytic perspective would effect the way analysts and policy-makers approach this vital policy issue. For now, however, let us begin the consideration of the first element in the humanistic model. I will start where the previous chapter ended, with a consideration of the conservative bias in analysis. I will show how humanistic analytic assumptions can help to overcome this bias, and how this new perspective can begin to illuminate a wider range of policy possibilities.

Transcending the Conservative Bias

By acknowledging the unique characteristics of human reality policy analysis can begin to overcome the conservative bias in policy analysts. By recognizing that social reality is constituted in large part by our beliefs, and that those beliefs are subject to change, two important changes in perspective can be accomplished. First, analysts can begin to pierce the naturalistic mask that overlays much of current policy. Many of the key terms that analysts use to describe

current policies--"realistic," "feasable," "rational," "necessary," "viable," and "practical"--can begin to be stripped of their neutral and objective connotations. These terms can now be perceived as ideological and system-bound concepts; concepts that are relative to the socio-economic system that is assumed by the analyst. A humanistic perspective on policy would make it clear that many of the constraints that limit our policy choices only exist given our current socio-economic arrangements, and that what may seem impractical, unreasonable, or irrational in one human system, may not in another.

A second, more positive implication of the realization of the unique and changable nature of human reality is that analysts can begin to more actively explore and report on a wider range of policy options--including options which challenge or go beyond current socio-economic assumptions. Policy studies developed from the humanistic model of policy analysis would not confine themselves to proposals that are consistent with the reigning ideology or the conventional wisdom, but also seek to include a serious consideration of proposed explanations and solutions to our social problems which would require modification of current assumptions and social arrangements to become viable. Moreover, from the perspective of a humanistic model, the job of the analyst would not be simply to dismiss those goals and values which "are not consistent with current realities," but to show us how current realities can be changed in order that we may achieve those cherished human values. This would be an important shift in emphasis;

for now the role of the analyst would not be to limit our political vision and imagination, but to expand them by offering a truly wide variety of policy alternatives based on different theories and models of social life. From a humanistic perspective, public policy analysis should not dampen our public hopes, it should enliven them. As we have seen, the positivistic perspective can all too easily become burdened with a sense of determinism and inevitability, where trend becomes fate, and where the social world becomes solidified and closed-up. In contrast to this, a more humanistic approach to policy analysis would embrace a more open and more hopeful vision of society, based on the recognition of and faith in the human capacity to be creative and change. It would assume and emphasize our ability to solve problems by living differently and beginning anew. In this sense, a humanistic approach to policy would function as an optimistic voice in the modern world--one which encouraged hope rather than resignation and hopelessness.

Such terms as "faith" and "hope" may seem out of place in the context of such a serious (i.e., scientific) activity. To use such terms leaves one open to charges of naivete and idealism. To be taken seriously, most policy analysts must cultivate an image of themselves as hard-nosed realists. To a realist, notions like hope represent a kind of irrationality, a kind of wishful thinking that can only produce well-intentioned, but doomed policies. This view

betrays a very unrealistic understanding of social reality, and a failure to appreciate the very real role that faith and hope can play in policies promoting social change. Hope can be seen as rational, and it can play a beneficial role in policy analysis--but in order to see this, we must reconsider once again the difference between natural and social reality.

Hope as a Self-fulfilling Prophecy

Social reality, unlike natural reality, is ordered by beliefs; and part of those ordering beliefs are those theories and assumptions that are generated and promulgated by policy analysts and policymakers. Thus the social theories and models used in analysis can actually become part of the subject they seek to describe--those theories can enter into society and actually help to orient social behavior. Indeed, that is part of their intention. But a curious phenomenon can result from this: those theories and assumptions can become self-fulfilling prophecies. They can contribute to their own fulfillment. The existence of this unique social phenomenon means that it can make quite a difference whether analysts assume pessimistic or optimistic social theories. As one interpretive theorist, William Connolly, has pointed out, a pessimistic theoretical assumption can sometimes work to create the very situation it fears.

Suppose, as a participant in a social setting, I hold the Hobbesian theory that human beings are essentially egoistic. Influenced by this belief, I will be tempted secretly to break community rules based on mutual trust. If I don't, my reasoning goes, others will, and I will then be placed at a

comparative disadvantage. As others realize that I respond in this way to them, they will conclude that it would be dangerous for them to abide by the common rules: for such conformity threatens to put them at a disadvantage against people like me. As each suspects that the others will not do their part, the arrangements of mutual trust become unstable. My theory about human nature thereby contributes both to the instability and to the production of evidence in support of my initial theory. The evidential support in turn encourages others to conclude that the theory is correct and thus to reinforce even further defensive responses to the expected selfishness of others. The theory itself thus again encourages the behavior it expects and the behavior provides more evidence to sustain the theory.¹

A process very similar to this can occur in policy analysis. The models used in policy analysis produce predictions about the way that our social system will operate; these predictions serve as guides for our policy actions, actions which may in turn ensure that society does in fact operate in the way predicted. We can see this phenomenon at work in policies concerning continuing economic and energy growth: if we assume a society in which growth must be continual, then we will enact policies to ensure that it will happen, which in turn is taken as evidence that growth is necessary and inevitable. Herman Daly explains the logic of this process nicely:

Suppose that a forecast shows that the future will very likely be X. Next it is shown that for X to happen, the necessary conditions Y and Z must also happen. Then it is concluded that to ease the transition toward our "destiny," K, we must strive for Y and Z. But as often as not, either Y or Z or both turn out to be not only necessary but also sufficient conditions for X, so that in preparing for the predicted future we in fact bring it to pass. The prediction is self-fulfilling because it was, from the beginning, more in the domain of planning than of prediction. . . . If the Edison Electric Institute makes a projection of energy demand for the year 2000, and the number is such that supply can meet it only with a crash program of building breeder

reactors, and we undertake such a program, then barring technical failure and nuclear war, the Edison Electric Institute's projection will be borne out.²

Thus social predictions are not simply just detached descriptions of the future, but can function to actually help create the future in their own image. As Daly points out, they become a kind of de facto planning. This process of analytic theories and assumptions becoming self-fulfilling prophecies is, as we saw in the last chapter, often most evident when assumptions tend to perpetuate the status quo. But could not this same phenomenon be at work in the process of social change? Could it be that analytic assumptions which view optimistically the possibility of change may actually make change more possible? Or to put it more in terms of policy analysis, might not policy plans which are guided by analyses which assume the possibility of a different and better way of life also become self-fulfilling prophecies? In other words, as long as the assumptions in analysis can sometimes contribute to their own fulfillment, why not favor the more optimistic assumptions? This is, in fact, exactly what Connolly argues:

Concepts and beliefs about social life help to some degree to constitute that life. Therefore, privileging the more optimistic assumption might well help both to bring out evidence in its support previously unavailable and to contribute itself to the optimistic possibility Conduct based on more optimistic beliefs can sometimes contribute to their fulfillment. Arnold Kaufman, in his defense of citizen participation in group decision processes, captures this idea nicely: "The effort to achieve a possible good (sometimes) depends on our belief in the possibility of that achievement--the very nerve of our effort to achieve a good may be cut by premature admission of its impossibility."³

Lest this begin to sound like pollyannaism or policy through wishful thinking, it should be pointed out that not all assumptions are self-fulfilling prophecies. Also, it is not being argued that optimistic assumptions are sufficient in themselves to cause desired social change, only that optimistic assumptions can sometimes be a necessary factor in the process of change. Still, despite these obvious limitations, there is reason to believe that there are potential benefits from "privileging the more optimistic assumption" in policy analysis. Consider, for example, some recent policy changes enacted by several local libraries in the United States. One of the persistent problems afflicting many libraries is that of book thefts and over-due books. In dealing with this problem, roughly two sets of assumptions--two models of public behavior--have been available to library policymakers. First, one can adopt the "realistic" model, and assume that this problem is due to the irresponsible and selfish nature of the public. Assuming that human nature will not change, the logical policy option is to install expensive and elaborate electronic detection systems at their doors to deter thieves, and to initiate a stiff fine system to ensure books are returned on time. While producing some success, this system has also produced some resentment on the part of patrons. On the other hand a handful of libraries have adopted a radically different policy and have eliminated check-out systems entirely, allowing patrons to take as many books as they want and return them when they are done. The assumption

here was that if people are treated as responsible beings, they tend to act that way, and an effort was made to educate the public on how the effective running of the library depended primarily on them. Many of these libraries have enthusiastically reported this policy is working as well or better than previous systems.⁴ Thus it seems that in at least this case, policies based on trust and an optimistic view of human nature can be self-fulfilling prophecies.

Given this phenomenon of self-fulfilling prophecy, then, a good case can be made for including a serious consideration of a wide variety of policy proposals and assumptions in policy studies--even those suggestions which may not appear at first to be "realistic." This phenomenon also implies that the inclusion of an element of faith or hope in policy analysis is not necessarily a "naive" or "hopelessly idealistic" act. There are good reasons why these notions are a central part of human experience, and why they deserve a place in practice of policy analysis--they are often crucial to any prospect of a better world. In some situations, faith and hope are the only realistic alternatives.

Multi-Perspective Policy Analysis

What would a humanistic policy analysis informed by this sense of hope and wider possibilities actually look like? It would most likely have to be some form of multi-perspective approach--that is, an approach which incorporates a number of competing perspectives on

policy issues. This would be an explicit attempt to get away from the use of one model and one set of assumptions by using several different sets of models and assumptions. Instead of analysts restricting themselves to the one most "plausible" or "realistic" set of assumptions, they would be encouraged to explore a wide variety of assumptions. For example, a study might give consideration to several different explanations of a particular socio-economic problem and demonstrate the implications these competing explanatory frameworks have on policy formation.⁵ One of the obvious advantages of the multi-perspective approach is that once policy discourse is cast in terms of competing perspectives, it is more likely that citizens and policymakers will become more aware of the importance of assumptions in policy analysis and decisions. Clashing perspectives tend to expose rather than obscure underlying presuppositions.

Of course, a multi-perspective approach to policy analysis is not a totally new suggestion. There have been several steps taken in this direction already. One of the most promising is a multi-scenario approach to analysis in which studies explore a number of competing visions of the future. Scenarios start with the present state of the world, and then shows, in a step by step fashion, how various futures might develop.⁶ Importantly, scenarios are not intended to be predictions of the future, but explorations of various possible futures even those which may not seem particularly plausible at the moment. Scenarios, like any form of analysis, can be done either well or poorly.

When they are done well, they emphasize, instead of a future that is the product of inevitable trends and constraints, a future that is shaped by the decisions we make today. Multi-scenario analysis accentuates the importance of human agency in human affairs. It was once said that science discovers order in the world, while art seeks to create new orders. If this is true, then a multi-scenario approach to analysis is more like art than science, for it seeks to explore how various new future orders can be created. Let us consider what the art of multi-scenario analysis can look like in practice.

Several of the most provocative analyses of our national energy policy done to date have utilized versions of this approach. A classic example is A Time to Choose, the comprehensive study of energy policy released by the Ford Foundation in 1974.⁷ The study began with a macro-economic models developed by Data Resources Inc. The exogenous assumptions of the model were first calibrated to produce a Historical Growth Scenario. In this scenario it was assumed that energy demand in the United States would continue to grow at the historical rate--3.4% annually--until at least the end of the century. It further assumed that no deliberate effort would be made to alter current patterns of energy use, and that a vigorous effort would be made to enlarge non-renewable supplies to keep up with rising demand.

Next, the energy assumptions in the model were adjusted to produce another scenario--the Technical-Fix Growth Scenario, in which it was assumed that energy conservation practices and energy saving

technologies would be incorporated into production and consumption patterns to the extent possible within existing life-styles and economic organization. Energy demand would grow at a 1.9% annual rate. In the words of the study, "Technical Fix is leaner and trimmer, but basically on the same track as Historical Growth." Finally, the models was adjusted to produce a Zero Energy Growth Scenario, in which it was assumed that in addition to the technical fix measures, there would also be changes in life-styles and economic structure to produce a situation of constant energy consumption. This would be primarily accomplished by "small but distinct redirections of economic growth, away from energy-intensive industries toward economic activities that require less energy."⁹

The study caused quite a controversy when it was made public. It concluded, among other things, that the Historical Growth Scenario which dominated policymakers considerations at that time could produce major economic, environmental, and foreign policy problems in the near future, and severely limit our ability to pick and choose among various energy sources. Virtually all sources would have to be exploited heavily, including coal and nuclear power. Further, the other two scenarios suggested that the growth in energy demand could slow or stop without unduly harming economic growth. This was the first major study to seriously question the iron-link between energy and GNP. These conclusions gave a considerable boost to those groups seeking to emphasize conservation and alternative energy sources, and the

report was one of the first to lend some legitimacy to the Zero Energy Growth alternative. As Herman Daly pointed out, "the Ford Foundation Energy Policy Project took seriously the alternative of zero energy growth, and included it as one of their three possible scenarios for the future, thus giving a certain respectability to what (many in government) and others evidently still consider a 'far out' idea." ¹⁰ In addition, the study played a part in informing Jimmy Carter's energy plan, with several top analysts from the project participation in its early development. Carter's emphasis on conservation (in word, if not in deed) can be partially attributed to the influence of this scenario study.

The Need for Pluralistic Research Funding

However, inspite of its contribution to broadening the range of energy policy debate in the U.S., the Ford Study is perhaps not the best example of this multi-scenario technique. Ideally, if this analytic technique is to be most useful and provocative, it must incorporate a wide variety of assumptions. For example, scenarios should include a range of possible socio-economic theories--for these theories are one of the key constraints on policymaking. But the Ford Study actually incorporated only a very narrow range of different assumptions. The models used in the scenarios were virtually alike, except for differing assumptions about the level of energy demand. "The general specifications of the macro-economic model were held unchanged in the

three different energy scenarios; only energy specific parameters were varied to secure the move between the three alternative growth paths."¹¹ Thus none of the scenarios seriously challenged conventional economic theory, or the need for continuous economic growth. All scenarios simply assumed "a steady growth in gross national product and income."¹² It is of course debatable as to how wide a range of assumptions is desirable in this approach; but if one of the purposes of this technique is to avoid the conservative bias, then it would seem necessary to construct scenarios which embody truly competing socio-economic theories.

To be fair, it might be too much to expect one policy analysis team to produce scenarios embodying a full range of socio-economic assumptions. It is difficult for one analyst to be intimately familiar with more than one theoretical system. This however is not so much an argument against the feasibility of this scenario technique, as it is a commentary of the limitations inherent in the One-Big-Report approach to policy analysis. Instead of expecting one team to produce a series of analyses based on different assumptions, it would be more realistic to commission a series of reports done by analysts with different theoretical frameworks. This would ensure that truly alternative scenarios were presented with equal vigor. All too often, policy research grants go to those organizations which uphold current assumptions, instead of groups who seek to challenge those assumptions and propose alternative socio-economic arrangements. But just the

opposite should be the case; policy research funding should seek to break down analytic hegemony by going, in part, to those research groups who seek to expand our options beyond current horizons. This would enable alternative perspectives on policy issues to be more fully developed and presented to a national audience. This approach assumes of course that the purpose of funding policy research is to expand our choices and not to simply confirm current political prejudices--which is a highly debatable assumption.

Scenarios as Qualitative Analysis: The Work of Amory Lovins

Perhaps the most famous scenario analysis done in the area of energy policy is the Hard Path/Soft Path choice set out by Amory Lovins. Beginning with his article in the October, 1976 edition of Foreign Affairs, "Energy Strategy: The Road Not Taken," Lovins has argued that the choice facing the nation in energy policy is between two mutually exclusive paths, one characterized by hard technology, the other by soft technology. The Hard Path assumed continued energy growth met by non-renewable resources utilizing centralized, complex, capital intensive technologies, with an emphasis on centralized electricity production. In contrast, the Soft Path emphasized conservation, renewable resources, and relatively simple, decentralized technologies that were more compatible with the environment.

One of the most unique and provocative aspects of Lovins' analysis is its emphasis on a qualitative as well as quantitative description of these two scenarios. Instead of focusing, primarily

on the quantitative--usually economic--dimensions of our energy choices, Lovins seeks to give equal time to discussing the moral, social, and political implications of these two different energy paths. In his book, Soft Energy Paths,¹³ Lovins not only includes chapters on economic issues like the capital requirements of different technologies, but also chapters with titles like "Sociopolitics," and "Values." He concludes that following the Hard Path is not only economically undesirable, but that it would also tend to encourage elitist technocracy, concentrate economic and political power, foster increased bureaucratization and alienation, encourage urbanization, and produce greater distributional inequity within and between nations. On the other hand, he claims that the Soft Path would foster more local control, increase participation in the political and economic system, encourage the creation of a society that is more diverse, pluralistic, and egalitarian.

The effect of Lovins' analysis was immediate. Less than two months after publication of his article in Foreign Affairs, Lovins was summoned to Congress to testify about his work before a joint hearing of two U.S. Senate committees. Soon afterward, he was also asked to visit the White House and the Department of Energy to present his controversial views. Irrespective of whether one thinks of Lovins as a "genius" or a "pied piper," it is clear that his analysis has changed the way many people think about our energy choices. His book, Soft Energy Paths, has been called the "Bible" and the .

"Das Kapital" of the alternative energy movement, and Lovin's has been described even by one of his critics as "the most articulate writer on energy in the world today."¹⁴

I believe that at least part of the success of Lovins' analysis can be attributed to his methodology--a scenario approach which explicitly addressed the moral, social, and political implications of our energy options. By including these elements in his scenarios, he was able to portray a much more rich and vivid vision of the future implied in our energy choices--a vision described in very human terms, and thus more easily understood and appreciated by the average citizen. As Lovins explains it, scenarios should be "descriptions of how future events (could) unfold, described chronologically and at least qualitatively in sufficiently vivid detail that readers can readily imagine themselves participating in the events they describe."¹⁵ Conventional forms of policy analysis, like cost-benefit analysis, because they tend to focus on the quantitative, economic implications of policies, often times fail to portray the full human implication of policy choices. As Charles Taylor has observed, they can distort our understanding of policy decisions by portraying them as decisions about having more or less of something--as if policies only produce quantitative changes in society.¹⁶ He argued that in actuality, most important policy decisions were qualitative in nature and involved choosing between this way of life and that way of life.

By using scenario analysis, it can be made clear that the choices facing us in areas like energy policy are not simply technological or

economic, but choices between different ways of living our lives, different sets of moral, political, and environmental relationships. For example, the fact that we are talking about alternative ways of life is made very evident in the following frugal, soft-path scene painted by Robin Clarke:

A countryside dotted with windmills and solar houses, studded with intensively but organically-worked plots of lands; food production systems dependent on the integration of many different species, with timber, fish, animals, and plants playing mutually dependent roles; with wilderness areas plentiful and available . . . a life-style for men and women which involved hard physical work but not over-excessively long hours or in a tediously repetitive way; . . . a political system so decentralized and small that individuals--all individuals--could play more than a formal, once-every four years role.¹⁷

One need not agree with this somewhat extreme vision to appreciate the power and utility of the scenario approach it illustrates. When it is done well, it portrays in a vivid way the full human implications of our policy choices. In this way, it is a useful way of transcending the kind of narrow, "factual" perspective on policy issues that was discussed in Chapter I. Instead of relegating the social and political dimensions of policy issues to a secondary status, a scenario approach to analysis helps to bring them to the forefront and grants them a legitimacy in policy deliberations. Thus one of the most exciting potentials present in this scenario approach is not only its ability to widen our analytic vision by portraying a number of different possible futures, but also its ability to deepen our analytic understanding by giving us a more rich and detailed vision of what policy choices mean to our lives.

Incorporating Multiple Normative/Theoretical Perspectives

While scenario analysis has promise as a way of developing a sense of wider possibilities in analysis, it is not a fully developed form of multi-perspective analysis. In order for an analysis to be truly multi-perspective, it must not only incorporate a number of different models and visions of the future, but it must also evaluate them from a number of different normative/theoretical frameworks. If, for example, no attempt is made to consider a variety of value perspectives in the evaluation of different policy options and scenarios, scenario analysis could easily degenerate into just an elaborate form of cost-benefit analysis. Cost-benefit analysis does consider a variety of policy options, but these options are evaluated from a single, fixed value perspective. It assumes uniform agreement about what is a cost, what is a benefit, and what they are worth.¹⁸ But in a fully developed multi-perspective analysis, this uniformity would not be assumed. Instead, it would assume a plurality of value and interest perspective--as actually exists in the real world. As a result, it becomes more clear that policy choices are not simply a matter of objective calculations, but a matter of value choices. A policy study which illustrates this point very nicely is Solar Energy in America's Future, a report done by the Stanford Research Institute for the Energy Research and Development Agency in 1977.¹⁹ The report studied the feasibility and desirability of expanding the role of solar energy in our energy system.

Almost immediately, the researchers realized that one's understanding and evaluation of solar energy depended primarily on one's "perspective"--i.e., one's normative-theoretical framework. So they set out to produce an analysis which demonstrated that what was at issue here was not so much a set of technological choices, but a choice between different views of reality, of which values were a crucial part.

