

DOCUMENT RESUME

ED 252 966

EA 017 480

AUTHOR Lincoln, Yvonna S.; Guba, Egon E.
TITLE Research, Evaluation, and Policy Analysis: Heuristics for Disciplined Inquiry.

PUB DATE Feb 85

NOTE .; Earlier versions of this paper were presented at the Annual Meeting of the Evaluation Network/Evaluation Research Society (1983) and the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 23-27, 1984).

PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Critical Thinking; Evaluation; Evaluation Utilization; *Heuristics; Information Utilization; *Inquiry; Logical Thinking; Policy Formation; *Problem Solving; Publications; *Research Methodology; *Research Reports; Research Utilization

IDENTIFIERS Cronbach (Lee J)

ABSTRACT

Research, evaluation, and policy analysis are elements of inquiry whose functions, aims, purposes, intended audiences, and intended outcomes have been confused in the literature discussing how to accomplish them. Using the definition of "disciplined inquiry" provided by Cronbach and Suppes (1969), which defines disciplined inquiry as the resolution of a problem to achieve understanding or to facilitate action, an analysis is made of each research, evaluation, and policy analysis. Each is found to fit within the definition of disciplined inquiry, and then each is dissected to compare purposes, audiences, and intended outcomes. Proposed for each is a new definition that incorporates the forms, functions, audiences, and outcomes. A bibliography is included.
(Author/TE)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED252966

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

X This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

Yvonne S.
Lincoln

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

**Research, Evaluation, and Policy Analysis:
Heuristics for Disciplined Inquiry**

Yvonna S. Lincoln
University of Kansas

and

Egon E. Guba
Indiana University

February, 1985

Earlier versions of this paper were presented at the Evaluation
Network/Evaluation Research Society Annual Meeting, 1983 and
the American Educational Research Association Annual Meeting,
1984.

EA 017 480

ABSTRACT

Research, evaluation and policy analysis are elements of inquiry whose functions, aims, purposes, intended audiences and intended outcomes have been confused in the literature regarding how to accomplish them. Using the definition of disciplined inquiry provided by Cronbach and Suppes (1969), an analysis is made of each, each is found to fit within the definition, and then each is dissected to compare purposes, audiences and intended outcomes. New definitions are proposed for each which incorporate the forms, functions, audiences and outcomes.

Research, Evaluation, and Policy Analysis:

Heuristics for Disciplined Inquiry

If hanging loose is our national genius, then we social scientists should have more tolerance for what passes as inefficiency and non-rationality. The argument would run like this: People should continue to be intendedly rational; there is nothing wrong with rationality per se. However, given human limits, people should avoid constructing systems--social and engineering and ideological systems--that exceed human rationality (Perrow, 1981).

The Proliferation--and Confusion--of Information Specialities

We live in a world of finite resources with a seemingly infinite number of interest groups all seeking to exploit them. It is not surprising, therefore, that demands for better and more complete information needed to service decision making, policy formation, and resource allocation are burgeoning. Persons from a wide variety of disciplines--political science, education, sociology, psychology, management, to name a few--are making efforts to respond to these information needs. But as each group brings its own disciplinary perspective to bear on the problem, the resulting proliferation of concepts and terms tends to confuse rather than to clarify the state of affairs.

The need to maintain status and legitimation in the home discipline also plays an important role; thus, both evaluation and policy analysis--"applied" areas clearly on the periphery of the more "pure" or basic discipline--acquire a patina of respectability as academic products or activities by the simple addition of the word "research." Evaluation becomes "evaluation research" (Suchman, 1967; Mann, 1972; Caro, 1971), and policy analysis becomes "policy analysis research" (Carley, 1980, p. 14). As a consequence,

whether deliberate or inadvertent, the distinctions between research, evaluation, and policy analysis have become blurred.

The blurring of distinctions has produced little clarity and a good bit more heat than light. The mixed terminology, coupled with a lack of commonly accepted definitions, has led to confusion regarding the aims of research, evaluation, and policy analysis, the types of products or outcomes consumers have a right to expect when each of these activities is undertaken, and, for academicians, the legitimacy of each as a "scholarly" activity. Furthermore, the great paradigm debate in the social sciences suggests that definition development alone may not be enough. Some consideration of paradigmatic underpinnings of inquiry may also be called for, at least to suggest where choice of paradigm might prove crucial in the outcomes of inquiry efforts.