Their aim, in their own words, was to produce an "analysis of policy issues (beginning with the assumption that groups experience different perceptual realities . . . (that) when people appear to be arguing about technical issues or choices among energy options, they may in fact be arguing from different fundamental perceptions of the nature of social reality."²⁰

First, three scenarios were constructed: A Reference Scenario (the familiar hard path, with high demand met with hard technology); a Solar Emphasis Scenario (high demand, with an emphasis on soft energy technologies); and a Low Demand Scenario (low demand and soft technology). These three scenarios were then evaluated from the perspectives of three individuals using different normative and theoretical assumptions. The first perspective (which I will call the Status-Quo Perspective) assumes that continued economic, material, and technological growth; centralization, and free enterprise are all desirable and necessary. The second perspective (the Environmentalist Perspective) stressed the limits to growth, and emphasized the desirability of decentralization, simplicity, and frugality, and seeks to maximize

social and environmental values. The third perspective (the Radical Perspective) assumes the values of the Environmentalist Perspectives, but differs theoretically by stressing that those values cannot be realized within the current structure of society and the economy, and emphasizes the necessity of fundamental transformation of culture, institutions and world view as the answer to our energy/environmental problems. Table 2 summarizes how these different perspectives view the three scenarios.²¹

The Relativity Trap

In some ways, the SRI study is multi-perspective analysis at its best; for it allows us to fully sense not only the range of possible policy paths but also the extent to which our evaluation of those options depends so highly on the values and theories that we assume. It also enables us to appreciate the coherence of other perspectives on energy policy. However, while this study is a good illustration of the potentials of this style of policy analysis, it also reveals one of its most potentially serious problems--the inherent tendency of this style of analysis to degenerate into an immobilizing kind of relativism in which each scenario is seen as desirable and valid as the next one, given the assumptions contained in particular perspectives. As Table 3 illustrates, each scenario can be considered "Right on!"²² given a particular perspective. The authors of the report are aware of this problem:

TABLE 2
PERSPECTIVES ON SCENARIOS

SCENARIOS	PERSPECTIVES		
	Status Quo	Environmentalism	Radical
High Demand --Hard Tech	Of the three, this is the best future for the U.S. and the best hope of raising the standard of living of the poor nations. Above all, the nation needs enough energy to keep the economy rolling.	The costs of this scenario greatly exceed the benefits. Strong measures must be taken to reduce energy demands below the levels of this scenario.	This scenario represents gluttonous use of energy in a world becoming resource poor. The outrageousness of social and environmental costs help to demonstrate the need for a new social order.
High Demand --Soft Tech	Solar energy should be stimulated only moderately; it is generally desirable to keep interference with the market to a minimum. It is also important to keep energy prices down to insure a strong economy	The society must move in the direction of renewable energy sources and lowered demand. The strong stimulation of solar energy development in this scenario is highly desirable.	Stimulation of solar development is desirable but the total energy demand is much too high. In addition fundamental change in economic and social institutions will be required for a rational energy future.
Low Demand --Soft Tech	The low-demand scenario is absurd; it endangers all we have built up and imposes unnecessary sacrifices on the individual. It would inevitably bring a depressed economy.	We must choose voluntarily a scenario with energy demands as low as this or lower, in order to avoid terribly serious costs in the long run.	Energy demand as low or lower than this must be achieved, but this is incompatible with the structure of the economy. Fundamental change, probably coming about through a traumatic transition period, will be necessary to reduce environmental and social assaults to tolerable levels.

TABLE 3
HOW PERSPECTIVES VIEW EACH OTHER

BY PERSONS WHO HAVE	IMPRESSION OF		
	Status Quo Perspective	Environmentalism Perspective	Radical Perspective
Status Quo Perspective	Right on!	Idealistic Impractical	Dangerous, Revolutionary
Environmentalism Perspective	Irresponsible	Right on!	In the right direction, but too radical. More gradual, rational ap- proach is better.
Radical Perspective	Dangerous Dinosaur-like	In the right direction, but unrealistic about the extent of fundamental institutional change that is required.	Right on!

As we have seen, all three of these perceptions represent views found among decision makers, analysts and citizens. All have to be honored in some sense since each "fits" the observations of his environment as made by the person holding that view. Presently there appears to be no clear way of standing apart and objectively determining that one of the views is more "true" than the other two. No one of these views can be disproven by "facts" taken from another. Whichever view society comes to accept, that view will tend to become more "real."²³

In this sense, the strength of the multi-perspective approach is also its chief weakness. It requires us to open our minds and to suspend our notions of common sense in order to appreciate the multiplicity of options and perspectives that should be considered; but if our minds remain too open, we run the risk of slipping into total relativism and becoming unable to decide which perspective and option is the right one. Each appears coherent and right given its own assumptions. It does little good to avoid the trap of objectification, only to fall into the trap of relativism. It does little good to multiply options, if we cannot provide some way to choose between them.

This is not merely a philosophical or academic problem. As Martin Rein has pointed out, it is often difficult for analysts and policymakers to choose between competing normative/theoretical frameworks.²⁴ This is particularly clear in the area of value assumptions, for as we saw earlier, most analysts adhere to the positions of value non-cognitivism and value relativism--the belief that values are essentially subjective and cannot be proven to be correct. But it also seems equally difficult to prove which theoretical assumptions

are valid. If a particular theoretical or explanatory framework could be shown to be correct, it would not only be shown to be correct, it would not only indicate what social model we should adopt, but it would also give us an indication about which values it is valid to adopt, for as we saw earlier, models help to indicate which values are practical and achievable in a given society. But the efforts to test and prove these theories have not been successful or reliable. For example, it is sometimes helpful to compare various theories with the known "facts," and thus eliminate from consideration those theories which are obviously incompatible with our present information. However, as the SRI report concluded, the present facts often can support a number of different paradigms. "It may be impossible at this time to establish which picture among these pictures of reality is "correct," because the available data can be fitted into more than one pattern."²⁵

Some analysts have suggested a more sophisticated way to test theoretical frameworks--the construction of policy "experiments" in order to test which theories actually work in practice. This is the thrust, for example, of the suggestion put forward by Alice Rivlin in Systematic Thinking for Social Action.²⁶ The obvious intention here is to imitate the analytical approach to the natural sciences. But again, while this scientific approach has proved helpful in some cases, it is far from a reliable technique. It is fraught with both theoretical and practical problems. For example, because it does not

acknowledge the unique nature of social reality, it fails to appreciate that "experiments" cannot serve the same purpose in social analysis as they can in the natural sciences. As I pointed out earlier, social theories, because they can become self-fulfilling prophecies, can actually create their own evidence. Testing the predictive powers of social theories becomes questionable when it is understood that theories and predictions can actually contribute to their own fulfillment.²⁷ Moreover, if a policy experiment fails, this does not necessarily invalidate the theory underlying it, but only indicating that it may not be applicable at this point in time. Changes in the beliefs and values which organize and orient social action might make that policy a viable one in the future. For example, consider the policy experiment conducted by one Alaskan town. They took all of the unclaimed bicycles at the police department, painted them white, and distributed them in bike racks around town so that residents could ride from place to place--a sort of poor man's transit system. Initially, some of the bicycles were stolen and some people called the program a failure. But the mayor insisted that the program continue, arguing that it would work once people realized that the bicycles would always be available and they wouldn't have to steal them. The changeableness of human beliefs and behavior make theory testing a difficult endeavor.

There are also more practical problems with constructing valid social experiments. For one thing, it is often difficult to measure

social variables with the accuracy necessary for careful experiments. For instance, in order to draw connections between various variables, we need to be able to measure them accurately, which is not always possible. In addition, in social experiments we are often not in a position to control all the variables involved. Social situations are so complex, so full of different variables, that it is difficult to isolate out the limited number of variables necessary for a valid experiment. And when an experiment fails, it is often difficult to identify just which variable or variables was actually responsible.²⁸ In other words, society often makes a poor laboratory.

Back Again Into Politics

Now all of this does not mean that there is no way to choose between competing frameworks--only that there is no sure, empirical way to do so. It only indicates what should have been obvious from the beginning: that the choice of frameworks and perspectives--and thus the choice of policies--is a decidedly political activity, one which depends highly on the values of the chooser. This should have been clear from our own personal experience, since we all tend to adopt those socio-economic theories which are most compatible with our own values. This normal process of choice is usually seen by policy analysts as a biased and self-serving way to choose among theories. And there is some truth to that contention; strong value commitments can tend to blind us to the faults in our favored theories,

and lead us to ignore facts which are inconsistent with them. But this does not mean that values never have a sensible place in the choice process. When we are faced with a situation in which the facts support a number of different theories, we may be forced to appeal to values as a final criterion. And as I pointed out earlier, it may actually make sense to favor the more optimistic assumptions and theorize in these situations; for given the nature of social reality, these assumptions may actually contribute to the fulfillment of valued goals.

For some, this acknowledgment that the choice of perspectives and policies is ultimately a value-laden, political activity is a discouraging admission. It seems to imply that the essence of policy decisions is forever beyond the realm of rational analysis. But I do not share this discouragement. First of all, it can only be helpful to see policy decisions for what they really are: human, and therefore moral, decisions. A truly humanistic approach to policy analysis must acknowledge this simple but difficult fact. Secondly, a value-oriented humanistic approach to policy analysis can only be discouraging if one assumes that there is no way to evaluate normative issues--that there is no way to begin to say that some value decisions are worse than others. But this is an assumption that can and should be challenged. Indeed, if the humanistic style of policy analysis is to be relevant and effective, it must not only include acknowledgement of the

of the centrality of values in analysis, but also a demonstration of how those value issues can be analyzed rationally in policy studies. This is the second important element in the humanistic approach and it forms the subject of the next chapter.

Footnotes

¹William Connolly, "Theoretical Self-Consciousness," Polity, Fall, 1973, p. 30.

²Herman Daly, Steady-State Economics (San Francisco; W.H. Freeman and Company, 1977), p. 138.

³Connolly, p. 33.

⁴One example of this was an experiment carried out at the Dedham Public Library in Massachusetts. After totally abolishing the fine system for 14 months, Director Philip Meriam declared the new program a success. He cited the many benefits of the new policy including the fact that it freed staff time to help patrons, it was good public relations, and it eliminated a petty and punitive atmosphere. For more details, see "No More Fines," Library Journal, Vol. 95 (February 15, 1970), p. 622.

⁵One of the very best examples of this approach is the study done by Vic George and Paul Wilding on social welfare policy, Ideology and Social Welfare (London: Routledge and Kegan Paul, 1976).

⁶A standard reference on the use of scenarios is H.A. DeWeerd, A Conceptual Approach to Scenario Construction (San Monica CA: The Rand Corporation, 1973).

⁷Energy Policy Project of the Ford Foundation, A Time to Choose (Cambridge, MA: Ballinger Publishing Co., 1974.)

⁸Ibid., p. 15.

⁹Ibid., p. 15.

¹⁰Daly, p. 137.

¹¹Ford Foundation, p. 496.

¹²Ibid., p. 12.

¹³Amory Lovins, Soft Energy Paths (Cambridge, MA: Ballinger Publishing Co., 1977).

¹⁴The comment was made by Alvin M. Weinberg, head of the Institute for Energy Analysis, Oak Ridge Associated Universities in his review of Lovin's Soft Energy Paths, in the March 1978 issue of Energy Policy.

¹⁵Lovins, p. 65, footnote 11.

¹⁶See Charles Taylor, "Responsibility for Self," in Amelie Rorty (ed.), The Identity of Persons (University of California Press, 1976), pp. 205-233.

¹⁷Robin Clarke, "Technology for an Alternative Society," New Scientist, (January 11, 1973).

¹⁸For an enlightening discussion of this point, see Alasdair MacIntyre, "Utilitarianism and Cost-Benefit Analysis: An Essay on the Relevance of Moral Philosophy to Bureaucratic Theory," in Kenneth Sayre, (ed.), Values in the Electric Power Industry (Notre Dame, Ind.: Notre Dame University Press, 1977).

¹⁹Stanford Research Institute, Solar Energy in America's Future, prepared for the Energy Research and Development Agency, January 1977, ERDA Contract E (04-3)-115.

²⁰Ibid., p. 90.

²¹Table

²²Table

²³Ibid., p. 97.

²⁴Rein gives an excellent discussion of the dilemmas involved in this problem and arrives at a different solution. See Social Science and Public Policy (New York: Penguin Books, 1976), especially Chapter 7.

²⁵SRI, p. 90.

²⁶Systematic Thinking for Social Action (Washington D.C.: Brookings Institution, 1971).

²⁷For a more lengthy discussion of this and other problems of theory testing in the social sciences see the Connolly article cited above.

²⁸For a discussion of these practical kinds of problems see Peter Marris, "Experimenting in Social Reform," in Community Work One, edited by David Jones and Marjorie Mayo (London: Routledge and Kegan Pual, 1974).

CHAPTER IX

POLICY ANALYSIS AS MORAL RATIONALITY

To assert the necessity of ultimate values in this day and age is heretical. Scientific orthodoxy says that values have no epistemological standing; any statement that one value is to be preferred to another is therefore scientifically meaningless. And since science is our standard of social reality, value questions must not be socially meaningful either Yet wisdom, if only the rough and ready kind acquired by everyday living, tells us that not all values are equal and that virtue matters in life.

William Ophuls
Ecology and the Politics
of Scarcity

We have seen that many of the limitations and distortions in public policy analysis are due to the analyst's reluctance or inability to directly address value questions. But any thorough and relevant approach to policy analysis must include an attempt to deal with these crucial questions. Martin Rein has argued that what is needed in the profession is a "value-critical" approach to analysis, in which "values themselves become the object of analysis."¹ Robert Dorfman, a leading environmental analyst, has also observed that the ability to address the moral dimension of policy questions is "the missing ingredient in current policy analysis."

No one challenges seriously that, in a slavish way, the new analytic techniques have vastly amplified our ability to design and appraise projects in the light of given objectives. The challenge is, rather, that our skills in attaining objectives has outrun our skill in determining or even articulating them.²

In addition, Laurence Tribe, one of the most thoughtful students of policy analysis, has observed that in the 20th century social thought reason has become separated from morality.³ Reason has come to be thought of as instrumental rationality, which as Dorfman observed above, is merely concerned with means not ends. Tribe argues that what is needed in policy analysis today is a "reintegration of reason and moral perception."⁴ It is important to see that this is more than a philosophical need, that it is a political need as well. The political world of the 1980's is an increasingly fragmented one with a multiplying number of moral and political perspectives on our pressing policy choices. Not only is there the newly polarized conservative right and liberal left, but we also have the Environmentalists, the Born Again Christians, the Libertarians, the Unions, Minority groups, and so on. We live in a time when society is dis-integrating, a time when society is increasingly unsure of its values and goals. Policy analysts could have a constructive part to play in this confusing situation by beginning to bring a thoughtful and analytic approach to the various competing values being debated in the policy; but as Tribe points out, our current analytic tools fail us.

Inherited from an era when certain basic values and ideals seemed to be more clearly (if tacitly) understood and widely (if not universally) shared, the intellectual and institutional techniques available to any policy-oriented research institute seem distinctly ill-adapted to the task of helping to reach important decisions in more fragmented society, a society which, for a variety of reasons, is no longer confident about the priorities among its values, and which is becoming increasingly aware of the inherent difficulty of choosing among values in conflict, coupled with the increasingly unavoidable need to do so.⁵

Clearly, then, a relevant and humanistic approach to policy analysis must include the attempt to address these crucial normative questions. Rein, Dorfman, and Tribe all agree that the first step in this process is to abandon the positivist-emotivist-relativist perspective on values which assumes that value judgments are the purely subjective, arbitrary preferences of the individual. We need a perspective which assumes that one can critically judge value decisions and that some values are more important than others, and which begins to describe how those judgments can be made. That is the object of this chapter, to remove some philosophical deadwood, and to sketch out what such a normative policy analysis would look like. In order to do this, we will have to travel into unfamiliar waters--the realm of moral philosophy. It is here that the most useful thought concerning the rationality of moral and value judgments has taken place.

The academic literature advancing the rationality of moral judgments is extremely rich and varied, ranging from the careful expositions of moral philosophers like Stephen Toulmin and John Rawls to the more popular forms of "values clarification" that are currently taught in many secondary schools. This is clearly not the place to exhaustively survey this field, but it is certainly possible to explore some of its important contours. I will consider several of the central thinkers in this area and sample some of their classic lines of argument. My intention will be to establish the minimum claim of this chapter--that it is possible for policy analysis to begin to bring at least some

rationality to the analysis of the normative judgments in policy decisions. In the interest of consistency, I will focus primarily on ethical thinkers who fall roughly within the interpretive approach to social and philosophical thought--the post-positivist tradition that has been touched upon throughout this dissertation.

The Rationality in Normative Judgments

It usually comes as a surprise to policy analysts to learn that their view of values is at least 20 years behind the times--philosophically speaking. As Steven Rhoads observed:

If pressed, most sophisticated analysts would probably say that there can be no transsubjective standard to help determine what is in the public interest, and they would be surprised to learn that the contemporary student of philosophy Richard Flathman has said, "The position that reason is relevant to value selection and adjudication has the support of the overwhelming majority of contemporary writers in the fields of ethics and value theory."⁶

What Flathman has stated is true; ever since the early 1950's, many of the prominent philosophers of ethics including Stephen Toulmin, Kurt Baier, and Kai Nielson have argued that there is a rationality in moral and value judgments that can be evaluated.⁷ In an approach which is obviously indebted to the work of the later Wittgenstein, they argue that the rationality in these judgments should not be judged by the same standards of rationality commonly applied to scientific judgments. Moral and scientific discourse are two different activities (or "forms of life" as Wittgenstein would say) with somewhat different standards of rationality. Thus to establish the validity of a normative judgment,

one need not prove it to be empirically true as in scientific rationality, but simply demonstrate that it is supported by sound reasoning that could be understood by any rational actor. In keeping with this understanding, these philosophers have focused their attention on the logic of moral reasoning, and have argued that it is possible to evaluate normative judgments, to establish that some moral or value judgments are more rational and acceptable than others.

However, before we begin to consider how this can be done, a prior question must be answered: How can moral and value judgments be considered rational at all? How is it concluded that these judgments are not simply the arbitrary, subjective preferences of the individual? To answer this question, I will turn to the work of Charles Taylor, a leading interpretive social theorist whom we have encountered before in this dissertation. Once Taylor has laid the philosophical groundwork justifying the presence of rationality in normative judgments, then we can move on to consider the work of other moral philosophers who begin to explain the nature of that rationality.

In his essay, Neutrality in Political Science, Taylor illustrates one of the classic lines of argument that demonstrates that there is some rationality in normative judgments.⁸ He begins by showing that our everyday language indicates that we in fact do not consider our moral judgments to be merely emotional or arbitrary preferences. He argues that in our everyday lives we all honor an implicit distinction between moral judgments and mere preferences. He points out that we rarely use the two notions interchangeably in common speech. It sounds natural, for

instance, to say, "I prefer chocolate ice cream," or "Genocide is wrong." But it would sound quite odd to say, "I think chocolate ice cream is wrong," or "I do not prefer genocide." These last phrases sound odd because the notions of preference and moral choice are not interchangeable--one cannot be reduced to the other.

Taylor maintains that part of the implicit difference between preferences and value judgments is that we tend to require reasons of justifications for value judgments, but not for preferences. When someone prefers a certain kind of ice cream, or a certain color, or kind of music, we do not usually require justifications for those choices. But we do for moral judgments. We tend to not notice this requirement when we agree with a moral judgment, but it becomes evident when we disagree. We might not question a person who stated that genocide was bad, but if someone said that genocide was good, we would most likely demand reasons for such a claim. Or consider the example used by Taylor. There are two segregationists who disapprove of miscegenation. In defense of the claim the first argues that mixing races will produce general unhappiness, a decline in the intellectual capacity and moral standards of the race, the abolition of creative tension, and so forth. The second, however, refuses to make any of these arguments: the race will not deteriorate, man may even be happier, in any case they will be just as intelligent, moral, etc. And yet he insists that miscegenation is bad. When pressed to produce some reason, he simply says "I do not need to give reasons, moral judgments are

simply subjective preferences, and cannot be ultimately justified by reasons and therefore none are required. Micegenation is just bad."

As Taylor concludes,

Now no one would question that the first segregationist was making the judgment "miscegenation is bad." But in the case of the second, a difficulty arises. This can be seen as soon as we ask the question: how can we tell whether this man is really making a judgment about the badness of micegenation and not just, say, giving vent to a strongly felt repulsion, or a neurotic phobia against sexual relations between people of different races? Now it is essential to the notions of "good" and "bad" as we use them in judgments that there be a distinction of this kind between these judgments and expression of horror, delight, liking, disliking, and so on.⁹

In short, while some philosophers have gone to lengths to artificially reduce moral and value judgments into the category of pure subjective preferences, a careful consideration of the nature of everyday moral discourse reveals that we demand and give reasons for those judgments. Taylor is making here what is called a transcendental argument--an argument that contends that certain principles must be regarded as correct if certain forms of life or forms of discourse are to be possible at all.¹⁰ In this case, Taylor is saying in effect that for common moral discourse and debate to exist at all, there must be at least some rationality to normative judgments. Moral discourse would make little sense, we would have little reason to engage in it if we believed that values were totally irrational and arbitrary. Thus the widespread customs of moral persuasion and discourse presuppose that values can be debated and that moral judgments are based on reasons that can be evaluated and discussed in a rational manner.