This state of affairs suggests that a critical analysis of how these activities are defined and used by their practitioners, whether in colleges and universities, state or federal agencies, or "on the firing line," might be useful in relation to such questions as these:

- °How do these activities relate to each other, if at all?
- °Are all these activities some form of research (as their mixed nomenclature might lead us to believe), or do they exemplify different forms of knowledge creation, transformation, or utilization activities?
- °What are the legitimate purposes (outcomes) of each?
- °Who are the intended audiences for each?
- °Are they well served by conventional scientific inquiry or might they be better served by emergent, alternative or naturalistic paradigm?

It is the purpose of this work to deal with each of these questions.

Are Research, Evaluation, and Policy Analysis Related?

It seems clear that the use of such hybrid terms as "evaluation research" (or the unbelievable term recently encountered in the literature, "policy analysis evaluation research") has little to recommend it. Yet the three terms are not entirely independent either. We do not mean to denote, by that observation, the fact that the same tools--methods--are used in each; to assert identity or similarity on the basis of common methods would be analogous to saying that carpenters, electricians, and plumbers do the same thing because their tool kits all contain hammers, saws, wrenches, and screwdrivers. Similarity is rather asserted on the grounds that all three are variants of what is commonly called "disciplined inquiry." Cronbach and Suppes (1969) suggest that the report of a disciplined inquiry

. . . has a texture that displays the raw materials entering into the argument and the logical processes by which they were compressed and rearranged to make the conclusion credible (pp. 15-16).

That is, to qualify as disciplined, the report of an inquiry must inform the reader, in ways that are publicly confirmable, what the nature of the "raw" data is, the sources of those data, and the context in which they were collected (for example, a laboratory, the respondents' work places, and the like). At the same time, the processes for transforming the data into information--interpretations, conclusions, extrapolations, recommendations--must also be apparent to the reader; they too must be publicly confirmable so that their logic and coherence can be tested.

Now there is no question that not all reports of research, evaluations, or policy analyses conform to these requirements.

But it is equally evident that there is no reason in principle that prevents any of these modes from qualifying as disciplined, if they have been properly carried out. The reader should be in a position to answer each of the following questions with "Yes": Are the raw materials clearly displayed? Do I understand the logic by which the data were reorganized into the argument? Does the argument exhibit logic and coherence? Clearly, most exemplars of research, evaluation, and policy analysis do lead to "Yes" answers.

But it does not follow from that assertion that these activities are identical or interchangeable. Indeed, it is possible to differentiate them along a number of dimensions, particularly their purposes, products or outcomes, and their audiences. The following three sections consider each activity in turn.

Research

What is a generally acceptable definition of research? Webster's New Collegiate Dictionary offers "studious inquiry" as a first definition, presumably to differentiate it from casual inquiry. Provas (cited in Gephart, Ingle, and Saretsky, 1973) suggests that research is characterized by three dimensions: "1) it is problem oriented, 2) it is a systematic process, and 3) it is objective [in the sense that it is] free of introduced [or unaccounted for] bias, [and] it uses empirical evidence" (p. 11). But that seems to be simply another way of saying that research is disciplined inquiry, without providing any insight into what form of disciplined inquiry it might be. Gephart, Ingle and Saretsky (1973) suggest that the aim of research is creating "generalizable knowledge; . . . to find out, in one sense, truth" (p. 11). At the same time they comment

that "a specific or practical outcome is usually not the major goal of this type of research although it is usually possible to infer some application" (p. 11). Thus the common distinction between basic and applied research is maintained.

That distinction is not very useful, however; it simply reflects the need of some scientists to claim superiority over others. This belief is perhaps best demonstrated by the observation that basic research is often called "pure" research, evidently to distinguish it from its less pure cousin. Attempts to differentiate these two putatively different forms of research on the basis that the problems they address come from different sources (one is said to derive from the innate curiosity of the researcher while the other is defined by a client group) seem unpersuasive. Basic research is, after all, sometimes mounted in applied settings because that is where the necessary resources, facilities, or "subjects" are to be found. Similarly, the suggestion that the purposes of these two forms are different--theory development versus problem solving or responding to a need--is not helpful. Applied research often produces the "facts" that challenge an entrenched theory. Further, the results of applied research may have theoretical utility, as for example, when data on the creep of metals under stress, intended to inform engineers about how structural members of bridges or buildings deform over time because of the loads they bear, may also provide insights into the nature of molecular movement. Indeed, it seems possible to assert that many basic advances in the sciences have been occasioned by efforts to solve practical problems.