Taylor's argument against the subjectivity and irrationality of moral judgments is in many ways simply a modern restatement of a line of thought that is over 30 years old--one first developed by moral philosophers like Kai Nielson and Kurt Baier. Nielson, Baier, and others were part of a movement in moral philosophy that began in the early 1950's in reaction to emotivist and prescriptivist theories of ethics which dominated the discipline then. Their approach, which was at least indirectly based on the philosophical methods associated with the work of the later Wittgenstein, was to focus on the purposes and defining characteristics of the activity of moral judgment. They argued that one of the defining characteristics of moral judgment is that it is not entirely subjective in nature. For them, moral discourse was understood to be inherently concerned with establishing what are good and bad moral judgments and doing so in such a way that those conclusions can be reached by any reasonable person. This means that the validity of such judgments cannot be "dependent on some cultural or individual idiosyncrasy of the persons involved," but rather, must be "publically warrantable, that is admit of some publically determinable procedure in virtue of which any informed and rational person could come to accept it."¹¹ This understanding of the nature of moral judgments is confirmed by the way we use the terms "objective" and "subjective" in evaluating moral judgments. By an objective judgment we mean one which would be arrived at by any impartial, rational person. We naturally tend to accept such judgments because, as Nielson observes, "a procedural rule of morality is that the moral agent (as well as the

moral critic) must, in making moral judgments, try to assume the viewpoint of an impartial observer."¹² In contrast, to call someone's judgment "subjective" is a way of criticising it. As A. Phillips Griffiths explains,

When someone's judgment is stigmatized as subjective rather than objective, this means that some idiosyncratic factors such as the hopes and fears or special interests of the speaker have affected his judgment; an objective judgment, however, is one not affected by such idiosyncratic factors but one which any reasonable and unbiased person would form in the circumstances.¹³

For example, if moral judgments are to be objective or publically warrantable, then they must be supported by the facts that are commonly known. As Nielson puts it, "in making a moral judgment it must be possible to give factual reasons in support of the moral claim."¹⁴ If a moral claim cannot be supported by the facts of a situation this might indicate that the reasons supporting the claim are primarily subjective. For instance, if someone were to argue that homosexuality (and therefore gay rights) is bad primarily because gay people harass straight people and break up their families, but it is well-known that extensive research has shown that this is not the case, then we might conclude that the person's judgment is not an objective one, but a subjective one based on some idiosyncratic factor like a neurotic fear of homosexuals. In this case, as with the genocide example cited earlier, it is legitimate to conclude that the argument being made is not really a moral one at all, but one which simply appeals to subjective prejudices. Nielson and his cohorts insisted that this factual

support requirement is simply one of several criteria by which we can begin to judge the rationality of moral judgments. Let us now examine several of the other important criteria.

Initial Criteria for Moral Rationality

Nielson maintains that there are certain trans-subjective and transcultural criteria that we can use to help determine if a moral judgment is objective or not. One of these is the factual-support criteria mentioned above. There are also other criteria that can be applied, criteria of consistency or rationality that are built into the very nature of moral judgments themselves. For example, it can be shown that one of the essential features of any moral judgment is "universality." By universality it is meant that if I judge that I ought to do a certain thing in some situation, I also must implicitly judge that similar persons in similar situations also ought to do it--unless there are some relevant differences. This willingness to generalize is part of what constitutes a moral judgment. As Nielson maintains,

Moral utterances are objective in the sense that they do not apply exclusively to any given speaker or class of people but are meant to count for all people in like circumstances. Moral utterances are universalisable; they must be so if they are to count as "moral utterances."¹⁵

The analyst can use this universality criterion to begin to rationally criticise the moral reasoning underlying certain public policies. For example, one can criticise Japanese trade policy as morally incoherent when that country asserts their right to trade their goods freely in our

country, but imposes stiff trade barriers against the importation of our goods. This is a subjective position in that its acceptability depends largely on the idiosyncrasy of being Japanese. Its inconsistency and lack of objectivity can easily be identified and bemoaned, even across cultural barriers. Another example of the use of this universality criterion occurred during the crisis over the presence of Soviet troops in Cuba in 1979. Some critics of America's reaction claimed that our moral indignation over having foreign troops so close to our borders was self-contradictory considering that we had our American troops stationed right in Cuba at Guantanamo Bay.

There is also another version of this universality criterion that can be of use to policy analysts. One further rule of universality is that any form of treatment thought to be right for one person must also be considered to be right for all others--unless the others are significantly different. This logical requirement of moral judgments is essentially equivalent to the requirement of justice or equal treatment in our dealings with others. For the policy analyst then, this requirement forms a rational basis for condemning public policies and institutions that are discriminatory on the basis of race, sex, and so forth--the argument being that these differences are in most cases not obviously relevant differences on which to justify ignoring the requirement of equal treatment.

Philosophers of ethics have also pointed out that another essential feature of moral judgments is that they are "practical"--which is to say that "moral questions are fundamentally questions about

what we are to do."¹⁶ Moral judgments are not theoretical, but practical in the sense that they are meant to guide our actions. Thus if a moral judgment cannot fulfill this function--if, for example, the action described in the judgment is impossible to do--then it is not considered to be a legitimate or rational moral judgment. This is the point made by John Ladd,

If we say that P ought to do X, we imply that he is able to do X; for ought implies can. The principle "ought implies can" operates as a presupposition of moral discourse. To say that it is a presupposition means that if it is false, that is, if the agent is not able to perform the action in question, then the moral proposition containing the "ought" is void and pointless. There is no point in telling someone that he ought to do X if in fact he is unable to do X.¹⁷

This practicality criterion should already be somewhat familiar to the reader. It is this criterion that is invoked when we use social theory to demonstrate that a certain policy goal is impossible or impractical, and thus not a rational goal. This is the criterion that is used by both sides of the energy and economic growth debate discussed in Chapter 5. There we found traditional economists arguing that a viable no-growth economy was an impossibility, while advocates of no-growth argued that continuous growth was impractical and irrational in a world of limited resources. Since socio-economic theories help to establish what is possible and impossible in human affairs, they become quite relevant in assessing the rationality of goals and values. Before, this was seen as a matter of common sense, now it can be understood as function of the logic of moral reasoning itself.

The Good-Reasons Approach

Criteria like universality and practicality can begin to add some rationality to the evaluation of moral judgments. But these criteria apply essentially to the form of moral judgments, not to their specific content. Universality can help us detect inconsistencies in a moral position, but it does not by itself serve to justify the legitimacy of a given moral judgment. Thus we need to be able to specify just what constituted a good reason for believing that a moral judgment is a legitimate and reasonable one--a task which spawned the "good-reasons" school of ethical thought. The good-reasons school is actually a permutation of the line of thought of philosophers like Nielson that we have been exploring.¹⁸ This school argues that a careful examination of the way we think about and discuss moral questions reveals an inner logic--a set of good reasons for accepting the legitimacy of moral judgments. One of the strongest forms this argument takes is the proposition put forward by Kurt Baier in his famous work, The Moral Point of View.¹⁹ He argues that a moral judgment can only be considered legitimate if it meets certain criteria, one of which is that the judgments "considers the good of everyone alike."²⁰ His point is that a judgment cannot really be considered to be a genuine moral judgment unless it takes into account the welfare of the others in society. In other words, moral judgments necessarily embody some notion of the common good. Again, the assumption here is that one of the inherent purposes of moral is the promotion of the common good--that a

morality that didn't do this would be nonsensical. This can be a useful observation, for it logically follows from it that any judgment which attempts to base itself purely on self-interest would be morally invalid. For instance, if a coal miners union attempted to justify a nation-crippling strike solely on the basis of self-interest, an analyst could reasonably assert that they have not morally justified their action. Baier's argument thus serves to establish the notion of common good as an essential criterion in evaluating the validity and rationality of all policies which claim to be moral.

Another moral philosopher concerned with this good-reasons approach to moral judgment is Stephen Toulmin. Like Baier, Toulmin attempts to explain in his Examination of the Place of Reason in Ethics how moral judgments can be justified.²¹ He argues that if we examine carefully the way moral reasoning is carried out in moral discourse, certain characteristics become evident. He concludes from his examination that moral rules and practices are typically judged on roughly utilitarian grounds. Utilitarianism typically states that we should accept those moral rules and practices which create more pleasure than pain for society as a whole. Toulmin actually favors a negative formulation of this criterion, that we ought to accept those rules and practices which cause the least amount of suffering for humanity.²² He prefers this formulation because he believes that it is very difficult to stipulate what will make people happy, but less difficult to determine what causes suffering. In any case, he argues that it is roughly on these grounds that we tend to justify our moral claims--that this

utilitarian reasoning constitutes a good reason for accepting such a claim.

There is clearly much truth in Toulmin's thesis; we need only examine any current policy debate to see that each side typically tries to justify its case by arguing that their policy will produce the greatest good for the greatest number, or at least will cause less suffering than their opponents proposals. This is typically part of what people mean when they argue that their policy is in the public interest. This kind of utilitarian criterion should ring a bell with policy analysts, for it is roughly equivalent to the Kaldor-Hicks criterion that is commonly applied in cost-benefit analysis.²³ This criterion states that a policy should only be adopted if the societal benefits exceed the costs, and that we should choose the policy which produces the most societal benefits (pleasure). In fact, the cost-benefit approach to policy analysis can best be understood as the modern reincarnation of utilitarianism, with dollars and cents used to measure the pleasure and pain. The good-reasons approach to ethics would seem to indicate that cost-benefit analysis is the ideal way to approach the rational justification of policy goals. Ironically, then, it might seem that policy analysts already have a sufficient method for approaching normative decisions rationally--but unfortunately this is not true. This utilitarian criterion is useful in a general way, but it is not sufficient; and as we will see, the manner in which it has been traditionally pursued by policy analysts has transformed it into a way of avoiding rather than facing the question of what a good normative judgment is.

Cost-Benefit Analysis

Cost-benefit analysis is probably the most popular form of public policy analysis, in large part because it is a prescriptive form of analysis which appeals to our common sense. It offers a precise formula for choosing between competing policy options: one simply adds up the costs and benefits of the prospective policies and picks the one which maximizes the benefits. But while this approach brings with it all the appeals of utilitarianism, it also brings with it all of the classical deficiencies of the ethical theory.²⁵ For example, one has to be able to attach prices to all the costs and benefits, and this is very difficult for those social, political, and environmental values which have been called, "soft," "fragile," and "intangible." But for our purposes the main problem with the utilitarian approach of cost-benefit analysis is the problem of justifying the prices one gives to the various cost and benefits involved. The choice of policy is obviously dependent on how we value the various results of the policy. But how can we justify those key value judgments, how can the analysts rationally demonstrate that each cost and benefit is actually worth what they say it is? Unfortunately, though this is obviously the fundamental question in cost-benefit analysis, analysts seem to work very hard to avoid facing it. Indeed, they have labored to produce a number of techniques which would assess values automatically. This kind of "cop-out" is rooted of course in the analysts positivist conviction that value judgments cannot be rational--that they are entirely subjective. Given this assumption,

they have resorted to devising techniques which would attempt to measure the value preferences of the individuals in society. The favorite technique is to presume that the market price of the costs or benefits actually represents what they are worth.²⁷ The main problem with this kind of approach (and utilitarianism is general) is that it does not give us any kind of critical perspective on the values being considered. For instance, nary a thought is given to Oscar Wilde's warning that one can know everything about prices and nothing about values. The analyst is never encouraged to ask if the commodities and services being considered actually are worth the prices given to them in the market. Prices are presumed to represent something's correct value. Cost-benefit analysis simply attempts to ascertain what the prevailing prices and values of the public are--and does not question them. As Stokey and Zeckhauser acknowledge, techniques like cost-benefit analysis are merely intended to "provide a procedure for inferring and pursuing existing values; their role is descriptive and positive, rather than prescriptive or normative."²⁸

Of course, assuming and describing the prevailing values are not the neutral acts they pretend to be, for this process lends credence to those values which happen to be dominant at the time. It presumes that those public policies which reflect dominant societal values are desirable and should be carried out. This may seem reasonable until we consider that societies have been known to be wrong. The values of the public can be shaped by irrational fears, by biased educational systems, or advertising or propaganda designed to structure our values, and so

forth. In such far from uncommon situations, the traditional analyst is left with little critical moral leverage. If a large part of the public believed that the space program was much more exciting and worth much more than a program to aid inner-city ghettos, there is nothing in cost-benefit analysis which would question this assessment. If the market puts a high price on the pelts of rare animals, the oil of whales, and the tusks of elephants, there is little in this traditional approach which would challenge a policy of hunting them to the point of extinction. Moreover, if we were to compute the average value of a human life at \$285,000--as has been done by some government analysts--and we find a diamond with a market value of \$300,000, given the logic of cost-benefit analysis, we must conclude that the rock is worth more than human life. No questions asked. Individual analysts could of course question such judgments on an informal basis; but significantly, there is nothing in their formal approach which requires or encourages them to do so.

Perhaps what is most impressive about this perspective is not its lack of morality, but the casual way in which analysts often defend not having to have a moral perspective. Consider, for example, the logic of Arthur Okun:

I, like other economists, accept people's choices as reasonably rational expressions of what makes them better off. To be sure, by a different set of criteria, it is appropriate to ask skeptically whether people are made better off through the production of more whiskey, more cigarettes, and more big cars . . . Are there criteria by which welfare can be appraised that are superior to the observation of choices people make? Without defense

and without apology, let me simply state that I will not explore those issues despite their importance. That merely reflects my choices, and I hope they will be accepted as reasonably rational.²⁹

A better example of the faults of this perspective would be hard to find. I see no reason at all to accept Okun's "choice" not to address such a critical question as being "reasonably rational." Indeed it seems a highly irresponsible position for a serious intellectual to adopt--and he probably should apologize for it. This apparently cavalier dismissal of the analyst's moral responsibilities begins to make more sense when we realize that techniques like cost-benefit analysis are designed, in part, as ways for analysts and policymakers to avoid the messy task of making value decisions. It provides a relatively painless and automatic calculus for determining the desirability of policy goals. I believe Herman Daly touched on a central truth when he described cost-benefit analysis as a good example of the "self-imposed blinders that economists habitually wear in order to avoid facing up to some hard issues."³⁰ In short, cost-benefit analysis is certainly a convenient approach if one agrees with public sentiments, or if one does not want to have to go through any soul-searching in recommending certain policies. But it is certainly not a particularly thoughtful or moral approach. This is not to say that the utilitarian criterion is an undesirable one, but simply that for it to be a useful and critical one, we must have a way of rationally assessing the value judgments that go into it. Sound moral judgments about which policies are right or wrong depend on sound value judgments about priorities. Thus, instead of simply assuming that everyone's value judgments are

equally correct and rational, we need to be able to criticize people's value judgments, and especially the way in which people rank various values. We must be able to say whether the environment or human life are really important values, instead of presuming that this is simply a matter of opinion. As Robert Dorfman has pointed out, we cannot truly assess the desirability of a policy unless we can legitimately make "the assertion that some values are better than other values."³¹ Let us consider one way that might be done.

Evaluating and Ranking Values: The Basic-Needs Approach

One could begin in the spirit of Taylor and Toulmin by asking whether there is any inherent logic to the way values are commonly ranked in value discourse. It is clear that values are often ranked, and that there is some persistent rationale to this process. Let us consider a simple example. It seems reasonable to say that one's house is more important than one's television, or that one's health is more important than one's jewelry. Most people would undoubtedly agree with those judgments. But why? What is the reasoning that makes those choices so clear. Basically it is because things like health and shelter are basic needs, while television and jewelry are conveniences or luxuries. Health and shelter are human necessities, while TVs and diamonds are not. It is just this rationale, I would contend, that serves as one of the main ways in which we rank values: the most important values are those which correspond to basic needs and thus to the continuance of human life.

In a sense, the argument being made here is a transcendental one: one that assumes that giving a high priority to basic human needs is a necessary characteristic of any human moral or value system. One of the fundamental functions of any moral and value system is the preservation of human existence--it would be non-sensical and self-destructive for such a system to do otherwise. Values associated with human basic human needs must necessarily be ranked highly if human life is to be possible at all. Thus policies which violate this kind of prioritization could justifiably be deemed irrational. Consider a stylized policy example, a situation of economic depression where there is widespread malnutrition but where farm prices are so depressed that farmers can no longer make a profit on their produce and are going out of business. In such a situation the analyst could legitimately say that it is irrational for policymakers to put a high value on the preservation of the market system in agriculture. To be rational, policymakers must put a higher priority on encouraging food production--a very basic human need--than on ideological purity, and begin to subsidize prices, nationalize farms, or whatever it takes to pursue the fulfillment of that need. Of course, this may simply seem to be common sense--but that is exactly my point.

Roughly speaking, then, values can rationally be ranked on a continuum from basic needs to luxurious or frivolous wants. Not all desires need to be thought of as equal, we can rationally say that some are more fundamental and important, and this can begin to give us

the critical leverage we need to assess the priorities embodied in public policies. We can legitimately criticize national priorities, for example, when they put wants before basic needs. We can rationally criticize our nation for spending more every year on jewelry than on needed decent housing for the poor, or for spending more on pleasure boating than on welfare.³² We need not accept these warped priorities simply because they are an accurate expression of public preferences, we can justifiably condemn them for putting luxuries before basic needs.

Likewise, the logic of this basic-needs approach would force us to admit that there is some moral validity to the complaints by many in the Third World that the United States uses one third of the world vital energy resources each year and squanders some of that on conveniences like electric toothbrushes, big cars, escalators, air conditioning, excess lighting, and so forth, while many areas of the world have little or no oil or electricity for basic domestic or industrial needs. Oil supplies are so tight, for instance, that even if these poor countries could afford to buy the oil they required for their developmental needs, not enough would be available due to the way in which the U.S. and other developed countries monopolize the market. Indeed some have gone as far to argue that the market system itself is immoral because it allocates basic resources according to demand instead of according to need. They point out for instance that there is enough food in the world to allow everyone a decent diet, but that malnutrition and starvation are present because food goes to those countries which can generate the money to afford it, rather than to those countries which desperately need it.³³

A major advantage of the basic-needs approach is that it allows the analyst to validly give certain values high priority even though this is not reflected by the market or in public opinion. For example, consider the environment. There is hardly a more basic need than maintaining a viable relationship with our natural environment. Our health and very existence depend on it. An analyst who adopts the basic-needs criterion can justify giving environmental values an important place in policy evaluations without having to show that the public puts a high value on them and without having to devise some artificial way to put a market price on them. In a sense, environmental values could be considered to be objectively important values. In fact, this is very much the rationale that was finally adopted by the analysts of the Stanford Research Institute in their search for a way to rationally choose between the competing perspectives they were considering. Recall that when we saw them last in the preceding chapter, these analysts had concluded that examination of the facts was not a sufficient way to choose between the competing paradigms and that they stood on the very edge of value relativism, without any apparent way to adjudicate between the paradigms. Aware of the pressing necessity to choose an energy policy path, the analysts sought some criteria that could fairly be applied to all of the paradigms--in their words, "criteria which are relatively independent of perception, or rather, would seem reasonable in any perception."³⁴ They concluded that one such criterion concerned whether the paradigms being considered "lead toward system adaptability and hence, toward survivability."

Adaptation refers to the process by which living systems maintain system stability (homeostasis) in the face of short-term environmental fluctuations and, by transforming their structures, through long-term nonreversing changes in their environment as well. Rappaport has discussed the conditions under which societies maintain adaptability. He concludes that "as energy flux has increased, the disparity between the direction of cultural change and the goal of biological survival has widened," raising the question of whether the continuing growth of high-energy industrialized society is, in the long term, maladaptive.³⁵

Thus this environmental criterion of adaptability can be seen as an "objective" criterion which can and should be applied to the assessments of the competing normative/theoretical perspectives used in energy policy. In this case, the SRI analysts are suggesting that the perspective which assumes and values continuing high energy and economic growth is irrational in that it neglects this need for adaptability and could in the long-run threaten our ability to live in our eco-system.

The Human Bias

If it is not evident already, it should be pointed out that this basic-needs criterion does rest heavily on the assumption that human life itself is good and desirable. Some people, almost exclusively philosophers, would argue that this is a highly questionable assumption, and thus that this basic-needs approach is an elaborate castle built upon sand. There are, however, several acceptable counter-arguments to this objection. First, in keeping with the transcendental style of argument developed throughout this chapter, it could be observed that the moral enterprise itself assumes necessarily that there is value in human life. The assumption is inescapable. A concept of morality which denied the value of human life would be inconsistent and nonsensical, for as Baier

observed, "a genuine moral rule must be for the good of human beings."³⁶ One could of course still deny the value of human life, but this would also require the abandonment of morality itself--a step that few serious social analysts would be willing to make.

There is also another line of argument which support the assumption that humans must value human life. It posits that unless we adopt this assumption, we will inevitably fall into some serious contradictions. The point of this argument is best illustrated by the following anecdote. One day, in a very large and prestigious university, a philosophy professor was very disgusted with his class. He knew they were bright students, but they were not making an effort to engage the philosophical questions he posed. With only a few minutes left in the hour, he declared that he was going to take a philosophical position and that everyone would remain until either he was proven wrong or the class admitted defeat. He adopted the position that there was no real value to human life and defended it vigorously. Try as they might, the students could not overcome his arguments and soon became sullen and near to giving up. At that point a student who had remained silent throughout raised his hand and made the following statement. "I am prepared to accept your position that there is no value to human life," he said to his teacher, "provided that you commit suicide right here and now in order to prove it." Needless to say, the professor quickly admitted that the central contradiction in his own position had been discovered, and class was dismissed.

Avoiding the Materialistic Bias

There is a more practical problem with this basic-needs approach to value evaluation. It can tend to exacerbate a tendency in Western thought to think of basic needs in purely physical or materialistic terms--food, warmth, physical security, and so forth. Even in the hierarchy of needs developed by Abraham Maslow, a man who was sensitive to people's social and psychological needs, material needs are rated as more basic than those "higher" needs.³⁷ There is of course some truth to this ranking, but the degree of difference between physical and other kinds of basic needs should not be exaggerated. Food may be a more basic need than, say, a sense of belonging and being loved; but this does not mean that a sense of belonging is not a very basic human need also--one that is essential to human life. Humans clearly have a wide variety of basic needs: physical, social, emotional, etc.--all of which are necessary for human life as we know it. We must have, then, a full vision of what human life consists of. It is not merely biological, we do not live by bread alone. A purely biological existence, without emotion, contemplation, friendship, and so on could hardly be legitimately considered a human life. Truly human life could not exist without some of these values and practices. Indeed, when people see little or no possibility of meeting their basic emotional and social needs, they often consider ending their biological existence. Or consider the fact that people often will forego basic physical needs like sleep, food, and safety in order to pursue these other non-material

needs. Thus analysts must be careful to consider the full range of basic human needs in their evaluations.