Nor do audience distinctions--pure scientists versus client groups (which may include applied peers, e.g., fellow engineers)--seem useful. Laymen may be interested in theory and scientists in applications.

A further major difficulty with extant definitions of research is that virtually all are cast within a positivist framework. Thus the purposes of research are said to be prediction and control, through explanation in the erklärung sense; the major products are seen as technical reports that delineate variables and specify relationships among them (preferably causal); the major audiences are seen as one's scientific peers and do not include those whose characteristics, behaviors, values, attitudes, and the like--that is, the "subjects"--are represented in the research. Those social scientists who are increasingly finding themselves disenchanted with the results of research couched in positivist terms, and who are therefore, drawn to naturalist approaches, find little to attract them in these conventional definitions. A more open view of research would allow all inquirers the freedom to operate on either traditional or emergent philosophical grounds.

We believe that the following definition of research has much to recommend it, both in that it avoids the basic/applied dilemma and because it is congenial to those with an emergent-paradigm or naturalist perspective, while not closing out the scientific or rationalistic position:

RESEARCH is a type of DISCIPLINED INQUIRY undertaken to resolve some PROBLEM in order to ACHIEVE UNDERSTANDING or to FACILITATE ACTION.

This definition, first asserts that research is disciplined inquiry, which means that we commit it both to publicly examinable

7

and verifiable "raw materials" (data) and "compression and rearrangement" processes, as specified by Cronbach and Suppes (1969). We have elsewhere made the case that naturalistic research fulfills these conditions as well or better than conventional research (Guba and Lincoln, 1983, Lincoln and Guba, in press).

Second, the definition asserts that the focus of research is a problem. The outcome of research is some problem resolution or amelioration (whether theoretical or practical in nature), a formulation acceptable within both paradigms. This statement suggests that conventional and naturalistic inquiry both bound inquiry in exactly the same way; one is no more "empty-headed" than the other. Further, since problems can be of various types (Guba and Lincoln, 1981), including conceptual, action, and value problems, naturalists can note with satisfaction that the value dimension is provided for.

Third, the definition asserts that the outcome of research is either the achievement of understanding or the facilitation of action or both. Understanding can mean, if one wishes it to, prediction, control, and erklärung, but it can equally well mean description, elucidation of meaning, or verstehen. Both positivists and naturalists can find a home within one or the other of these interpretations. Finally, the inclusion of the phrase "facilitation of action" implies that what is conventionally known as "applied" research is nevertheless recognized as fully legitimate.

If this furnishes a definition of research, then how may evaluation be defined?

Evaluation

There is no general agreement among the practitioners of the art/science of evaluation about what evaluation is. Evaluation is variously defined as:

- °A process for determining congruence of performance with objectives or intents (Tyler, 1949; Provus, 1971; Popham, 1975).
- °A process of delineating, obtaining and providing useful information for judging decision alternatives (Stufflebeam, 1971).
- °A process for comparing actual effects to a profile of demonstrated needs (Scriven, 1973).
- °A process for critically describing and appraising an evaluand through connoisseurship and criticism (Eisner, 1979).

Building especially on the insights of "responsive" evaluators (Stake, 1975; Parlett and Hamilton, 1972; Patton, 1980), we have suggested (Guba and Lincoln, 1981; Guba and Lincoln, 1983) that there are four different types of evaluation, generated by crossing Scriven's (1967) well known dimensions formative/summative with two aspects of value that an evaluator may seek to establish: merit and worth. Merit, as we have construed it, refers to a kind of "intrinsic, context-free value" illustrated, for example, by the scholarliness of a professor (the qualities on which promotion is based) or the sequence, continuity, and integration of a curriculum. These are qualities that accompany the evaluand from context to context and are relatively invariant. Worth, on the other hand, refers to an "extrinsic, context-determined value" exemplified by the professor's utility to the institution that employs him (the qualities on which tenure is based),¹ or the utility of the curriculum for teaching a certain kind of student in a certain setting. These

are qualities that are at least as much dependent on context as on the evaluand; while merit is relatively invariant worth varies greatly from context to context.