It is true that it is not as easy to identify basic social and political needs as it is to identify basic physical needs. But again transcendental arguments are useful in establishing which non-materialistic needs are essential to any policy evaluation. The work of the political scientist Charles Anderson is a good example of how this can be done. In his article, "The Place of Principles in Policy Analysis,"³⁸ he argues that certain political values must be considered essential to any rational policy analysis.

As standards of policy evaluation, (some political values) are not simply preferences. They are, in some sense, obligatory criteria of political judgment. To justify any policy recommendation, one must argue that it is within the legitimate powers of government, that it is, in some sense, "in the public interest," that it is consistent with lawful rights, that it is fair, and efficient in the use of resources.³⁹

To justify the necessity of invoking these political values he points out that "certain criteria of choice are inherent in the activity of politics itself, that they are part of what we mean by "making a political judgment, or as Wittgenstein might have put it, that they are part of politics as a 'form of life.'"⁴⁰ In other words, certain values are part of what constitutes what we mean by a political decision.

In a larger sense, it could be said that values like legitimate authority and justice are a necessary part of political life. Much of the purpose of moral and value systems is not only to make physical existence possible, but to make political and social existence possible as well. We literally could not live together in societies without some

allegiance to notions like fairness, authority, etc. A society in which those kinds of values and needs were consistently being violated--for instance, an illegitimate dictatorship which was viciously oppressive and unjust--would be unstable and would ultimately undermine its own existence. Any ongoing, harmonious society would not only have to meet its citizens physical needs, but their social and political needs as well.

Normative Rationality: Incomplete but Necessary

For some, the excursion into normative philosophy in this chapter may have seemed largely a waste of time--for it is clear to even the casual observer that many of the rational criteria that we have sought to establish as valid are already being used by most policymakers in their decisions. The consideration of such criteria as justice or basic needs is already a matter of common usage and common sense in policymaking. And indeed this is true--but that is exactly the point. We need an approach to policy analysis which does not ignore or violate our moral and political common sense--a form of analysis which does not endorse, for example, taking money from the poor and giving it to the rich, simply because there is a net benefit. We need a humanistic form of analysis which can speak to the kinds of reasoning that policymakers often try to use in judging policy options; a form which allows us to wade into the center of public policy controversies and be helpful in sorting them out. Including criteria like basic needs, justice, universality, and so forth in public policy analysis is one

way to create this more humanist form of analysis. It would help make this activity less of an abstract intellectual exercise which the public and policymakers have difficulty relating to, and more of an activity which speaks to the concerns of those people. Only when analysis begins to deal with policy issues in the terms that are commonly used--though hopefully in a more precise and illuminating way--will policy analysis begin to be fully relevant to the real world of politics.

It should be noted that though these criteria begin to add some rationality to the consideration of the moral and value questions in policymaking, they do not add up to a complete rationality. They do not always unfailingly serve to indicate the one rational policy path to pursue. On the contrary, they can usually only serve as a rough guide to solving value problems. This is so for several reasons. First, like all human notions, these criteria require interpretation; and there are inevitably some differences in interpretation. Consider the basic needs criterion. While some physical needs are obviously in the category of basic necessities, there could easily be legitimate disagreement over the status or importance of other needs. A final and complete schedule of human needs is probably impossible to determine.⁴¹ Further, sometimes these rational criterion will be in conflict, especially considering that we have not even touched upon all the different possible criteria. It is quite possible, for example, that a utilitarian criterion could favor one policy, while a consideration of justice or basic needs could favor another. Also, it is not unusual to find relatively equal values and needs to be in competition. For example,

how could we decide whether to put more funds into producing adequate health care or into producing an adequate national defense? Both are pretty basic human needs. (Of course, it could be pointed out that such choices between basic values are often more difficult in the abstract than in practice. For while such values may be equal in the abstract, they may not be equally fulfilled in reality. Choices between such values are made more tractable by determining which of those values is currently in most need of fulfillment and favoring those in policy decisions.⁴² Thus in the case of health vs. defense some have argued that since we already have the nuclear capability of destroying our enemies several times over, and since there are still many people without adequate health care in the U.S., we should allocate more of our funds for health. Of course others disagree, and although consideration of degrees of fulfillment may be helpful in clarifying our choices of value priorities, it too is open to competing interpretations.)

However, in spite of these kinds of limitations, I believe that the rational normative criteria that have been discussed here are an important aid to concerned policy analysts. And as Kai Nielson concluded, despite our doubts, it is clear that certain important moral and value judgments can be arrived at by normative analysis:

Social practices which drastically frustrate our need for sleep, food, sex, drink, or elimination; or practices that pointlessly diminish self-esteem, appreciation and concern for others, creative employment and diversion, or practices that seek to destroy our tendencies to prize integrity, conscientiousness, knowledge, and the contemplation of beautiful things are practices which must be said to be morally inferior to social practices which do not so frustrate us. This is not to deny the obvious, namely that there are sharp disagreements over

the value of some things and that there is even considerable disagreement about the moral priority of those very things we universally prize, approve of, or admire. But even with our less than exact conception of human welfare, we can still show that there are many sets of social practices both imaginable and actual that intelligent and correctly informed people judge without equivocation to be morally inferior to comparable sets of practices.⁴³

The point then is that even though normative rationality is incomplete, it is very useful, and it is both relevant and necessary to the thoughtful analysis of public policy choices. The purpose of our excursion into moral philosophy has been to demonstrate that this attempt to be moral and political can be a thoughtful and responsible activity, and that the philosophical excuses which have prevented analysts from facing up to their moral and political obligations are no longer valid.

Footnotes

¹Martin Rein, Social Sciences and Public Policy (New York: Penguin Books, 1976), pp. 13.

²Robert Dorfman, "An Afterword: Humane Values and Environmental Decisions," in When Values Conflict, (edited by Laurence H. Tribe, Corinne S. Schelling and John Voss), (Cambridge, Mass. Ballinger Publishing Co., 1976) pp. 162, 160.

³See his extremely useful essay, "Ways not to Think About Plastic Trees," in When Values Conflict.

⁴Ibid., p. 70.

⁵Ibid., p. xii.

⁶Policy Analysis is the Federal Aviation Administration (Lexington, Mass: Lexington Books, 1974), p. 13.

⁷See for example his An Examination of the Place of Reason in Ethics (Cambridge, Cambridge University Press, 1950); The Moral Point of View (Ithaca N.Y.: Cornell University Press, 1958); "Justification and Moral Reasoning," Methodos, Vol. 9 (1957), pp. 77-112.

⁸These arguments can be found in his "Neutrality in Political Science," Philosophy, Politics and Society, (Third Series) ed. Peter Laslett and W.C. Runciman (London: Basil Blackwell, 1978).

⁹Ibid., p. 43.

¹⁰For a good short summary of the nature of transcendental arguments and their relevance to moral and value philosophy, see A. Phillips Griffiths, "Ultimate Moral Principles: Their Justification," Encyclopedia of Philosophy, Vol. VIII (1967), pp. 177-182; for a more detailed discussion see A. Phillips Griffiths, "Justifying Moral Principles," PAS, N.S. Vol. 58 (1957/1958), pp. 103-124.

¹¹Kai Nielson, "Ethics, History of," Encyclopedia of Philosophy, Vol. III (1967), p. 126. For a more rigorous treatment of this argument see Griffiths, "Justifying Moral Principles."

¹²Ibid., p. 132.

¹³Griffiths, "Ultimate Moral Principles," p. 179.

¹⁴Nielson, p. 110.

¹⁵Kai Nielson, "The Functions of Moral Argument," Philosophical Quarterly Vol. 7 (1957), p. 241.

¹⁶Nielson, "Ethics," p. 130.

¹⁷"The Issue of Relativism," The Monist, Vol. 67 (1958), p. 607.

¹⁸For a good review of this approach, see Kai Nielson, "The 'Good Reasons Approach' and 'Ontological Justification of Morality,'" Philosophical Quarterly, Vol. 9 (1959), pp. 116-130.

¹⁹Moral Point of View.

²⁰*Ibid.*, p. 200.

²¹Toulmin, An Examination.

²²*Ibid.*, pp. 153-160.

²³Again, for a good, brief account of the role of this criterion in policy analysis, see Edith Stokey and Richard Zeckhauser, Primer for Policy Analysis. (New York: W.W. Norton and Co., 1979), p. 279.

²⁴For a good essay on this subject see Alasdair MacIntyre, "Utilitarianism and Cost-Benefit Analysis," in Values in the Electric Power Industry, Kenneth Sayre, ed., (South Bend, Ind.: University of Notre Dame Press, 1978) pp. 217-237.

²⁵*Ibid.*

²⁶See Tribe, p. 63.

²⁷The point here is not that prices don't really reflect what people are willing to pay for something, but that the price that someone is willing to pay may not represent what it is worth.

²⁸Edith Stokey and Richard Zeckhauser, A Primer for Policy Analysis (New York: W.W. Norton and Company, Inc., 1979) pp. 259-260.

²⁹Arthur Okun, Equality and Efficiency: The Big Trade-Off (Washington D.C.: The Brookings Institution, 1975), pp. 2-3.

³⁰Herman Daly, Steady-State Economics (San Francisco: W.H. Freeman and Company, 1977), p. 121.

³¹Dorfman, p. 163.

³²Figures adopted from Michael Parenti, Democracy for the Few (New York: St. Martin's Press, 1974), p. 282.

³³For a good example of this argument see Frances Moore Lappe, et al., Food First: Beyond the Myth of Scarcity (Washington, D.C.: Institute for Policy Studies, 1977).

³⁴Stanford Research Institute, Solar Energy in America's Future, prepared for the Energy Research and Development Agency, January 1977, ERDA Contract E (04-3)-115. p. 97.

³⁵*Ibid.*, p. 98.

³⁶Baier, p. 126.

³⁷Abraham Faslow, Motivation and Personality (New York: Harper and Row, 1954).

³⁸American Political Science Review, Vol. 73, No. 3, (September 1979).

³⁹*Ibid.*, p. 713. It should be noted that Anderson does not consider this line of argument as a justification for these values, but I would argue that it is.

⁴⁰*Ibid.*, p. 716.

⁴¹Interpretive theorists would no doubt argue that a notion like "basic needs" is what they call an essentially contestable concept, one which can never be finally defined beyond reasonable question. For a discussion of essentially contestable notions and their importance in political evaluation, see William Connolly, The Terms of Political Discourse (Lexington: MA: D.C. Heath, 1974).

⁴²Dorfman, p. 164.

⁴³Nielson, pp. 131-132.

C H A P T E R X

APPLYING MORAL RATIONALITY

From Theory to Practice

Given that rational moral analysis is clearly theoretically possible, what would this element of a humanistic policy analysis actually look like in practice? In this brief chapter, I will move from the philosophical arguments supporting a normative policy analysis to the consideration of how moral rationality can be applied to a specific issue in energy policy. The issue to be addressed is the desirability of publicly-owned utilities--a sub-issue in the debate over public ownership of energy resources and energy production facilities. Currently there are more than 3,000 public power systems in the United States--including 1,900 municipally-owned systems, 900 rural electric cooperatives, 100 regionally-owned systems, and a handful of state and federal systems. In several states there have been movements toward transforming some privately-owned utility systems into publically-owned systems.¹ Wherever this attempt has been made, debates have raged over the desirability of these competing forms of utility ownership. Using the various standards developed in the previous chapter, I will attempt to pass judgment on the rationality and irrationality of the value judgments and moral arguments that have been a central part of these policy debates. I will indicate when criteria like

universality are correctly or incorrectly applied, when value rankings are questionable, and so forth. Among the normative areas to be considered in this analysis are economic values, distributional justice, political values, and ecological values. The basic intention here is to demonstrate that it is quite possible for policy analysts to rationally analyze the normative dimensions of policy issues and to arrive at recommendations that are both clear and defensible.

Economic Costs and Benefits

Much of the controversy over public ownership concerns the economic costs and benefits involved. Will more people be better off economically under publicly-owned utilities (PCUs) or under private, investor-owned utilities (IOUs)? The central question is whether POUs would mean higher or lower prices for electricity than that charged by IOUs. A consideration of the facts would seem to support the notion that public power systems are cheaper. Federal statistics gathered in 1974 indicated that publicly-owned utilities (municipals and public utility districts) offered rates that were 29% lower than those charged by private utilities. The rates charged by consumer-owned cooperatives were 10% lower than those of the IOUs.²

IOUs counter these figures by arguing that much of the difference in rates is due to the fact that many municipal and public utility districts pay no local taxes and they also benefit from tax exempt municipal financing. IOUs must pay taxes, and they are financed by regular bonds and the sale of stock to investors. IOUs appeal to the

universality criterion and complain that they are not being treated fairly, and that both public and private utilities should pay the same taxes. If this was done, it is insisted, the rates would be closer.³ Public power advocates retort that POUs should not have to pay the same taxes as private utilities, that there is a very relevant difference here: IOUs are profit-making enterprises while POUs are not. Our government has traditionally considered this to be a relevant difference, and a legitimate justification for requiring less taxes for non-profit, public service organizations. It is also pointed out that some POUs do in fact make "payments in lieu of taxes" to local governments, often in amounts that approximate what the IOUs pay in local taxes.⁴

IOUs argue that at least some of the savings experienced by public power customers may be illusory. They maintain that the tax breaks given to public power utilities have to be made up by governments somehow, and that higher taxes on the public will be used to make up for the lost revenues, though this claim is not supported by any documentation.⁵ In a sense, however, much of this tax dispute is beside the point, because even if POUs paid similar taxes as the IOUs, in most cases their rates would still be lower because they are not profit-making enterprises which must pay dividends to stockholders. Much of the millions of dollars that IOUs pay out in dividends every year would be conceivably saved in a non-profit, publicly-owned utility. Support for this is given by an American Public Power Association study which determined that approximately 42% of the lower rates offered by municipals

can be traced to their lack of profit margins.⁶

Of course it should be kept in mind that general figures can mask individual differences between utilities, and that it is quite possible, for instance, to find publicly-owned utilities that charge as high or higher rates than some investor-owned utilities. But in general, the figures indicate the POUs tend to offer substantial economic savings to their customers, and thus can be considered to be preferable to IOUs on these economic grounds.

The Distributional Issue

Besides questions of which system produces the most economic benefits, there are also the moral questions of how those benefits are distributed and which system provides the most desirable and just distribution of those benefits. Both public and private systems provide reliable power to their customers, but there is a basic difference in how the surplus revenues generated by the utilities are distributed. The profits from IOUs go to their stockholders, while any profits from POUs are refunded to the public in various ways. It is important to note that on the whole, utility stockholders tend to constitute a small, financially well-off elite. In the United States, only one family in six is comfortable enough to afford to invest in stocks, and approximately one-tenth of that small group owns 80% of all the stock in the country.⁷ In contrast to this small group, the general public is the recipient of the surplus profits from POUs. Some POUs return these funds to the public in the form of lower electricity rates in the future,

others have a policy of refunding excess revenues by reducing local taxes or improving community services. One city, Jacksonville, Florida, has financed the construction of several city buildings with the help of utility revenues; another, Carthage, Missouri, finances its fire department with those revenues.

Several of the moral principles that we discussed earlier could be applied to help indicate which of these distributional schemes is more just or desirable. For example, the principle of favoring the public interest over narrow private interests would seem to clearly support the case for publicly-owned utilities. In addition, the needs criterion developed in the previous chapter would also clearly favor the POUs. A system which distributes benefits across the spectrum of economic classes is more likely to aid in the fulfillment of basic human needs than a system which diverts benefits to those who are already relatively well-off. Lower income and even some middle income families can use every penny they can get in these inflationary times to meet their basic needs.

Objectivity Criterion

Some of the arguments in this controversy do not stand up to standards of objectivity. Most notably, private utilities have long contended that private corporations are more efficient than public organizations. A specific example of this argument occurred in a 1976 campaign in Massachusetts to create a state-owned utility system. IOUs contended that such a system would only breed more bureaucracy and inefficiency, stating that "all are familiar with the inefficiency

of government."⁸ This proved to be a highly effective argument in the ultimate defeat of the proposal; but the rationality and objectivity of this argument are questionable. It has little factual basis. First of all, it could be noted that IOUs require state bureaucracies as well in the form of the state utility commissions which must be created to regulate them. Further, experience has shown that public power systems have had little trouble in attracting the same kind of able administrators and skilled technicians that are typical of the private sector. Finally, federal statistics indicate that in 1973, municipal utilities were actually more efficient than the IOUs, spending 7% less on operation, maintenance and production expenses than the IOUs.⁹

The Massachusetts IOUs indirectly revealed the non-objectivity of their efficiency arguments by not backing them up with facts and by resorting to a kind of guilt by association argument. They argued that a state-run system would be inefficient because several other state agencies had been found to be wasteful. Here is their argument in its entirety:

There is no reason to believe that a Massachusetts government power authority will be an efficient, well-run operation. The track record of government operation in Massachusetts is nothing to brag about. The MBTA, and Massachusetts Welfare Department, among others, are part of the reason that Massachusetts may be the only state in the nation requiring new taxes in 1975.¹⁰

This is clearly a scare tactic, since there is nothing in this argument to demonstrate why a state-owned utility would be liable to the same problems as the welfare department. This kind of argument seems

intended to take advantage of anti-government feelings, and indeed, ever since the onset of public power systems, private utilities have sought to equate POUs with a "big-brother" image. In the 1950s, for example, when there was a push for more publically-owned utilities, IOU trade organizations took out advertisements in magazines showing a man with his daughter and son (who is dressed in an Army uniform), with the man saying, "Sure, I used to think that it wouldn't do any harm to have the government run the electric business. But I've changed my mind. Because when government meddles too much in any business, you get socialism. And who'd want to leave a socialistic U.S.A. to his kids?"¹¹

These kinds of arguments are hardly objective--they are not based on an impartial consideration of the facts of the situation, but rely heavily on the individuals fear of socialism, or fear of higher taxes. They cast serious doubt on the objectivity of the IOUs and indicate that their own personal interests are biasing their perception of the issue.¹²

Political Needs

Another area which deserves serious consideration in this moral analysis is whether basic political needs are given a high priority in the POUs and the IOUs. Specifically it is important to consider how these two organizations tend to fulfill the need for legitimacy and accountability in our public institutions. Increasingly, the American

public is feeling alienated from the large, centralized institutions (both public and private) that control so much of their lives. There is a very strongly felt need to gain more control over these institutions so that they truly promote the public interest. Proponents of public power argue that publicly-owned utilities can be more democratic and thus more responsible and accountable to the public than the IOUs. There are good reasons to believe this. The board of directors of an IOU is not accountable to the public at all, but to the stockholders of the corporation. Often these directors are not members of the communities served by the utilities, but representatives of the large banks which hold interests in the IOUs and from oil and coal companies which supply them fuel. In the priorities of the directors of IOUs then, it is more important to be responsive to their stockholders than the public.

In contrast to this, most directors of public power systems are elected by their customers and directly responsible to them. If the public is dissatisfied with the policies of a POU, they can elect different directors that will carry out their will. For example, in the West Florida Electric Co-op, officials were under attack because of rising rates and because they refused to recognize a newly-formed utilities workers union. Citizens organized a successful campaign to defeat all nine incumbent board members, and the new board then fired the co-op's manager and began bargaining with the union. Changing the

board of an IOU is much more difficult, requiring the cooperation of the stock-holders, who are often not particularly sensitive to the complaints of consumer groups.¹³

IOUs argue that they are under public control, that they are regulated businesses which are held accountable to the public through their state utility commissions.¹⁴ They must hold public hearings to justify rate increases, and so forth. But in practice, this kind of regulation is often not a very effective check on the utilities. As critics have pointed out,

Many private utilities have successfully used their political clout to influence the selection of the very individuals who are supposed to regulate them. For example, in 1975, Pennsylvania utilities successfully pressured their state Senate to reject the governor's nomination of two strong consumer advocates to the state's utility commission.¹⁵

Moreover, even when public hearings are held, well-financed IOUs often have the advantage in them. They are able to marshall experts and studies that overshadow the efforts of overworked and understaffed citizen groups and commission staffs.

It is important to note that not all publicly-owned power systems are responsive to their customers. Experience has shown that the larger and more centralized these institutions are, the less responsive they tend to be. This is most true on the federal level where organizations like the Tennessee Valley Authority and the Bonneville Power Administration have both been severely criticized by citizens groups for their arrogance and insensitivity to criticism from the public. In contrast to this, one study found that the public utilities that were more

responsive and lenient concerning disconnect and deposit policies, were those "in small towns where the utility officials know many of their customers."¹⁶ Decentralization may foster more responsiveness, but it certainly does not guarantee it. Even small publicly-owned utilities can be unresponsive to the public, if the public does not seek to take an active part in making and influencing the decisions of the utility. Professionals on any level tend to resent the "interference" of the public in their decisions, and often must be forced to take into account the wishes of the public. However, despite these problems, it does seem the public utilities, and especially the smaller ones, offer a better opportunity for responsiveness to the public than IOUs do.