The terms formative and summative refer, broadly speaking, to the aims of evaluation (Scriven calls them roles). The aim of formative evaluation is to provide descriptive and judgmental information, leading to refinement, improvement, alterations, and/or modification in the evaluand, while the aim of summative evaluation is to determine its impacts, outcomes, or results.

The dimensions formative/summative and merit/worth may be taken as orthogonal to one another to generate the four types of evaluation described (Guba and Lincoln, 1981). Thus, formative merit evaluation is performed to modify or improve some evaluand while it is in process of development. Summative merit evaluation is performed in order to certify or warrant its merit against some set of standards, after the evaluand has been developed into its putatively final form. Formative worth evaluation is performed to facilitate adoption, adaptation, or fitting of the evaluation to some local context of use. Summative worth evaluation is performed to warrant or certify an evaluand for permanent local (situational) use.

Based on this analysis the following definition for the activity of evaluation is proffered:

EVALUATION is a type of DISCIPLINED INQUIRY undertaken to determine the VALUE (MERIT AND/OR WORTH) of some entity--the EVALUAND--such as a TREATMENT, PROGRAM, FACILITY, PERFORMANCE, and the like--in order to IMPROVE OR REFINE the evaluand (FORMATIVE evaluation) or to ASSESS ITS IMPACT (SUMMATIVE evaluation).

This definition asserts that evaluation, like research, is a type of disciplined inquiry, and should therefore exhibit the properties

prescribed for such inquiries. It is intended to establish merit and/or worth (Guba and Lincoln, 1981). The evaluand is described as a treatment, program, facility, performance, or similar entity; it is not (looking ahead) a policy option. Evaluands may be assessed formatively or summatively, depending on the purpose of the evaluation.

This definition appears to be acceptable on the premises of either the conventional or the naturalistic paradigm. Advocates of neither would quarrel with the claim that evaluation is (or can be) disciplined inquiry. That evaluation deals with the determination of value cannot be an issue either, since the very term evaluation has value as its root. The identification of two kinds of value--merit and worth--can only be regarded as a useful distinction (although, to be sure, some might think it superfluous, a matter of overkill. But that judgment would not be made on the basis of the judge's paradigm affiliation). That evaluands should be described as treatments, programs, facilities, or performances (or similar entities) is also not unusual, although the naturalist might be somewhat offended by "treatments" since that formulation seem to play into the hands of those who would regard evaluation (ideally) as a form of experiment. The distinctions between formative and summative evaluation are also well understood and universally accepted by the profession.

What is of special interest here is the delineation of those features that distinguish evaluation from research. First and foremost we must be struck by the difference in purpose: research is undertaken to resolve some problem, while evaluation is under-

taken to establish value. / On that score alone research and evaluation are monumentally different, and this fundamental difference reflects itself in the products that result, in the expected outcomes or uses of the inquiry, and in the audiences to whom products are addressed.

Research is typically adequately served by a technical report (which may be a book monograph, or journal article), but technical evaluation reports are rarely sufficient to meet the needs of, or communicate well with, the variety of stakeholding audiences. Reports which can be utilized by many different audiences often take the form of case studies. Additional, less formal, but also more responsive reporting formats may also be utilized as audience needs dictate: an oral report, slide show, filmstrip, town meeting, special program on local television or radio, and the like. The format of most evaluation products, with the possible exception of summative merit evaluations which address audiences outside the local context and therefore probably need to be written, is largely determined by needs of local community groups or users, and depends in part on their ability to deal with varying degrees of complex technical material.

While the expected outcome or use of research is simply the expansion of understanding (whether in the erklärung or verstehen sense), the outcomes and/or uses of evaluation inquiries vary depending on the kind of evaluation which is undertaken. For example, the expected outcome of a formative merit evaluation will be modifications, improvements, or refinements in the design of the evaluand (treatment, program, facility, performance, and the

like). The expected outcome of a summative merit evaluation will be the certification or warranting on the evaluand as intrinsically valuable, meriting consideration for adoption or use in some setting other than the one in which it was developed. The expected outcome of a formative worth evaluation will be adaptation of meritorious evaluand to a particular local setting, and the expected outcome of a summative worth evaluation is the certification of such an evaluand for extended and long-term local use.