Ecological Needs

For the utilities, the needs of the environment are usually embodied in the issue of conservation. Conserving on electricity production not only lowers the ecological damages and risks associated with recovering and transporting energy resources like coal and oil, but it also lowers the damage caused to the environment and human health by the burning of these fuels (acid rains, the problems with SO₂ and CO₂, etc.). Despite the importance of conservation, there is reason to believe that private utilities tend to rank profits ahead of conservation. IOUs place a very high value on making profits, that is part of their purpose. Profit levels in IOUs are generally fixed by state commissions as a set percentage (\approx 12%-13%) of their capital investment in their facilities. Thus if profits are to increase, they must build more plants

and sell that increased amount of electricity. Conservation is obviously incompatible with this built-in drive toward expansion. As one Florida utility executive said, "If we succeed in getting the public to conserve energy to the point where our revenues drop 15 to 20 percent, we may all be looking for a job."¹⁷ As a result of this logic, many of the conservation programs adopted by IOUs have not been particularly aggressive.

Publicly-owned utilities do not have to maximize profits, and as a result, many of these utilities have led the way in encouraging conservation by their customers. For example, Seattle City Light and Los Angeles Department of Water and Power are two municipal utilities that have initiated impressive conservation programs. Facing the serious need to conserve, Seattle began a Kill-a-Watt program which reduced electricity use by 7% in the first year, while in Los Angeles the savings was over 15%. A report by the Rank Corporation attributed much of the success of the L.A. program to the fact that it was a municipal facility and could command the full resources of the city government in its efforts.¹⁸

Much of the problem of conservation of electricity can be traced to a tendency to charge large commercial and industrial customers lower rates than residential users. Sometimes this takes the form of what is called "declining block rates" whereby lower rates are charged as consumers increase their use of electricity. Both public and private utilities have been guilty of engaging in this kind of wasteful rate

structuring. But federal statistics reveal that the differential between industrial and residential users tends to be more than twice as small for publicly-owned utilities than for IOUs.¹⁹ Moreover, while most IOUs have vigorously opposed proposals to modify their rate structures, public power systems have been more amenable to change. As early as 1975, the American Public Power Association maintained that "new types of rate structures, designed to conserve resources . . . should be followed by the industry."²⁰ A specific example is the city of Wellesly Massachusetts, whose municipal utility has eliminated block rates and designed a system of flat rates. Besides encouraging conservation, these rates were thought by most city residents to be more equitable.

In terms of the environment, a final point against the IOUs has been their general reluctance to pursue or encourage the development of alternative, renewable sources of energy like solar and wind power. Not only do such sources save on non-renewable resources, their environmental impacts also tend to be less serious. As a rule, IOUs have been apathetic about these alternative sources, arguing that they can only be viable in the distant future. A report done for the Florida Energy Committee by the consulting firm of Booz, Allen, and Hamilton concluded that "the utility stance is to avoid, and even possibly to discourage, solar energy development, out of the apprehension that the only result can be a reduction in utility revenues. Solar energy is viewed essentially as a threat which the utilities have not yet determined how to turn into a benefit."²¹

On the other hand, some publicly-owned utilities have also had a record of apathy towards alternative energy sources and hostility toward their advocates. But again, this problem is most typical of those POUs that are large and federally owned--like the TVA. Some of the more decentralized public power system have been more open to these alternatives. For example, some rural co-ops have been promoting the use of solar crop dryers as an alternative to ones using electricity or propane. The head of one solar dryer project run by the East River Electric Power Co-operative justified their project by arguing that "rural electric co-operative are interested in far more than just selling electricity to their members."²²

Conclusions

In light of the foregoing analysis, it seems clear that a policy supporting the predominance of private, investor-owned utilities in the United States is an irrational one. In terms of values, they put profits ahead of environmental needs, and they put allegiance to special private interests before responsiveness to the public and the public interest. This kind of value ranking is warped, and can only seem reasonable if one is a member of the interest groups that benefit from IOUs. Even if there is not an economic advantage to POUs, they would probably still be the most rational form for utilities because their structure allows for the maximization of important ecological and political values, that can easily be neglected by the IOUs. A rational assessment of the

moral and value issues involved, thus clearly favors a policy encouraging the creation of more public utilities--preferably on the most local level possible.

Of course, not all rational investigations of the normative issues surrounding policy issues will produce results as clear as these. But this example shows that it is quite possible to make rational normative recommendations concerning public policies, and that this can help to ensure that our public policies are morally legitimate.

Footnotes

¹Richard Morgan, et.al., Taking Charge: A New Look at Public Power (Washington D.C.: Environmental Action Foundation, 1976), pp. 53-72.

²Ibid., pp. 17-18.

³These arguments as well as many of the other anti-publically-owned utility arguments in this section were taken from a packet of developed by New England Electric that was developed to counter a proposal on the Massachusetts ballot in 1976 concerning the creation of a state-owned utility. Copies can be obtained from New England Electric, Public Information Department, 20 Turnpike Road, Westboro, Mass. 01581 (Most of this material is unpaginated.)

⁴Taking Charge, p. 18.

⁵New England Electric.

⁶Taking Charge, p. 18.

⁷Information of stock ownership adapted from Ira Katznelson and Mark Kesselman, The Politics of Power (Second Edition), (New York: Harcourt Brace Jovanovich, Inc. 1979), p. 78.

⁸New England Electric.

⁹See Statistics on Publicly Owned Electric Utilities in the United States, 1974; and Statistics on Privately Owned Electric Utilities in the United States, 1974, (Washington D.C.: Federal Power Commission.).

¹⁰New England Electric

¹¹Cited in Taking Charge, p. 8.

¹²One would suspect that there would also be instances of irrational anti-corporate bias on the part of public power advocates, but I was unable to find any in the literature I examined.

¹³For examples of how difficult this can be see Taking Charge, pp. 45-48.

¹⁴Argument made in New England Electric materials.

¹⁵Taking Charge, p. 18.

¹⁶Ibid., pp. 31-32.

¹⁷Quote from Booz, Allen and Hamilton, Inc., Solar Energy Utilization in Florida, p. A56.

¹⁸J.P. Acton, et al, Electricity Conservation Measures in the Commercial Sector; The Los Angeles Experience (Santa Monica, California: Rand Corporation, 1974).

¹⁹Federal Power Commission.

²⁰Taking Charge, p. 21.

²¹Booz, Allen and Hamilton, p. A55.

²²Taking Charge, p. 28.

CHAPTER XI

POLICY ANALYSIS AS POLITICAL ACTIVITY

Freedom is not merely the chance to do as one pleases; neither is it merely the opportunity to choose between set alternatives. Freedom is, first of all, the chance to formulate the available choices, to argue over them--and then, the opportunity to choose. That is why freedom cannot exist without an enlarged role of human reason in human affairs.

C. Wright Mills
The Sociological Imagination

All styles of policy analysis have political implications. This chapter will explore the political implications of the humanist-non-positivist/normative approach that has been set out in the previous chapters. Are there substantial political disadvantages or biases in this approach? For instance, might it not be argued that the possibility of a normative policy analysis would only encourage analysts to think of themselves as moral or ethical "experts?" This would only worsen the problem of technocracy that is already inherent in policy analysis. We would not only have policy experts directing technical policy decisions, but analysts seeking to dictate value decisions as well. It is just this disturbing possibility--the possibility of encouraging a kind of moral technocracy--that could make many policy analysts reluctant to embrace value analysis as part of their craft. Many might feel, and justifiably so, that they have no right to be making moral decisions for others. In fact, one reason that techniques like cost-benefit analysis are so

popular is that they seem more democratic, in the sense that the analysts are only trying to measure public values and are (supposedly) not in a position to impose their individual values on the public. While it might be acknowledged that the moral relativism typical in cost-benefit analysis has its problems, it could be argued that the moral dogmatism and moral dictatorship would be even worse.

However, the case can be made that normative analysis actually discourages the possibility of moral technocracy. Indeed, there is a much greater danger of moral technocracy in the scientistic approach than in the normative. For as we have seen, in the scientistic approach there is a tendency for value judgments to be introduced surreptitiously in the form of tacit modelling assumptions, objective looking cost-assessments, etc. It is much easier for analysts to impose their value judgments on policymakers by disguising them as "value-free recommendations" than it would be if moral and value judgments were recommended to policymakers in an explicit and straightforward manner. Hidden values biases in policy studies may escape detection by policymakers and the public, but clear and open value recommendations would not. In this sense, normative analysis would actually help to undermine the possibility of moral technocracy by clearly labelling value judgments and thus exposing them to criticism and discussion for what they are. And while policymakers might bow to the technical recommendations of analysts, it is unlikely that many would naively accept explicit value judgments without question. As

I have continually stressed, policy analysts have little power to actually impose their views upon policymakers or the public, and this would be especially true in the area of moral and value judgments.

Furthermore, a correct understanding of the nature of the knowledge addressed by normative policy analysis mitigates against a dogmatic or technocratic approach to policy judgments. I took pains to point out that although one can approach moral and value judgments rationally, that rationality can never be complete or fool-proof. While it is certainly possible to label some moral judgments to be irrational, and to conclude that some value rankings are not justifiable, the rational status of many moral and value judgments is quite debatable and there can be genuine disagreement by rational and impartial people. In this sense, moral knowledge is often tentative, and must be left open to question. It simply lacks the kind of precision and accuracy that is needed to justify a technocratic approach. Normative analysis simply cannot produce the kind of indisputable, objective answers that would justify letting a moral "expert" make the final decisions on these matters. Instead, the inherent tentativeness of normative knowledge would more likely serve to support an argument for a more democratic approach to these decisions. For it could be reasonably argued that if it is not possible to arrive at some final, objective answer to policy questions, such decisions should ultimately be left up to the public or its legitimate representatives. If knowledge cannot be an unambiguous guide to policy choices, we must turn to democratic decision-making mechanisms which express as directly as possible the choices of the entire public--to legitimize public policy choices.

Tentativeness is not only a characteristic of moral knowledge, but of other areas of human knowledge as well. As noted in prior chapters, our knowledge about the socio-economic theories which help to guide policy decisions is also somewhat tentative. Because of the nature of social reality, these theories simply cannot be "proven" true or false in the same way as theories can in the natural sciences. Thus social theories are another crucial area of human knowledge where our knowledge is probably not precise or reliable enough to justify letting experts make the final decisions. As I suggested earlier, it makes much more sense to encourage a policy research system which produces a pluralistic variety of socio-economic theories, with the final choice being made again through some legitimate democratic mechanism.

We might even extend this argument into that most objective area of knowledge, "facts"; for even in issues of scientific fact, where clear, undisputable answers are at least theoretically possible, definitive, unambiguous answers are usually not forthcoming in practice. More often than not, respected scientific experts disagree about the facts of the matter in environmental impacts, or nuclear safety, or the extent of our energy reserves. Scientists are typically found lining up on both sides of policy disputes, and so are the facts. And so again it must ultimately be up to the public to choose which expert to believe and which set of facts is most reasonable and important. All of which is not to say that we do not need good policy research, but only that a non-positivist understanding of the limited and tentative nature of

human knowledge requires that we approach that research with a healthy sense of doubt, and that we should not rely on "experts" to settle crucial policy questions. In this sense, while positivistic and scientific forms of policy analysis can give the illusion of objectivity and scientific precision upon which technocratic arguments are built, a non-positivist approach cultivates a doubt which is anti-technocratic and pro-democratic. As E.E. Schattschneider was fond of saying, "Democracy is a political system for people who are not sure that they are right."¹

From Pollster to Provocateur

The activity of normative policy analysis is not only compatible with democracy, it may even do more to encourage it than traditional forms of policy analysis. For example, the normative approach implies a much different--and probably more helpful--role for the policy analyst in the democratic political process. The traditional public choice/cost-benefit analysis approach fosters what could be termed the "Pollster" model of the analyst's role in the democratic process. In this model, the job of the analyst is to enhance the democratic process by attempting to gather up whatever the public's individual value judgments are--either through use of market prices, questionnaires, or observation of previous choices--and to try to use them as a standard for recommending certain public policy choices. In essence, the analysts serves as a pollster for the policymaker. But one of the problems with this approach is that there is no guarantee that what is collected is the public's best or most thoughtful judgments. It is simply assumed that since moral and value

judgments are essentially subjective, the individual's choice must be accepted as rational. But in practice, most peoples' buying habits and value judgments are affected by all kinds of irrational and unconscious factors. Those choices can be shaped by advertising, socialization, irrational fears, propoganda, personal prejudices, and so on. A pollster approach does little to make people conscious of these factors or to encourage more rational and thoughtful judgments on their part.

In contrast, the assumptions contained in normative analysis encourage the analyst to bring forth the best judgments by the public. If it is realized that some degree of rationality in moral and value judgments is actually possible, then the task of the analyst is not merely to try to collect individual opinions, but to encourage and enable those citizens to make the most thoughtful and rational judgments possible. Thus instead of assuming the legitimacy of the individual's priorities, the analyst might actually challenge and even criticise those priorities. The analyst could use the criterion of rational normative judgments to analyze and critique the judgments and lines of argument being made in the public realm. In this sense, the role of the analyst changes from pollster to provocateur; and the public policy analyst becomes a public policy analyst who is interested in making his or her analysis public in order to stimulate more informed and rational public judgments. This is exactly why it is important for the normative policy analyst to take reasoned stands on policy issues and to make those stands as public as

possible, through publications of studies, press releases, talk show appearances, or whatever. This needs to be done, not because these stands should be considered to be the final answer to a particular policy problem, but because such stands are an effective way of stimulating critical public thought on policy issues.

Furthermore, despite its democratic pretensions, the traditional pollster approach to policy analysis does very little to encourage the public to actually become engaged in democratic processes of policymaking. Indeed, the thrust of this approach is to attempt to devise elaborate ways to discern the policy preferences of the public without their ever having to become involved in the political process at all. Now besides the fact that many of these elaborate "polling" techniques are of questionable accuracy, this approach totally neglects the fact that the essence of a healthy democratic system is an intelligent and actively involved public. It also somehow neglects the fact that one of the best ways for the public to express their policy preferences is to do so directly--by becoming actively involved in influencing policymakers and the policymaking process. Thus it seems that if an analyst is truly interested in promoting democratic choices of policies, he or she had best adopt the role of provocateur, and attempt to stimulate more informed and thoughtful public participation in the policymaking process. Let us consider several ways in which this can be done.

Friedman, Commoner, and the National Issues Forum

We needn't consider hypothetical examples, for there are several real example people and programs that have adopted this more publically oriented, provocateur role. On an individual level, analysts like Milton Friedman and Barry Commoner, though they are of very different political persuasion, share a passion for provoking public thought. Both are deeply interested in our pressing policy problems and are committed to specific and sometimes provocative recommendations to solve those problems. Both have written extensively for the public, both in popular magazines like Newsweek and the New Yorker, and in books that have enjoyed large public readerships. To be sure, each of these men speaks to a different public, but they have sought to get their arguments heard by anyone who would listen to them, and have made significant contributions to the public debates over economic, energy, and environmental problems. Not all analysts can become national figures like these two, but it is surely possible for most analysts to become more publically active in their local political areas.

A more institutional example of this approach is the National Issues Forum on energy policy called "Energy and the Way We Live." This ambitious program was carried out during February, March, and April of 1980 by the American Association of Community and Junior Colleges with funding from the National Endowment for the Humanities and the U.S. Department of Energy.² The program was an effort to use the mass media

and public forums to facilitate a "serious and thoughtful examination of past, present, and future dimensions of the energy issue"³ by the citizens in several hundred communities nationwide. In each community, the local newspapers ran a series of 15 weekly newspaper articles on various aspects of our energy problem that were written by a number of different energy policy analysts and experts. On Saturday afternoons, the National Public Radio station in each community ran a series of seven consecutive weekly broadcasts on related energy issues. Communities ran Energy Fairs and tours of local energy facilities and solar houses in conjunction with this media campaign. And finally there was a series of forums or town meetings in which local energy experts, humanists, and city and county energy planners discussed the nature of the energy problem with each other and the public audience who attended. This kind of coordinated effort served as an excellent opportunity for both local and national energy planners and analysts to share their information and recommendations with members of the public.

How successful are such programs? Unfortunately it is very difficult to say; for although these programs are obviously desirable, it is quite difficult to measure their exact impacts. For example, it is hard to have any clear idea of how many people read the articles, or listened to the radio shows, whether they learned anything, or how it will affect their future actions. One of the only significant figures available on this particular project is that approximately 150,000 people took part in the community forums nationwide. This is a figure that some program

officials considered disappointing. Others argued that this poor attendance was due to cases of poor publicity, or the fact that by 1980 many of the public have already been able to familiarize themselves with our energy problems.⁴ In any case, even though results of such programs are difficult to measure, it seems clear that such public education programs can only be a positive contribution to raising the level of critical public understanding of complex issues like energy policy.

A Dialogical Approach to Policy Analysis

It should be emphasized that critical public thought on policy issues is best stimulated not by public education--a one-way transfer of views from the analyst to the public--but by the analyst engaging in give and take dialogue with the public. Critical thought is best cultivated not in individual isolation, but in public, by participating in arguments and discussions. One learns to question one's own theories and assumptions by having other people do so.⁵ One learns to be more thoughtful about one's values by having one's moral inconsistencies pointed out by others. Paulo Friere, the respected Brazilian philosopher/educator has argued that "authentic thinking does not take place in ivory tower isolation, but only in communication . . . Only dialogue, which requires critical thinking, is also capable of generating critical thinking."⁶

This suggests that the role of the analyst is not only to make recommendations, but to engage the public and policymakers in analytical

discussion, to share with them the analytic process itself. This could be called a "dialogical" approach to policy analysis. Such an approach could serve as a viable middle path between the twin pitfalls of merely letting superficial public opinions determine public policy and allowing an intellectual elite to make those decisions in an undemocratic manner. By engaging the public in analytical policy dialogue, the analyst can put his or her expertise and knowledge to good use, but in a manner that is consistent with democratic processes and values. Unfortunately, however, initiating such discussion is not always an easy task. For example, even policymakers, who are often relatively accessible to staff analysts, sometimes prefer only brief written summations of policy studies (Robert MacNamara was fond of saying, "I can read faster than you can talk,"); and most policymakers are not eager to critically discuss their own values and assumptions, especially with analysts they consider their subordinates. It is even more difficult to engage in dialogue with the public at large. The public is not readily accessible to the analyst, and so they must take responsibility to create opportunities for discussion. This may involve things like attending or even helping to organize meetings with civic and community groups. Staff policy analysis should try to take advantage of the public hearings held by most government bodies, and attempt to turn them into an opportunity to engage in dialogue with the public. Let us consider how this could be done.

Creating Interactive Public Hearings

Several important changes would have to be made in the way that public hearings are approached and structured if they are to become situations where true discussion and exchanges with the public can take place.

1. Instead of being attempts at one way communication, with either the staff analysts overwhelming the public with long "educational" presentations or various spokespeople reading long-winded, formal statements, hearings should be made as interactive as possible, with give and take exchanges between the public and policymakers and analysts. In part, this means that the public must have the opportunity to ask policymakers and analysts questions, to identify issues to be discussed, and to be generally treated as equals in these situations.
2. To facilitate discussion, policy proposals should be in non-technical, non-bureaucratic language that is easily understood by the general public. Also, scholars of citizen participation techniques uniformly agree that public participation in helping to analyze and formulate public policies is most effective when the value issues involved in the policy are emphasized.⁸ This suggests that analysts should spend less time on the technical issues involved and more on provoking discussion about the various moral and value judgments imbedded in the various policy

proposals, a topic that people usually feel more comfortable and confident about addressing.

3. Most traditional public hearings are dominated by special interest groups who have both the time and money to take part in these meetings. If the analyst is truly interested in a dialogue with the whole public, or a representative sample of the community, they must take steps to ensure that this is possible. Hearings notices must be advertised where the public is likely to see them, not, as is typically done, by simply inserting a small notice in the legal sections of newspapers. Also, hearings should be held at convenient times and at places that are readily accessible to the public--for example, holding a hearing in the evening at a neighborhood school. Finally, analysts should support programs to give various public groups financial assistance to enable them to prepare for and attend important public hearings.⁷

Those few government agencies which have begun to experiment with this kind of interactive approach have produced some promising results. For example, Barry Checkoway, a perceptive critic of traditional public hearings, has cited an innovative hearing approach used by the Northeastern Illinois Planning Commission in their consideration of the Chicago regional transportation plan.⁹ In order to reach the most public, they conducted the hearing at a local television station. Sixty telephones and tape recorders were staffed by volunteers in the studio to enable viewers to submit testimony and to ask questions which the

planners answered during the broadcast. The commission found, unsurprisingly, that many more citizens expressed their view and suggestions than at any previous hearing, and more importantly, those suggestions resulted in 23 changes in the final plan.

Another promising example is a series of experimental, interactive style hearings that were held by the Virginia Department of Health in order to get citizen input for a proposed state health plan. Before each of the hearings was to take place, the department staff analysts made every attempt to notify people who might be interested in or affected by the proposed policy. They used the mass media, posters, and even direct mailings to announce the meetings. Instead of using the usual courtroom or auditorium-like set up, the staff searched out large accessible rooms with movable tables and chairs--like school cafeterias. At the hearing, the public was presented with written summaries of the policy proposal and was given a brief and lively presentation by staff analysts. The presentation included, among other things, the steps followed in developing the proposal, the key individuals involved in defining the problems and solutions, and the definition of the problem and solution offered by the proposal. Participants were then broken down into small discussion groups (6-8 people) and a discussion of the policy plans was conducted with a staff person acting as a facilitator. Each group analyzed the strengths and weaknesses of the proposals, and developed a prioritized list of suggested modifications which was eventually presented to the whole group. At the end of the hearing, individual questionnaires were handed out and collected, and the staff made itself available for informal discussion.

According to Bryan Tomlinson, Director of the Department of Health Planning, such an innovative approach was not easy to set up.¹⁰ He had to spend much time "selling" this approach to the Plan Development Committee, and finally had to agree to abandon it quickly if any problems were encountered. He also pointed out that such a format requires a staff that is enthusiastic about this kind of participatory experiment. They must be willing to be trained as discussion facilitators, and to stay with this difficult and sometimes frustrating task. But the pay-offs were even greater than expected. As Michael Appleby, a professor at Virginia Polytechnic Institute who was instrumental in designing and implementing this format, observed,

Hearings, which were previously a form of the theatre of cruelty, became productive. Staff analysis of the hearings showed a huge increase in the quantity and quality of comments over traditional hearing formats. The process often involved angry doctors who, upon becoming engaged in the review, decided not to formally present a prepared speech and instead, became involved in a constructive give and take The staff still speaks of the hearings as the best event of the year and recounts the tense moments in attempting a new process.¹¹

Not only were the citizen's comments more detailed and of better quality, but as Tomlinson pointed out, because of face-to-face contact with those citizens, the staff analysts were better able to understand what the comments meant. "Staff people came out with a very strong sense of what the public wanted. One-on-one discussions gave them a better feel for what was being said. They not only got to know a person's view, but why they held it. They got to know where a person was coming from.

No question it was a great leap over the traditional format." Citizen evaluations were equally enthusiastic; they were mostly 8 to 10 on a 10 point scale.

Tomlinson's staff also made a unique attempt to let the public know what happened to their suggestions and criticisms. They drew up a lengthy document which listed each suggestion, how it was ranked by each hearing throughout the state, its rationale, the staff's analysis of the suggested change, and what the Planning Committee finally decided. According to Tomlinson, the process of ranking the suggested changes was one of the most important parts of the experiment, for it proved quite helpful in indicating which of the many suggestions made by citizens were considered most important by most of those at the hearings. This combined with the discussion yielded a very good sense of what changes were crucial to make--and why. Tomlinson's only regret was that these hearings did not take place earlier, so that citizen input could have been used at the very beginning of the development of the policy plan.

An important point here is that not only did this dialogical approach foster a better informed and more involved public, but it also produced a better policy. Over 230 changes were made in the final state health plan as a result of those interactive hearings. We tend to forget that policy analysts can learn much from encounters with the public. But Bryan Tomlinson stresses that the interactive hearings "were a very educational experience for the staff." As Paulo Freire maintains, one person can only have a partial view of reality; and analysts, like all

specialists, tend to become isolated and narrowly focused on their areas of expertise. Dialogue with the public can perform the vital service of pulling the analyst out of that narrow perspective, it can sensitize them to issues, perspectives, and arguments that they may not have considered seriously. To give only one example, in many cases it is the public--those who actually live with the effects of public policies--who are the experts on how useful or effective those politics really are. As one of the earliest policy analysts, Aristotle, argued, "[a house] is something which can be understood by others beside the builder: indeed the user of the house--or in other words the householder--will judge it even better than he does. In the same way, a pilot will judge a rudder better than a shipwright does: and the diner--not the cook--will be the best judge of the feast."¹² In other words, policy analysts would be negligent in their duty to produce the best public policies if they did not take advantage of the unique knowledge that can be gotten from direct encounters with the public at large.

Integrative Policy Analysis

Interactive hearings are basically a way of including more of the public in the very process of policy analysis and planning; and the reasoning behind this that the more input and dialogue we have in this process, the more it will enhance that chance of producing more rational public policies. To take off on Schattschneider's earlier comment:

democracy may be the best political system for making sure that we are right--in the sense that policy rationality is enhanced by free and extensive democratic dialogue.

But a dialogical approach to policy analysis may also prove helpful in improving the effectiveness of public policies in another way as well. One of the main obstacles to the solution of some of our current social problems is not the lack of good policy studies and recommendations, but the substantial gap that exists today between the policymakers and the public. Even when policymakers are democratically elected, there is no guarantee that their policy decisions will actually reflect the will of the public, and in those cases where it does not, public resistance can inhibit public policies. As we say in Chapter 4, the temptation in these situations is to resort to methods of manipulation in an effort to impose the "right" policy upon the public. Policymakers and analysts seek the correct independent variable which will produce the desired public behavior. But efforts to manipulate or control the public often only increase the alienation between citizens and lawmakers. Dialogical policy analysis may offer an alternative to this. Interactive public hearings, for example, could help to ensure at least some public input before policy decisions are made, and this could enhance the chances that these policies will gain public acceptance and support. This is especially likely if citizen input is present from the very beginnings of the policy planning process.

This approach is a good example of what "policy as promising" could look like. "Policy as promising" was a notion based on the ideas

of Hannah Arendt that was briefly discussed in Chapter 4 as an alternative to "policy as control." This alternative posited that truly effective public policies were not those which were imposed on the public from the top-down, but those which embodied the public's understanding and agreement as to the correct policy action to take in a given situation. Activities like interactive hearings are one mechanism by which policies can begin to be designed by those who are ultimately responsible for living them out--the public.

Of course, one of the main problems with the viability of this approach is that we don't currently have a public in the United States; we have many different publics, many different interest groups which are often in conflict. Indeed, these basic disagreements between these publics are probably a much more serious obstacle to effective policies than the alienation between policymakers and the public. We live in a deeply divided society, where serious conflicts and stalemates between interests groups can prevent the development of coherent policy solutions to our social problems. And even if rational plans are developed, powerful interest groups can block their passage, or their effective implementation. In a society where these kinds of conflicts and deadlocks exist, even the most thorough and thoughtful policy analyses, even the best normative/non-positivist analyses are insufficient, because the central problem is not an analytical or intellectual one--it is a political problem.

Standard forms of policy analysis are of little help in these conflictual situations, for they too only attempt intellectual solutions.

For example, analyses based on economic theory usually take competition and conflict for granted, and merely attempt to calculate the most efficient policy--the one which best maximizes the satisfaction of the conflicting groups. Given a conflict between coal operators and environmentalists, for example, the rational economic approach would be to attempt to split the difference and discover that policy produces the most coal and the most environmental protection. But often it does little good to simply calculate the "best" policy, if the basic conflict is left intact. For, in practice, the result is that the conflicting parties usually continue to inhibit policy agreement in the legislative branches, and to block implementation through court challenges, intentional misreadings of the policy, and so on. And this in fact has been the case in coal policy, with both environmentalists and coal companies adopting obstructionist tactics against policies they oppose.

However, a dialogical approach to policy analysis could begin to provide a way around these kinds of problems. Instead of seeing their role as being purely intellectual, policy analysts could begin to get involved in the political conflicts and negotiations between competing interests groups. And instead of simply assuming that competing values are purely subjective and must be taken as given, the analyst can attempt through rational argument and persuasion to change the value positions of the conflicting parties and bring them more into harmony. It is certainly possible, for example, that by engaging in authentic, critical dialogue, conflicting parties could become aware of unconscious

assumptions or disguised motives which are irrational or questionable. Or they could be made aware of previously unknown rationalities in opponents positions. After all, rationality rarely inhabits only one side of an argument. Dialogue between parties could also help to eliminate distortions, or to reveal previously hidden common concerns. All of these possible effects of dialogue could produce changes in opponents positions and bring them closer together in terms of values and policy proposals. Thus, by encouraging reasoned dialogue not only between analysts and the public, but among differing segments of the public as well, the analyst could help to undermine the conflicts which are interfering with effective policy actions.

This dialogical approach is similar to what Paul Diesing has termed an "integrative approach" to social problems. In his book, Reason in Society.¹³ Diesing argues, like many non-positivist theorists, that all societies require shared values and consistent beliefs to exist and prosper. Persistent conflicts over beliefs and values weaken and destabilize societies and lead to continuing deadlocks and stalemates which inhibit effective social action. In such situations, he argues, "social rationality" dictates that an attempt be made to mend those social splits and to integrate divergent value positions. In the integrative approach, "the competing desires and habits of which all problematic situations are composed" are not simply taken as given, but are perceived as "symptoms of a . . . social system in conflict." One attempts to resolve such conflicts by an "integrative process in which the desires are changed rather

than satisfied."¹⁴ And according to Diesing, an essential part of this integrative approach is the establishment of "discussion relationships--talking and listening, asking questions and answering them, suggesting courses of action and adopting them."¹⁵

Admittedly, this dialogical/integrative approach to policy problems could easily be labeled optimistic, or even idealistic in terms of the amount of faith it puts in the human capacity to settle conflicts through reason. Obviously, some conflicts are too basic to be solved in this way. And Diesing is careful to point out that even when this approach is effective, it is a laborious and time-consuming process.¹⁶ It could take years for entrenched positions to change to any degree. And yet despite these problems, I would argue that we must have faith in the potentialities of human reason--not a naive faith, but a reasoned faith. A reasoned faith is one based upon the notion of self-fulfilling prophecy that was discussed earlier. The success or failure of rational discussion is in part a matter of self-fulfilling prophecy--it depends partially on the beliefs that we bring to it. If we assume, like some, the inevitability of conflicting values, discussion has little chance of success. Conversely, if we enter into discussion with some faith in our ability to resolve those conflicts, our chances for success are heightened. Faith in our ability to reason together certainly does not ensure success, but it is a necessary precondition. In this sense, such faith is not simply a naive hope, but a deliberate political act. In any case, we need not base our evaluation

of the potentials of dialogical analysis merely on theory, there are some concrete examples of this approach which can be examined.

Dialogue in Practice: Environmental Mediation

One example of a dialogical/integrative approach is the relatively new phenomena of environmental mediators. These mediators enter into situations of conflict over environmental standards and attempt to negotiate a compromise policy that the various parties can agree upon. One successful example of this approach involved the attempts of the New England Electric's Brayton Point, Mass., power plant to convert from oil to coal. The Department of Energy was insisting on the conversion and also requiring the installation of costly scrubbers needed to prevent an increase in air pollution, a requirement also endorsed by area environmentalists. The utility insisted it could not afford the scrubbers. The conflict intensified until David O'Connor, an environmental mediator, convinced all sides to come together to exchange information. One year and eighteen meetings later a compromise settlement was accepted by all parties. It was agreed to allow the utility to install less costly environmental equipment that would keep emission levels comparable to that of an oil fired facility. Harold Keohane, a regional DOE official estimated that the conversion would lower fuel costs by \$20 million a year, while "nothing was given away on the environment."¹⁷

A more ambitious example of this approach was a project which attempted to bring together environmentalists and coal companies on a

national level. Needless to say, coal policy has been one of the most controversial and frustrating areas of our national energy plan. On the one hand we have enormous domestic potential in coal--some say over 300 years worth at current consumption rates. Exploiting these reserves could mean decreased dependence on foreign oil and large profits for those companies involved in coal production. On the other hand, there are the numerous health and environmental impacts that would come from increased coal use. This is a classic policy problem of conflicting values and interests--with the coal companies and utilities on one side and the environmentalist on the other. And as might be expected, the fight over coal policy has been characterized by vilification, ad hominem attacks, and oversimplification by both sides. The intensity of the feelings in this situation would seem to make it one of the least promising for a dialogical/integrative approach to analysis of these issues.

And yet an undertaking called the National Coal Policy Project¹⁸ demonstrates how useful this approach can be even in difficult areas like coal. The project, jointly headed by the corporate energy manager for Dow Chemical Company and a former president of the Sierra Club, was a yearlong series of meetings between leading conservationists and top and middle-rank executives from coal-mining and coal-consuming industries. Many of the participants themselves were cynical about the possible worth

of such encounters, and more than a few expressed skepticism when it was announced that the "rule of reason" was to be the principle governing the approach to resolving the disagreements. For the purposes of the project, this rule of reason consisted of the following guidelines:¹⁹

1. All pertinent facts should be shared.
2. There should be no misleading by the use of unfair tricks.
3. Each other's motives should not be lightly impugned.
4. Dogmatism should be avoided.
5. Complex concepts should be simplified for communication to lay persons.
6. Subjective considerations should be identified and isolated.
7. Distinctions should be clearly drawn between facts and value judgments.

For antagonists used to battling each other in no-holds barred courtroom fights, this kind of "reasonable" approach would be a novel one indeed.

The project was divided into five task forces, each responsible for a different area of interest: Mining, Coal Transportation, Air Pollution, Fuel Utilization and Conservation, and Energy Pricing. In addition, an Ad Hoc Task Force was established to deal with the issues of emission charges which overlapped several of the other task forces' areas of interest. Each of these groups was composed of equal numbers of environmental and industrial members. Likewise, each group had an environmental and industrial co-chairman. In this particular experiment, there were no separate, neutral mediators which ran the meetings.

As the participants settled into a series of meetings, punctuated by actual visits to coal operations, they found much to their surprise that there were numerous areas of policy in which agreement could be reached. In the projects draft report, released in February of 1978, the groups professed "80 percent agreement," and cited a list of literally hundreds of specific policy recommendations on which they concurred.²⁰ Both sides made serious modifications in previously held positions. Industry representatives, for example, accepted the principle that several coal bearing regions of the U.S. should be placed virtually off-limits to mining operations. These areas included scenic areas in Appalachia, valuable farm land in the Midwest, difficult to restore arid areas in the Southwest, and areas with groundwater aquifers or springs that would be disrupted by mining. For their part, environmentalists made a surprising retreat from their long standing insistence that every new coal-burning plant install the "best available technology" to reduce emissions, agreeing with industry that some flexibility in this requirement could help to encourage the development and use of more experimental and cheaper ways of meeting emission standards. Although at the end of the project, there remained several areas of basic disagreement, virtually all the participants expressed astonishment at the degree of their success.

Assessing the Success of Dialogue

Despite this kind of enthusiasm by the project participants, this particular project has been less than a success in real policy terms. Interviews with project directors and participants reveal that few of

the mutually agreed upon policy recommendations have been implemented or even seriously considered by Congressional policymakers. When asked what the real policy effects of this project were, the typical responses were, "Not much," "Not enough," "Not very many," and "You really go for the jugular, don't you."²¹ This lack of impact seems largely due to the fact that many of the recommendations have failed to get the support of the powerful coal and electric industry trade organizations--like the Edison Electric Institute. Without such backing, the recommendations have little chance of being enacted into law.²² Also, some environmental groups, like the Environmental Policy Center, have also been critical of the projects recommendations, arguing that few "real" environmentalists took part in the project and that the recommendations represent a sell-out to the industries involved.²³ Thus in terms of concrete policy pay-offs, this particular attempt at dialogue might be called a failure.

But we should not be too quick to label such "failed" projects as a waste of time. As Hannah Pitkin has argued, just because attempts at dialogue do not produce agreements which effectively deal with the problems being addressed does not mean that they are total failures. Her analysis, again informed by the work of Wittgenstein, of the nature of moral and political dialogue suggest that there are several purposes served by dialogue besides that of reaching possible agreements. She points out, for example, that one of the benefits of dialogue is that it encourages antagonists to see each other more as human beings. As we

saw in Chapter 4, there is a real tendency in modern, large-scale politics to view other human beings as abstractions, as objects to be manipulated. But dialogical encounters can begin to undermine this tendency by actually bringing people together in face-to-face situations. It is much more difficult to see people as objects or abstractions when one is having prolonged conversations with them. As Pitkin argues, the whole activity of persuasion tends to require one to view the other person as a human being.

Moral discourse is precisely the kind of exchange which Martin Buber calls an "I-Thou" relationship, in which the other is addressed and conceived of as a human being, a person basically like oneself. It is a relationship that requires mutual identification and empathy. Thus, one can say following Hannah Arendt, that moral discourse is a mode "in which human beings appear to each other, not indeed as physical objects, but qua men."²⁴

Again, this kind of humanization is not a guaranteed product of a dialogue--but again, the experience of many in the National Coal Policy Project demonstrated that it is possible for adversaries to move from scorn to mutual respect. Journalist Tom Alexander relates an example of one such experience:

At first, the industrial members of the mining task force were horrified when they heard that one of the members picked for the environmental side was Robert Curry, professor of geology at the University of Montana. In the past, Curry's biting testimony before courts and hearings had often lacerated the technical competence and the motives of his industrial opponents. But by the time the mining task force had completed its first field trip through the lignite fields of the Gulf States, Curry's expertise and evenhanded attitude had earned the industry men's profound respect. "If I wanted to open a mine in the West," says lawyer John Corcoran, co-chairman of the mining task force and a former board chairman of Consolidated Coal, "Bob Curry is the first man I would go to about the environmental problems."²⁵

Pitkin also points out that one of the main purposes of dialogue is to increase understanding, even if final agreement cannot be reached. "The point of moral arguments," she explains, "is not agreement on a conclusion, but successful clarification of two people's positions vis-a-vis each other. Its function is to make the positions of the various antagonists clear--to themselves and to others."²⁶ Thus one of the benefits of even "failed" dialogues is that they can help both sides better understand their own assumptions, values, and arguments, as well as those of the opposition. At times, this dialogue may only intensify disagreement, as when the parties discover more basic or previously obscured reasons to disagree. But even this helps in the sense that the conflict will now be a more clear and straightforward one--not one based on misconceptions or distortions of other people's positions. For example, it could be that an environmentalist going into a discussion with a coal company operator might believe that much of the problem with coal companies has to do with the insensitivity of their owners and managers. They may be seen as greedy corporate ogres who almost enjoy despoiling the environment. But after several encounters the environmentalist would most likely see that these managers are people much like himself and that they are not ogres and are not totally insensitive to the needs of the environment; but rather, that it is the requirements of their business which encourage them to avoid their environmental responsibilities. Being profit-making enterprises, it is simply rational for them to ignore environmental requirements that

would lower their profits and thus threaten their ability to compete and survive in the market-place. Thus the environmentalist can realize that the problem here is not so much a function of the individual people involved, but is a function of the structure of the industry itself. This may mean that the problem is even more basic and intractable than previously thought, but at least now the real nature of the problem and disagreement is clear. Thus one need not be naively enthusiastic about the prospects of possible agreement to pursue this dialogical approach, for even if one believes that most policy disagreements are too basic to be solved by rational dialogue, dialogue can still be seen as a way to make those conflicts more well-defined. Dialogue may not be able to eliminate political fights, but it can make them better ones.

The Policy Analyst as a Political Actor

It could be argued that some of these activities implied by a dialogical approach cross the line between policy analysis and political activity; that an effort at integrative analysis, for example, puts the analyst more in the role of a political actor intervening in the process of political disputes than that of a neutral analyst. This is true--but I have contended all along that policy analysis is not an apolitical, intellectual activity, but a political activity with real political effects. All this dialogical approach does is to make this more explicit, and seek to delineate how the analysts can act

politically to enhance the rationality and morality of public policies. This alternative perspective sheds the illusion of apoliticism and not only acknowledges but embraces the fact that in order to ensure the production of the best public policies, the policy analyst must sometimes become a political actor. Much of this chapter has been concerned with showing that a new, more humanistic approach to public policy analysis involves more than using different kinds of theoretical assumptions and writing different kinds of policy reports--it also involves redefining how an analyst acts in the political system. A commitment to more rational and moral public policies is also necessarily a commitment to certain kinds of political action. In particular, it implies a commitment to the creation of the kinds of genuine dialogue and discourse which fosters more policy rationality in the political system. And this commitment in dialogue in turn implies a commitment to the creation of the kind of democratic and participatory political system in which that kind of interaction is maximized.

These kinds of commitments mean that the policy analyst must sometimes become an advocate of change in the political system. For example, changes in our political system may be necessary to ensure that fair and open policy discourse takes place, to ensure that policy debates are not structured in a biased way or that certain participants are excluded arbitrarily. While few people in the United States are actively prevented from taking part in policy debates, the structure of some of the institutions in which debate takes place can work to indirectly

favor certain speakers and exclude others. In particular, the mass media is structured in such a way that access to it is very directly related to financial clout. Newspapers, television, and radio constitute the central means by which policy issues are debated in public--but the ability to take out advertisements in these media which promote and argue certain policy positions is directly a function of the financial resources of the particular interest group. This means that policy debate can often be dominated by well-financed interest groups, which should be a matter of concern for analysts committed to a fair and rational dialogue on the important policy decisions that are facing us.

This kind of defacto bias in the media can have real effects in the policy. Consider the debate which took place over Proposition 5 in the 1978 California election. That proposition attempted to ban smoking in most public areas. Polls taken in August, two months before the election, revealed that the public favored the measure, 58% to 38%. Sensing a threat to their interests, the big five tobacco companies (Brown & Williamson, Liggett and Myers, Lorrillard, Phillip Morris, and R.J. Reynolds) poured nearly \$5.6 million into a massive and high-powered media campaign against the measure. (This was more money than Governor Brown and his opponent spent together on their campaigns.) Public groups supporting the proposition could only raise one-tenth as much, and spent \$512,000. By November, the polls revealed a voter switch to 56%-42% against the measure, which was eventually defeated in the election.²⁷ Establishing causality is obviously difficult in

these situations, but undoubtedly some of this turn-around can be attributed to the massive political advertising campaign by the tobacco interests, and the one-sided policy debate it produced. Thus if an analyst is concerned with promoting more open and rational policy debate, he or she must inevitably come face-to-face with a number of current political issues--namely the ability of wealthy interest groups to dominate public policy debates, and to exert an undue amount of power in the policymaking process in general. To ensure fair debate, the policy analyst must logically get politically involved in eliminating at least the inequalities that are present in our present policy discourse system. Since little can be done on an individual level, fostering these changes would probably require the analyst to become allied with the political groups that share these concerns--for example, citizen groups who are promoting equal time provisions for political ads, and other solutions to this problem.

There are other political issues which also naturally fall into the analyst's area of concern. For instance, an analyst committed to more dialogical and participatory forms of policy planning and analysis could quickly become involved in the current campaign for more citizen participation in the public policy process--especially on the part of those poor and powerless groups who have been traditionally disenfranchised from the planning process. In particular, an analyst advocating more participatory policy analysis might also have to advocate more participatory forms of making policy decisions. Participatory

analysis means little by itself if the participants have no real ability to effect policy decisions. There would be little reason for citizens to devote their time and energy to a dialogical process if they have no real power to ensure that their contributions are taken into account. Indeed, it could be argued that without any access to real power, many of the promising participatory approaches to analysis and planning that have been discussed here are largely a waste of time--or even worse, merely a way of co-opting those citizens who take part in them. An interactive hearing for example might only function to give the illusion of participation, while policy decisions are actually largely structured by the influence of powerful special interest groups working behind the scenes in the policymaking process.