While the audiences for a research inquiry may be primarily peers of the inquirer (other scientists, say), the audiences for an evaluation include all of the many stakeholders who may have some investment in the evaluand. These include (at a minimum) development teams that have been involved in designing and developing the evaluand; groups of potential local adopters; a local adaptation team charged with "fitting" an evaluand into the local context; groups of local decision makers who must decide what actions to take in regard to the evaluand; and, finally, groups of beneficiaries (e.g., clients, target groups, their parents or spouses, and the like) and of potential victims (e.g., persons whose interests were subordinated to free resources so that the evaluand could be developed and/or implemented). The stakeholders will differ from locale to locale. While the audiences for a research inquiry are relatively homogeneous, the audiences for evaluations are multiple and heterogeneous, a fact which, at the very least, introduces political considerations to an extent simply not found in research (although the fact that research is also value-bounded should not be overlooked). In all events, the purpose of a given form of

evaluation dictates who ought to be interested (a normative statement), but not who finally will be (an empirical and political matter).

Policy Analysis

Consensus on a definition of policy analysis is no more in evidence than in the case of research or evaluation. Yet there are sufficient similarities among definitions proffered by different writers that it seems likely that members of the social science community are operating along parallel lines. Two examples should suffice to make the point. Nagel (1979) defines policy analysis as "the how-to-do-it methods associated with determining the nature, causes, and effects of governmental decisions or policies designed to cope with specific social problems" (p. 7). Nagel terms this activity "policy analysis research"--a further case of legitimation. Peter House, in a work entitled The Art of Public Policy Analysis (1982--a title which suggests that policy analysis is something other than a science)--carefully skirts the issue of definition in his first chapter, but notes in a footnote at the end of the chapter: "I shall use the terms policy analysis, systems analysis, and operations research interchangeably, since I believe that the need for formalism and analytic techniques is similar to all, as is the underlying system structure and response" (p. 53).

A critique of constructions. Nagel's definition focuses primarily on method, to the subordination of impact, and is focussed rather more on analyzing policies-in-action than on projecting the impact of proposed policies (which we call policies-in-intent).² House's interchangeable terminology is also unsatisfactory; it can be only a supremely conventional thinker who would lump policy analysis,

systems analysis, and operations research within the same rubric. Both operations research and systems analysis have embedded in them assumptions which are not only relatively unuseful but to some extent destructive of good policy analysis: the assumption of linear causality (embedded in the word "systems" with its mechanistic metaphor of parts of a great machine all moving in concert), the assumption of value-freedom (defined by House's insistence on rigorous scientific method and objectivity), and the heavy emphasis on formalistic aspects of the process, with its inherent assumption of generalizability from analysis to analysis, and the concomitant need to "discover order and structure . . . [as] as feature of the scientific approach" (p. 240).

Nevertheless both Nagel and House have major contributions to make. Nagel suggests that policy analysts are "involved mainly in determining the effects of alternative public policies" (and indeed, this statement is a better definition of policy analysis than his earlier one cited above), and suggests that they perform this function in any of four ways, by

. . . (1) taking policies as givens and attempting to determine what causes them; [or] . . . (2) taking social forces as givens and attempting . . . (3) taking policies as givens and attempting to determine what effects they have; [or] (4) taking effects as givens and attempting to determine what policies will achieve or maximize those goals (1979, pp. 7-8).

Nagel characterized the third approach as "evaluation research" and the fourth as the "optimizing perspective," and declared that the latter would serve as the focus for his book, which will deal mainly with determining the outcomes or effects of different or alternative social policies.

Adopting the optimizing perspective has much to commend it, since it focusses on the acceptance of broad social mandates and concentrates on achieving those, or as much/many of them as possible, with optimal use of available resources (a phrase which suggests some mix of manpower, money, time, and other means). Another characteristic of Nagel's definition which seem to be sound is the forthright role to which he assigns values. He is quite clear that "policy analysts cannot be totally value-free, since they are seeking to achieve or maximize given values, but they can take extra precautions to keep social or personal values from interfering with their statements of fact" (1979, p. 9, emphases added).