As Sherry Arnstein pointed out in her new classic study of public participation in policy planning, most forms of participation are routinely used to either propogandize, placate, or co-opt the public.²⁸ Hearings are often used purely as ways to further the plans of the agencies which hold them, either by using them as a way to defuse public discontent by allowing criticisms to be aired in a harmless way, or as a kind of tokenism which gives the appearance that the agency has taken into account public desires when in fact the policies had already largely been decided. A specific example of an attempt to use participatory techniques to further agency ends can be found in an 1978 Department of Energy Task Force report on the problem of nuclear waste disposal. Waste disposal is one of the most difficult problems facing the nuclear industry. There have been technical difficulties with finding a suitable

storage method, but also there have been serious political obstacles as well. In particular, there has been stiff public resistance in various states against the idea of making their town or state the nation's nuclear dumping ground. Several members of Congress have supported legislation that would require state referendums before disposal sights were approved but the DOE has been reluctant to support such measures. But curiously enough, the task force report emphasized the importance of holding public hearings in areas being considered as disposal sites. The reasoning became clear however when the director of the task force said that he thought the government could convince the people near those waste disposal sites that it would be safe by discussing concerns with interested citizen groups in the area.²⁹ It is difficult of course to assess the motives of policymakers in the DOE, but it seems reasonable to conclude that some sought to use public hearings to diffuse dissent on their waste disposal plans, and to create an opportunity for government technical experts to come into a local area and "educate" the citizens about how safe these disposal sights really are.

In her study, Arnstein concludes that an interest in public participation in policy planning must also logically lead to a concern over how political power is distributed. As she explains, "without the redistribution of power, participation is an empty and frustrating process for the powerless. It allows power holders to claim that all sides were considered when only a few will benefit."³⁰ She argues that participation can only be meaningful when it takes the form of direct citizen

participation in making policy decisions, as in the case of community-controlled schools and neighborhood-controlled city programs. This notion that the concerned policy analyst must become involved in questioning the nature and structure of political power in our society is also supported by the work of Roger Kasperson and Myrna Breitbart. In their essay, "Participation, Decentralization, and Advocacy Planning,"³¹ they conclude that analysts must become more concerned with eradicating the large inequalities in economic and political power that bias the making of public policy decisions in our country. They also suggest that we begin to cautiously explore the benefits of decentralized governmental structures--structures which are accessible and allow citizens to be more directly involved in analyzing and deciding upon the policies which affect their lives. One move in this direction might be the creation of more of the small publicly-owned utility systems that were discussed in the prior chapter. Instead of citizen interests being represented by remote, politically appointed state utility commissioners, or by citizen groups which can only testify at rate hearings, a small co-operatively-owned or municipally-owned utility where the directors were directly elected from the ranks of its customers would offer a much more direct avenue of public control over these important institutions.

As Kasperson and Breitbart point out, analysts who pursue these kind of political changes are not in for an easy time; and this is especially true for analysts who work within government agencies.

Analysts will find themselves going against the ingrained values and procedures of the centralized, bureaucratic institutions in which they find themselves. Commenting on the uncomfortable position that advocates of public participation sometimes find themselves in, Kasperson and Breitbart observe that

Program development in government stresses efficiency, program results, minimization of manpower and resource expenditures, and rapid decision-making. But any genuine participation process is, at least in the short-run, inefficient, costly, time-consuming, and uncertain. Effective participation calls for a commitment of sufficient depth to override these other values.³²

Admittedly, this kind of commitment is difficult to maintain in a hostile environment, and that is one reason why it is important to link up with people and groups both within and outside of the government which can provide aid and support for these kinds of changes. And even though efforts to change the nature of the policy planning and policy-making process can be a laborious and frustrating endeavor, the experience of people like Bryan Tomlinson and the staff of the Virginia Board of Health Planning shows how even small innovations can be quite exciting and very rewarding.

Footnotes

¹Two Hundred Million Americans in Search of a Government (New York: Holt, Rinehart and Winston, 1969), p. 53.

²For more information on this program, contact Diane Eisenberg, at the AACJC office in Washington D.C.

³"Energy and the Way We Live," (Washington D.C.: American Association of Community and Junior Colleges, 1979).

⁴Expressions of disappointment and explanations for failure taken from interviews with two of the projects local Massachusetts coordinators, Duane Dale and Candace Julyan, conducted in May of 1980.

⁵For development of this point, see the work of the interpretive theorist, Stuart Hampshire, especially his Thought and Action, (London: Chatto and Windus, 1959).

⁶Paulo Freire, Pedagogy of the Oppressed (New York: Seabury Press, 1970), pp. 64, 81.

⁷Many of the following points were taken from an article by Barry Checkoway, "Public Hearings are Not Enough," Citizen Participation Vol. 1, No. 5 (May/June 1980), pp. 6-8.

⁸This point was taken from "Public Action and Social Change: A Report on the Proceedings of a Conference on Citizen Participation in Public Policy Formulation." A copy of this can be obtained by writing to Greg Yates in the President's Office, Box B, University of Alabama, University, AL 35401. This conference concluded among other things that "citizen participation can become more effective, even concerning the complex issues, if input about the values underlying public policy decisions is the focus of the participation activities."

⁹Checkoway, p. 7.

¹⁰The comments of Tomlinson were taken from an interview with him conducted on May 30, 1980.

¹¹This comment as well as the description of the hearing process were taken from Michael Appleby, "An Interactive Public Hearing," Citizen Participation, Vol. 1, No. 2 (Nov/Dec 1979), pp. 8-10.

¹²Quoted in Roger Kasperson and Myrna Breitbart, Participation, Decentralization, and Advocacy Planning, Commission on College Geography Resource Paper No. 25 (Washington D.C.: Association of American Geographers, 1974), p. 14.

¹³Paul Diesing, Reason in Society (Urbana, Illinois: University of Illinois Press, 1962.)

¹⁴Ibid., p. 114.

¹⁵Ibid., p. 171.

¹⁶Ibid., p. 115.

¹⁷This brief account adapted from an article on environmental mediators in Newsweek, March 1980, p. 79.

¹⁸For a description of this project see "National Coal Policy Project" Hearings Before the Subcommittee on Energy and Power of the Committee on Interstate and Foreign Commerce, House of Representatives, Ninety-Fifth Congress, Serial No. 95-138. (Washington, D.C.: U.S. Government Printing Office, 1978) Also see the report of the project called "Where We Agree: Report of the National Coal Policy Project (Washington D.C.: Center for Strategic and International Studies, Georgetown University, 1978).

¹⁹Congressional Hearings, p. 91.

²⁰"Where We Agree".

²¹These comments taken from interviews with James Tripp of the Environmental Defense Fund, a participant in the project; and with J. Charles Curran, assistant director of the project, during May of 1980.

²²This point was made by Charles Curran. He also pointed out that some environmental groups were obstructionist as well.

²³These comments were based on an interview with Dan Salzman of the Environmental Policy Center conducted in May of 1980.

²⁴Hannah Fenichel Pitken, Wittgenstein and Justice (Berkely: University of California Press, 1972), p. 155.

²⁵Tom Alexander, "A Promising Try at Environmental Detente for Coal," Fortune, Feb. 13, 1978, pp. 101-102.

²⁶Pitkin, p. 153.

²⁷This description was based on information from the New York Times October 14, 1978, p. 24; and November 5, 1978, p. 37.

²⁸Sherry Arnstein, "A Ladder of Citizen Participation," Journal of the American Institute of Planners, Vol. 35, No. 4, pp. 216-224.

²⁹Information on this report and the director's comments taken from Congressional Quarterly Inc., Energy Policy (Washington, D.C.: Congressional Quarterly Inc., 1979), p. 121.

³⁰Arnstein, p. 218.

³¹Kasperson and Breitbart, see especially their conclusions in the section entitled "Reconstruction."

³²Ibid., p. 24.

C H A P T E R X I I

ENERGY GROWTH AND HUMANISTIC ANALYSIS

Up to this point, my discussion of humanistic policy analysis has been largely theoretical, concentrating primarily on developing the methodological, philosophical, and political justifications for such an approach. While this development was important, the question remains of just how practical and useful this method of analysis can be in illuminating the policy issues which face us as a nation. I believe that the approach can be extremely useful, and I will attempt to demonstrate this in this chapter. To do this, I will again turn to the issue of energy growth, an issue touched upon repeatedly throughout this work. This time, however, the focus will be primarily upon the substance of that issue, and on what new insights into this subject a humanistic form of analysis has to offer. The choice of this policy is a timely one, for the issue of energy growth is again high on the national policy agenda. The cornerstone of the Reagan administration's energy plan is the assumption that vigorous energy growth is the basic solution to our energy problem.

In my consideration of this issues, I will first give a brief account of the history of the debate over energy growth, and then describe the current state of this debate. The rest of the chapter will explore how the various techniques of humanistic policy analysis

-- in particular moral analysis and multiple-scenario analysis-- can shed light on this important issue. It will be shown that a humanistic approach can play a vital role in encouraging a more serious and democratic debate in this controversial policy area.

The Early Debate Over Energy Growth

Before the early 1970's, there was no debate over the necessity and desirability of energy growth. As noted in Chapter VII, virtually all energy and economic analysts assumed that energy production must continue to expand in order to meet the requirements of an ever-growing economy. There was believed to be an "iron-link" between energy and economic growth. Even as late as 1976, the Chase Manhattan Bank's Energy Report confidently claimed that "there is no evidence that indicates that the long-lasting, consistent relationship between energy use and GNP will change in the future. There is no sound, proven basis for believing a billion dollars of GNP can be generated with less energy in the future."¹ Thus it seemed that one could not question energy growth without also questioning economic growth, and there was little sense in that.

Throughout the 1970's the energy industry seized upon this assumed one-to-one relationship between energy and economic growth to promote increased energy production and the weakening of environmental constraints interfering with this development. The effectiveness of this line of argument was heightened by the declining state of the economy during that decade. Particular emphasis was placed on the issue of unemployment, and the prospect for there being loss of jobs if new,

reliable energy supplies were not developed quickly. A report from the Westinghouse Energy Office illustrated this aspect of the industry's argument.² The report consisted almost entirely of quotes noting the unemployment caused by the energy shortages of 1973 and 1977.

The sudden curtailment of the energy supply in the fall of 1973 (OPEC oil embargo) resulted in unemployment of approximately 500,000 people.

U.S. News and World Report
February, 1977

...a 2% shortfall in energy production could mean the loss of 900,000 jobs.

Rep. Mike McCormack
U.S. House of Representatives³

Based on this evidence, the report concluded that there is a provable, one-to-one correlation between energy growth and job growth. Again they quoted Representative McCormack: "The phenomenal correlation between energy consumption and employment cannot be ignored with impunity."⁴ And the report included the figure below to prove its point.

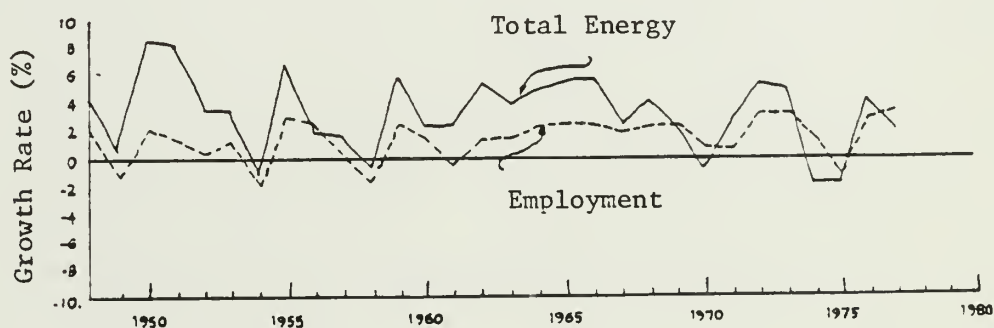


Fig. 2. Annual Growth: U.S. Energy Consumption and Employment.⁵

However, throughout the 1970's, these arguments met with increasing skepticism from independent energy analysts. One of the first major studies to cast doubt on the iron-link assumption was the Ford Foundation

report, A Time to Choose, released in 1974.⁶ A good example of the multiple-scenario approach described in Chapter VIII, this report was able to construct a plausible Zero Energy Growth scenario. The scenario demonstrated that while conservation through curtailment might cost jobs, conservation through increased efficiency of energy use would not harm employment at all. By using increased energy efficiency and investment in less energy intensive sectors of the economy, the United States could sustain economic and job growth and still maintain energy consumption at a constant level. This report with its scenario approach, was very instrumental in beginning to generate a true debate over the necessity of continued energy growth.

This notion that the link between energy growth and economic growth was more flexible than once assumed became increasingly popular among non-industry analysts during the 1970's. Analysts from as diverse perspectives as environmentalist Amory Lovins and the Harvard Business School became equally fond of comparing American energy consumption per unit of GNP to that of other advanced industrial countries.⁷ As the Harvard study pointed out, "West Germany consumed less than three quarters as much energy for each dollar of gross national product as the United States, and France only half."⁸ The study went on to conclude that there was so much massive waste and inefficiency in the U.S. energy system, that "if the U.S. were to make a serious commitment to conservation, it might well consume 30-40% less energy than it now does, and still enjoy the same or an even higher standard of living."⁹

By the late seventies, the arguments for conservation and slower energy growth had begun to make serious inroads in to the public policy

debate over energy. Even energy industry analysts began to admit that the iron-link was probably more flexible than previously thought. "We have found we can decouple the two," announced Shell U.S.A. in a 1978 report.¹⁰ And indeed, there seemed to be empirical evidence which demonstrated an unprecedented reduction in the growing demand for oil and electricity. During the 1970's the average GNP increased by 2.9%, but energy consumption only grew by 1.9% each year; and between 1978 and 1979, U.S. energy production actually declined slightly from 78.15 quades (quadrillion BTU) to 78.02 quads, while GNP rose by 2.3%." The 1977 Carter administration energy plan also formally acknowledged the possibility of decoupling energy and economic growth, stating that "there is no fixed relationship between energy and GNP."¹² Unfortunately, despite this encouraging rhetoric, there was no fundamental change in policy away from the emphasis on energy growth. In spite of the Carter administration talk of conservation, the details of his energy plan actually called for a 26% increase in energy consumption by 1985--most of which was to be met with increased development of coal and nuclear power. The plan advocated only a 2-3% energy savings due to conservation measures, far less than the potential cited in studies like that of the Harvard Business School.¹³ However, despite this disappointing lack of action, it was clear that at the end of the decade of the seventies, conservation and slow-energy growth were at least present on the public agenda.

The Current, Stalled Debate

In contrast to the lively debate that took place in the late 1970's over the question of energy growth, the 1980's began as a decade in which this debate would be sacrificed in an attempt to re-commit the U.S. to a policy of all-out energy growth. The coming of the Reagan administration heralded the revival of the notion of a strong link between energy and economic growth. To be sure, no one is returning to the discredited iron-link hypothesis, but it is argued by administration analysts that there is still a significant link between energy and economic growth. It is acknowledged that some conservation can be helpful, but it is thought that conservation can only loosen the link between energy and the economy, not decouple it. In fact, energy policy spokesmen for the administration, like Secretary of Energy James Edwards, have argued that too much conservation will only threaten the prospects for economic recovery. As he stated at his appointment hearing before the Senate, "I wish we could conserve ourselves into full employment in this country, but I don't believe we can."¹⁴ This stance is a reflection of Reagan's contention during the 1980 campaign that "arbitrary reductions in America's energy use would slow economic growth."¹⁵

The Reagan administration has done away with the Carter's misleading rhetoric of conservation and has explicitly embraced increasing supplies as the only basic answer to our energy problems. Among his policy proposals has been the abolition of the Solar and Conservation Bank, and the cutting of the government media campaign encouraging

conservation by \$66 million in 1981 and \$210 million in 1982. Reagan has also encouraged increased use of coal and nuclear power for electricity generation. In order to increase exploration for more oil and natural gas resources, Reagan has decontrolled oil, opened up more federal lands to development, and allowed increased off-shore drilling.

By hooking up energy policy to the train of economic recovery and growth (if only loosely), the Reagan administration has succeeded in leaving conservationists sitting at the station. This strategy has been very effective in limiting the scope of the debate over energy policy. Opponents to this massive push for energy growth find that their reluctance to endorse energy growth can be perceived as being only weakly committed to economic recovery -- and economic recovery is currently the highest national priority. Any talk of serious conservation or environmental protection is likely to be quickly attacked as undermining the possibility of creating more jobs and a healthy economy. Thus as long as energy remains coupled to the all important goal of economic recovery, it seems that the debate can hardly be more than minimal.

The Reagan administration has not only been successful in putting ideological limits on the energy debate, it has also attempted to create an institutional environment that will inhibit public discussion over energy growth policies. It has taken several steps to ensure that parts of the energy policy-making structure are redesigned in order to discourage true democratic debate over policies. For example, in early 1981 the Nuclear Regulatory Commission proposed regulations that would have significantly reduced the ability of the

general public to gather the information they need to participate effectively in nuclear plant liscensing hearings.¹⁶ Before, individuals or groups involved in liscensing proceedings could require the NRC staff to produce documents or answer questions relating to these cases. This process, called "discovery," permitted the public to gather detailed information about a power plant before a formal hearing opens. But under the NRC's proposal, the formal discovery process would have been abolished, and the NRC staff would have decided whether to respond to inquiries for information or documents. The NRC would have furnished the information on a voluntary basis "wherever practicable." Richard Pollack, director of the Critical Mass Energy Project, noted at the time that without the discovery process, citizens groups would be unable to get the technical information need to prepare for a hearing. "Basically, they will take away the tools citizens have in a democratic proceeding."¹⁷

Besides trying to eliminate this discovery process, the NRC requested at the same time the authority to issue interim operating liscenses for nuclear plants before hearings on safety requirements have been completed.¹⁸ These kinds of policies represent attempts by the Reagan administration to further limit the debate taking place over the issue of energy growth by circumventing democratic procedures. At best, such efforts can have a chilling effect on public discussion of this important policy issues; at worst, they constitute a disturbing threat to the viability of democracy and free debate in the 1980's.

Applying Humanistic Analysis

How can one begin to question the pro-growth vision that dominates energy policy? How can one begin to promote a more vigorous democratic debate of the full range of options open to the United States? Unfortunately, traditional positivistic analysis offers few ready answers to these questions. Indeed, there is little in positivistic analysis that is incompatible with the current, non-debate in energy policy. As I pointed out in Chapter II, most policy analysis in energy has traditionally focused on examining the various means to encourage energy-growth. Little attention is paid in value-free, positivistic analysis to questioning the end of energy growth itself. In addition, the top-down, technocratic perspective found in much of policy analysis is very compatible with restricting public debate over issues like nuclear energy. It is often argued that such complex questions should best be left up to qualified policy experts.

However, the current effort to limit debate over energy growth is surely not compatible with a humanistic approach to policy analysis. As we have seen, this approach seeks to maximize rather than minimize rational public debate over important policy issues like energy. Moreover, the humanistic approach offers interested analysts the analytic techniques to help open up the discussion over energy growth. Two techniques in particular would seem helpful in encouraging a more critical and broad debate over energy growth. First energy growth should be seen more clearly as a moral issue -- not just a technical one. Increased debate over current policies would be logically required

if it could be demonstrated that growth is not an unmitigated blessing, but a path full of moral problems that are serious and not easily solved. Secondly, multiple-scenario analysis could be useful in constructing alternatives that would serve to further open up debate over this issues. If it could be shown that a no-growth or slow-growth energy path is a plausible possibility, this would undermine the atmosphere of necessity that supports the dominance of current growth policies. Let us consider in more detail what these two approaches to the energy growth issue would look like.

Energy Growth and Basic Societal Needs

If a true debate is to take place over energy growth, the automatic desirability of energy growth would have to be directly questioned. One would have to penetrate the normative mystique that surrounds the notion of energy growth; for most Americans seem to believe that increased energy growth would be an unmitigated boon to society. There are however many moral issues contained in energy growth which can be used to cast doubt on this assumption. Indeed, there are too many such issues to deal with all of them in this limited space, but we can at least sketch out what several of the most productive lines of moral argument would be. There are several morally problematic areas that, if sufficiently emphasized, could serve as levers to open up the debate over the desirability of energy growth.

For example, it was shown in Chapter IX that the basis of many moral judgements is the notion of basic human needs, and that policies can legitimately be evaluated in terms of how they succeed or fail in

meeting these needs. It is useful to ask, therefore, how effective current policies of energy growth are in meeting the basic needs of Americans. The basic needs that would be most useful to focus on for our purposes would be (1) the physical need for a healthy environment; (2) the social/political need to reduce inequities in American society; and (3) the pressing economic need of increased employment. It is safe to say that this set of needs does embody many of the most basic and important needs of our society today. And yet energy growth turns out to be a very ineffective way of meeting those needs.

Clearly energy growth is an extremely poor way to encourage a healthy environment. Indeed, energy growth has been consistently singled out by environmentalists as one of the most fundamental threats to the health of the human and natural environments. Increasing energy growth, as advocated by the current administration, would necessarily require increasing use of coal and nuclear power--both of which exhibit serious environmental problems. To mention but a few: (1) increased coal development would encourage more mine deaths from accidents and occupational diseases like black lung; (2) increased coal burning means increases in gaseous and particulate pollution which are known to be harmful to human health; (3) coal combustion also contributes heavily to acid rain and acid dust which are detrimental to natural ecological systems; (4) the CO₂ created by coal combustion threatens to raise the mean temperature of the earth, which could cause destructive climatic changes; (5) mining of uranium has been shown to cause low-level radiation threats to

human health; (6) nuclear plant accidents could cause potentially devastating and long-range destruction to human and natural populations; (7) nuclear waste disposal presents health hazards which have not yet been solved; and (8) the export of nuclear technology encourages the proliferation of nuclear weapons and increases the probability of nuclear war. One could go on-- but the obvious point is that if a healthy environment is a good, then increased energy growth is morally questionable on those grounds.

It can also be argued that increased energy production and its environmental costs also undermine the basic moral principle of equity. All of the health risks generated by increased energy production and consumption are not shared by the population equally. Instead what we usually find is that a small portion of the population is expected to bear the risks and the costs, while another portion of the population reaps most of the benefits. As David Orr discovered, decisions about the development and use of energy sources produce specific groups of winners and losers: "The winners are cooled, coiffured, and entertained electrically, while the losers are strip-mined, irradiated and polluted."¹⁹ And as Orr points out, it is these inevitable inequities of current energy growth policies that have fueled many of the attempts by public groups to slow-down or block the expansion of energy production. The emergence of anti-nuclear groups, farmers protesting high-voltage lines, and Indians protesting desecration of holy land by coal developers are all due in part to the failure of current growth policies to fulfill the moral criterion of equity. Current attempts by the Reagan administration to limit the ability

of such groups to take part in the policy-making process may be somewhat effective in obscuring these moral problems -- but such problems will continue to exist and grow worse as energy development proceeds.

Energy Growth and Jobs

Even if energy growth undermines the values of equity and environmental health, it might be argued that growth is still necessary to ensure increased employment -- currently one of our most pressing economic needs. And if there were indeed a trade-off between employment and the values of equity and the environment, then it is clear that a moral case could be made for increased growth. One would simply argue that the need for a healthy economy with increased jobs must currently take precedence over the other values. However, it is questionable whether such a trade-off actually exists, for many analysts have argued that there may not be a direct link between energy growth and increased jobs. Let us consider two versions of this argument.

The first version posits that it is misleading to suggest that increased energy production and utility expansion will maximize job production.²⁰ The energy industry is not very labor intensive, and it can be shown that capital invested in the energy industry will in fact create substantially fewer jobs than the same capital invested in other kinds of business. As the table below indicates, a job in the petroleum industry requires about 21 times the capital investment as a job in textiles. In other words, investing in textiles produces 20 times more jobs than investing in the petroleum industry. Figures for the utility industry are almost equally discouraging. It would

seem then that the expansion of the energy industry would be a poor way to promote increased employment.

Table 4

CAPITAL INVESTMENT PER JOB²¹

<u>Industry</u>	<u>Capital Investment per employee</u>
petroleum	\$108,000
public utilities	105,000
chemicals	41,000
primary metals	31,000
stone, clay, glass	24,000
all manufacturing (average)	19,500
food and kindred products	18,000
wholesale and retail trade	11,000
services	9,500
apparel and other fabricated textiles	5,000

It is sometimes argued that while investing in increased energy production produces relatively few new jobs directly, it does create indirect increases in employment. And indeed, invested money is respend in the economy (the multiplier effect) and stimulates increased output and employment. But this phenomenon in itself is little reason to invest in energy specifically -- for any investment has this multiplier effect. Even unemployment benefits have a multiplier effect. Thus this indirect employment argument gives us no strong reason to invest in the energy industry over any other.

The second version of the attack on increased energy as necessary for increased employment is illustrated in the work of Herman Daly.²² Daly questions the assertion that there is a direct, positive correlation in the economy between more energy and more jobs -- as argued by the Westinghouse report cited earlier. He points out that

energy often serves as a substitute for labor, not merely as a complement. As the push for increased automation substitutes energy for labor in industrial processes, the total number of workers would naturally tend to decrease rather than increase. Daly argues that the only reason that the total numbers of workers have increased in some industries is because of increases in demand that have accompanied a growing population. Thus while it has appeared historically that energy expansion has been causing increases in jobs, it was actually constantly expanding demand which led to constantly expanding employment.

Daly's arguments are supported by the fact that very few new jobs are produced by the energy intensive sectors of the economy. It is the service sector -- including such things as banks, hospitals, retail stores, schools, insurance companies, etc. -- which have accounted for nearly all new employment in the U.S. and this service sector is the least energy intensive sector of the economy. As Daly points out, of the total net increment of fourteen million jobs between 1947 and 1965, the service sectors accounted for thirteen million, while industry accounted for only four million, and agriculture accounted for a decrease of three million. He concluded that "to allege that large increases of in energy input are needed to provide new jobs seems to presuppose that the average new worker will work in a steel or aluminum plant, a counter-factual presupposition, inasmuch as it is likely he will work in a service institution."²³

This line of argument would seem particularly relevant to the attempt to question the Reagan administration's effort to link energy growth to the goals of reindustrialization and greater employment. The

link between reindustrialization and energy growth is clear-- reindustrialization focuses on revitalizing the basic industries (automobiles, steel, etc.)-- which already constitute the most energy intensive sectors of the economy. Reindustrialization would make these industries even more energy intensive because the plan calls for increasing amounts of technology and automation. Greater automation is seen as necessary in order to increase the labor productivity of these firms, and greater labor productivity is seen as the key to stemming inflation. Increased industrial production can only be anti-inflationary if greater labor productivity makes those goods relatively cheaper. But while it is clear that such a plan could require greater energy production and consumption, it is less clear that it would produce substantial increases in employment. If Daly is correct, such an economic approach might not be effective in producing the large amount of jobs the society requires. In that case, increases energy production will not only produce greater environmental degradation, it may also fail to produce the jobs which are supposed to make the degradation worth it-- the worst of both worlds.

Of course, the potential failure of this energy-intensive reindustrialization program to produce a substantial increase in employment might not be perceived as a failure at all-- it depends on whether this was in fact its original intention. It could easily be that the primary aim of this program is not to increase employment at all, but to increase the productivity and the profits of our basic industries. Despite the Reagan administration's rhetorical bow to the goal of greater employment, the nature of its reindustrialization

program could suggest that this important goal is not their highest priority.

A Conservation Scenario

While a normative critique of the assumed good of energy growth can be useful for casting doubt on our current energy path, little real debate over energy policy can be expected without a plausible alternative path. A clean environment and higher employment are obviously desirable goals, but it must be shown that slowed energy growth makes both possible. The task of laying out the complete details of such an alternative energy path is a complex one; but enough work has been done in this area that it is relatively easy to identify the important elements of such a scenario.

First, increased energy conservation would have to have high priority. By energy conservation I do not mean curtailment of rationing of energy, but increased efficiency of energy use -- higher-mileage cars, insulated houses and other buildings, more efficient lighting and appliances, etc. If the Harvard study is correct, we can easily run our economy on 30-40% less energy than we use today. This kind of conservation would be a much more effective way to meet the basic needs discussed earlier. The potential threats to the human and natural environments posed by a strong conservation program are very minimal compared with a policy of increased growth. Serious conservation would also mean less need for more off-shore drilling, nuclear plants, and coal plants, and thus would avoid all of the potential health risks that these projects would inevitably entail. It is also

clear that a conservation program would eliminate many of the equity problems discussed earlier. As environmental costs and risks are minimized, so too is the potential for inequitable distribution of those costs and risks.²⁴

Further, conservation as increased efficiency would not cause increased unemployment. It would simply mean doing the same jobs with less energy. In fact, some analysts have argued that a conservation scenario would actually create a substantial increase in jobs due to the expansion of a labor intensive conservation industry. For example, Richard Grossman's analysis concludes that "conservation policies yield more jobs and a more stable economy than does our present energy policy."²⁵ To support his point, he cites a study by the Bonneville Power administration that found that "high impact conservation programs create more jobs than would be created by building new power plants to generate an equivalent amount of energy."²⁶ Grossman also notes the optimistic findings of a study done for the state of Colorado:

The State of Colorado has estimated that 17 million private homes in the nation need ceiling insulation; 20 million need clock thermostats; 20 million need caulking and weatherizing; 10 million need storm windows. In addition, millions of multiple-unit dwellings, apartment houses, commercial and industrial buildings are inadequately insulated and weatherized. If 487,000 jobs are generated by only three simple conservation procedures in a small fraction of the buildings which need work, the potential obviously exists for millions of jobs. Employment for energy specialists, construction of more energy efficient equipment, jobs for architects and engineers will be increased, along with jobs in the field of insulation, heat pumps, electronic controls and systems analyses, communications and transportation.²⁷

Given this potential for employment, there is clearly no real

trade-off between conservation and jobs; and it is equally clear that if increased employment is a valued goal in our society, that conservation policies should be highly valued on those grounds. Thus an energy policy scenario which emphasized strong, across-the-board conservation measures would seem to be both desirable and plausible.

The Next Step: Questioning Economic Growth

An effort to focus more attention on the moral problems of continued energy growth, and on the plausibility of the intensive conservation scenario could be useful in opening up the currently stalled debate over energy growth. Indeed, just such an approach (as exemplified by the Ford Foundation Study and the work of Amory Lovins) already proved useful in the first effort to widen the debate in energy policy during the seventies. It is possible that such an approach could be effective again, and such a path is certainly worth pursuing. However, new analytic and political developments suggest that a new kind of challenge to current energy policies might also be called for. In particular, it might now be necessary to question more directly the notion of economic growth underlying the push for stronger energy growth. There are two reasons for this. First, the current administration has been relatively successful in tying together energy and economic growth -- in spite of evidence that the link is questionable. Second, and perhaps more importantly, it may be that conservation can only decouple energy and economic growth temporarily and that in the long-run increasing economic growth will necessarily require increased energy growth. Let us consider these two arguments.

One reason it may be necessary to focus more explicitly on the issue of economic growth is that the Reagan administration has made it an issue in current energy policy decisions. And despite that fact that this attempt to recouple energy and economic growth may be questionable on empirical grounds, Reagan has nevertheless been successful in linking the two issues in the public's mind. Thus in order to gain leverage in the debate over energy policy, it may be necessary to criticize Reagan's current economic growth policies. If the logic and the desirability of these policies can be undermined then it would be much easier to question the necessity of energy growth as well.

The other reason a challenge to economic growth policies might be necessary is related to the analyses that indicate there actually is a very close link between energy and economic growth -- at least in the long run. For example, the work of William Ophuls in his much praised book, Ecology and the Politics of Scarcity, suggests that decoupling energy and economic growth can only be done temporarily.²⁸ He argues that when most energy waste is eliminated and energy efficiency is maximized, then once again there will be a very tight link between energy and economic growth. Insulating houses now may lessen demand in the short run; but if one continues to build houses, even insulated ones, eventually energy demand must again begin to rise.

While a possible 40% gain in efficiency may at first seem a very large amount, Ophuls demonstrates that if economic growth continues at current rates, such a "conservation program can buy no

more than a decade or two of time" before we again face serious demands to increase energy production.²⁹ He concludes that while conservation can be "extremely useful over the next few decades in helping to alleviate the impact of fuel shortages and reducing dependence of foreign oil, ...energy conservation can never be more than a short-term palliative."³⁰

For several reasons then, any plausible, long-range alternative to the problems created by endless energy growth may have to eventually question the viability of the continually growing economy. Needless to say, this is a very difficult line of argument to develop. Economic growth is one of the most deeply entrenched values in American society -- but nevertheless, the challenge to current economic growth policies is probably a necessary one if there is to be any hope for an alternative approach to energy policy.

Again, humanistic analysis can point the way and indicate what the general outline of an effective challenge to economic growth would look like. The attempt to generate a serious debate over the viability of continuous economic growth would take the same basic form as the attempt to widen the energy debate. First, one would need to focus on the cost and moral problems generated by current economic growth policies, and second, one would have to construct a plausible alternative vision of a healthy economy.

The moral challenge to economic growth is obviously a necessary one; for if one cannot demonstrate that current growth policies create more problems than they solve, then no alternatives will ever be taken seriously. Several lines of moral argument suggest themselves here:

1. As with energy growth, one should emphasize the destruction of human health and the natural environment caused by the resource exploitation and inevitable pollution that must result from an economy dedicated to increasing levels of production and consumption.
2. It should also be pointed out, as William Ophuls does, that there are basic ecological limits to economic growth-- limited amounts of land, water, energy etc., which make continued growth not only undesirable but impractical.³¹
3. In terms of social values, one should emphasize the current suffering created by policies (like the cutting of food stamps, school lunch programs, unemployment benefits, etc.) which are intended to encourage growth, but impact most severely on those least able to afford it.
4. Also, it would be relevant to demonstrate that despite all of its promises, economic growth has been unable to eliminate poverty in the U.S. or to mitigate the vast inequalities in wealth and income that exist in the U.S.
5. Special attention should also be paid to the arguments of those like Fred Hirsch (cited earlier in Chapter VII) who demonstrate that economic growth will never be able to provide universally the kinds of scarce social values that all citizens increasingly seek.³²

In short, a moral challenge to economic growth policies would develop two fundamental lines of argument. First it would be argued

that growth as currently pursued, has failed to meet a whole range of basic human needs-- environmental, economic, and social. Second, and equally important, it must be argued that economic growth cannot in principle ever meet some of these needs. As analysts like Ophuls and Hirsh have pointed out, some of the goals of growth are simply physically impossible to meet-- and thus continuous economic growth is morally irrational. Recall that in the discussion of moral rationality in Chapter IX, it was seen that one of the essential features of an effective and rational moral argument is that the desirable act be "practical," that it be possible to accomplish the act. Demonstrating that economic growth fails this practicality criterion can be an effective way of dampening the natural moral appeal of growth. This is an extremely important kind of argument to make, for as long as economic growth continues to be seen as the most practical way to solve many of our country's problems, no alternative will be taken truly seriously.

No-Growth or Different Growth

As in the case of energy, the second thrust of any challenge to economic growth would necessarily be the development of an alternative vision of a healthy economy-- one which did not require continuous growth. This is a large and extremely problematic task. One of the few economists who have attempted to take on this task is Herman Daly. Daly has spent considerable time working on a model of a no-growth or "steady-state" economy. According to Daly, a steady-state economy is

one in which "the total population and total stock of physical wealth are maintained through-put."³³ Translated into more easily understood terms, a steady-state economy would require that: (1) we have a constant population in order to ease that most basic source of pressure for growth; (2) we have a constant rather than increasing level of physical stock (houses, cars, consumer goods, etc.) on which that population depends; and (3) we maintain those stocks with the minimum amount of resources being put through the economy. This last concept of minimum resources through-put is in many ways the key one in a steady-state economy, and the most relevant to the consideration of energy policy. If one of the basic problems with constant economic growth is acknowledged to be the ever increasing amount of non-renewable natural resources (including energy) that such a production system requires (and the inevitably increasing pollution this process creates), then the only viable long range solution is a production system which uses a constant minimum amount of those resources to maintain the standard of living of the constant population.

Minimum through-put would imply several basic changes in our energy and production systems. In terms of energy, it implies a move away from non-renewable energy resources and an emphasis on renewable sources such as solar. In the production system, there would be a shift in emphasis from goods that require frequent replacement to goods which are durable or easily repairable. As Daly explains, this simple shift would have fundamental impacts of the quality of American life:

For the stock of wealth, a low rate of through-put (low production and equally low consumption) means greater life expectancy or durability of goods and less time sacrificed to production. This means more "leisure" or non-job time to be divided into consumption time, personal and house-hold maintenance time, cultural time, and idleness.³⁴

Such a low-production/low consumption society might first appear to not offer the necessary number of jobs for the population. But Daly points out that low resource through-put also implies minimizing energy use, and this would encourage the substitution of labor for energy in many production processes. And there is a neat compatibility between the emphasis on industries which are labor and skill intensive and the need in a steady-state economy for high quality goods which will be durable.

Obviously, such a short description of the steady-state economy cannot do justice to the rich vision that is present in Daly's books. However, it is possible to see that his is a provocative vision that deserves attention from those concerned about the problems of economic and energy growth. In practical political terms, however, Daly's vision may simply be too radical to appear plausible to most Americans. And indeed, one finds that Daly's work has recieved little serious attention. This is a serious political deficiency. In the short-run-- while the growth ideal is still alive in America-- those interested in pursuing alternative energy policies might find it more advantageous to advocate different visions for growth, rather than the no-growth ideal itself. Until the normative attack on growth is felt more strongly by the public and policymakers, it might make more sense to simply emphasize the need for different kinds of

economic growth. One could promote policies -- such as a policy of growth in the development of non-renewable resources, or a policy of growth in the labor intensive sectors of the economy -- which not only have current relevance, but also lead in the direction of a steady-state economy. Support for these kinds of transition policies may be the only viable tactics, given the present political realities. Any attempt to put the no-growth alternative on the national policy agenda now would most likely be premature and ineffective.

Conclusions

The foregoing discussion has clearly not been detailed enough to provide any concrete answers to our current energy and economic problems -- but it was not intended to do so. My intention was more humble: to demonstrate that the humanistic approach to policy analysis can indeed be relevant and yield some insights into these crucial policy issues. And I believe that it has been shown that these analytic techniques can be useful, especially in the attempt to provoke a more serious democratic debate over energy and economic policy. Such a debate would necessarily involve developing and promoting lines of argument similar to those just described. And to this extent, the effort to promote a more humanistic approach to policy analysis can be seen as a desirable one.

However, the humanistic approach demands that one last point be made: it is naive to assume that any new analytic approach would be sufficient in itself to open up currently narrow policy discussions. As I have continually stressed throughout this work, policy

decisions are political decisions. Policy paths are set for political as well as moral and rational reason. The dominance of the all-out energy growth scenario in the Reagan administration must finally be understood not simply as a function of an overly narrow and conservative analytic perspective, but also as a function of whose interests are represented most strongly in this administration. Whose interests dominate energy policy decisions was made clear even before the 1980 election when Reagan chose his Energy Task Force-- the group who designed the approach which serves as a blue-print for current Reagan policies. Of the 17 signers of the task force report, seven were chairman, vice-chairman, or presidents of oil, chemical, utility or nuclear companies. No women, no environmentalists, no experts in arms control, nor experts in energy efficiency or conservation were represented on the panel. It is hardly surprising, then, that the panel recommended the growth policies long advocated by the energy industry.

Thus, as was pointed out in the previous chapter, any attempt to ensure rational debate and policy choices in areas like energy policy must be a political as well as an intellectual task. Attempts must necessarily be made to broaden democratic participation in our policy-making institutions. Without a more representative cross-section of people, interests, and views in the policy-making process, there is little hope that a serious debate over current energy policies will take place.

This realization of the central importance of political change

should not be taken to mean that encouraging a more humanistic approach to policy analysis is irrelevant or secondary. Indeed, this approach remains a necessary and useful element in any attempt to encourage more wide-ranging and rational policy debates. It can serve as an invaluable tool for undermining the conceptual constraints and biases which help to unduly limit our present policy choices -- and this in itself is an important contribution to the cause of democracy and good policy.

Footnotes

¹Quoted in Robert Stobaugh and Daniel Yergin, (eds.), Energy Future (New York: Random House, 1979), p. 142.

²Westinghouse Energy Action Office, Energy and Jobs (Pittsburgh, PA.: Westinghouse Corporation, 1979), unpaginated.

³Ibid.

⁴Ibid.

⁵Ibid.

⁶Energy Policy Project of the Ford Foundation, A Time to Choose (Cambridge, MA.: Ballinger Publishing Co., 1974).

⁷Amory Lovins, Soft Energy Paths (Cambridge, MA.: Ballinger Publishing Co., 1977).

⁸Energy Future, p. 143.

⁹Ibid., p. 136.

¹⁰Quoted in Energy Future, p. 144.

¹¹Walter A. Rosenbaum, Energy Politics and Public Policy (Washington, D.C.: Congressional Quarterly, Inc., 1981) p. 210.

¹²Executive Office of the President, The National Energy Plan (Washington, D.C.: Government Printing Office, 1977) p. 10.

¹³Ibid., p. 95.

¹⁴Congressional Record (Senate), January 15, 1981, p. 199.

¹⁵League of Conservation Voters, The Presidential Candidates (Washington, D.C.: League of Conservation Voters), see chapter on Ronald Reagan.

¹⁶"Rule Would Aid Nuclear Power Plants," The Lorain Journal, March 18, 1981, p. 3.

¹⁷Ibid.

¹⁸Ibid.

¹⁹David W. Orr, "U.S. Energy Policy and the Political Economy of Participation," Journal of Politics, vol. 41, no. 1 (November, 1979), p. 1049.

²⁰Richard Grossman, Energy and Jobs (Washington, D.C. Environmentalists for Full Employment, 1977).

²¹*Ibid.*, p. 13.

²²Herman E. Daly, (ed.), Toward a Steady-State Economy. (San Francisco: W.H. Freeman and Co., 1977).

²³*Ibid.*, p. 260.

²⁴It should be noted that some conservation measures can increase equality--such as raising the price of gasoline, which is felt the most by those lowest on the economic ladder.

²⁵Grossman, p. 1.

²⁶*Ibid.*, p. 18.

²⁷*Ibid.*

²⁸William Ophuls, Ecology and the Politics of Scarcity (San Francisco: W.H. Freeman and Co., 1976), pp. 113.

²⁹*Ibid.*

³⁰*Ibid.*

³¹Ophuls, pp. 133-137.

³²Fred Hirsh, The Social Limits to Growth (Cambridge, MA.: Harvard Univ. Press, 1976).

³³Daly, p. 152.

³⁴Daly, p. 14.

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