However, in describing what constitutes good policy analysis (a presumed outcome), he suggests that it ought to be "empirically valid, in the sense of conforming to reality" (p. 10). This statement is not only at odds with the emergent-paradigm or naturalist position on ontology but takes a very synoptic view of policy as singular, conforming to the view that reality is singular (when there is "real" reality there can be only one policy that conforms to it exactly). Naturalists would of course assert that policy ought to be viewed as multiple in form, in line with the proposition that realities are multiple.

In the case of policy, multiple realities can take at least three forms: the policy-in-intention, the policy-in-action, and the policy-in-experience. These three forms may be conceptualized respectively as statements about policy, or the policy as constructed and written down; activities and behaviors that are displayed by agents in process of implementing policy (including the process of

local adaptation and/or diversion as practiced, probably necessarily, by street-level bureaucrats, i.e., the agents in face-to-face contact with the client or target group); and the experiences of the client or target group as they receive the policy (Guba, 1984). That policy may be viewed as three different processes/products by three different audiences betokens conducting analyses that treat it as potentially three different social realities (at least). Thus, Nagel's criterion of empirical validity is most assuredly one which, while supportable, does not go nearly far enough. Empirical validity begins and ends with the typical social science construction that policy, like reality, is unitary and synoptic, when it is clearly not, even to social scientists.

Nagel also suggests that the results of policy analyses should provide "good insights which are clearly communicated" (p. 10). No one would disagree with this conclusion, but what remains at issue is to whom, under what circumstances, and how such analyses should be communicated. Assuming a unitary character for policy makes it virtually certain that its insights will be largely wasted, since they are unlikely to be shareable with (or understandable by) the variety of audiences who may be concerned. It seems quite likely, in fact, that those who most need good policy analyses--clients and target groups--will be among those least likely to hear the results.

Finally, Nagel goes on to say that policy analyses ought to be conducted in such a way that they produce "desired social consequences," still another synoptic prescription. Recognizing that it is becoming increasingly difficult to satisfy everyone in a pluralistic

society, the idea of desired social consequences is loaded with the freight of consensual decision-making, value consensus, and majority rule. Consensual decision-making rarely occurs, since most decisions in the public policy arena are constructions resulting from trade-offs, compromises, negotiations, and political concessions--a perfect example, in fact, of mutual simultaneous shaping. There is nothing inherently wrong with such political development, but one must recognize that the political negotiation is a continuously ongoing process. Thus, the policy which was intended (by Congress, say) often turns out not to be the policy which is written (by the Federal administering agency, say), or the policy adapted in the process of devising the rules and regulations which accompany its promulgation. Likewise, assuming a consensus of opinion ignores the fact that policies which seek to enable or create advantage for some group viewed as disadvantaged may redress their social ills at the expense of some other group. Finally, it is becoming increasingly clear that majority rule applies only in rarified situations (not to include Presidential elections, where the majority of eligible voters do not exercise their right); in most situations, pluralism is increasingly respected, and the protection and encouragement of minority expression (whether political, racial, ethnic, linguistic, or cultural) has become the rule. As a result, desired social consequences change from locale to locale and context to context. The function of policy becomes more a matter of ensuring fair treatment to all rather than determining how best to achieve some mutually desired outcomes.

Fair treatment is the equitable distribution of justice as determined within the framework of context-relevant decisions. The political process is reconstructed not as majority rule, but as push-pull fine social tuning. Groups give voice to needs which may or may not be met depending on likely benefits, projected costs, certainty of returns, and legal and political constraints. Desired social consequences change. And with those changes comes a continuing necessity to re-establish what may be desirable at any given time and place.

Returning to House's (1982) formulations, we see that he makes contributions which help non-political scientists to understand what he believes a policy analyst is (another way of stating what a policy analysis ought to be, by looking at what policy analysts do). Using a table outlined by Nagel (1980), House has constructed a typology of the kinds of policy analysts that exist (scientific, professional, political administrative, and personal); how they separately view public policy problems (for example, the scientist sees them as theoretic problems, the professional as design problems, the political analyst as value-maximization problems, and so forth); and the motivations that drive each of the five types (for example, the search for theory, regularities, and "truth"; improvement of policies and policy-making; advocacy of policy positions, effective and efficient policy implementation; and concern for policy impacts on life). He goes on to suggest some possible approaches to policy analysis and some means of training persons who are to carry them out, since often the policy analyst operates in a different sphere from traditional, university-trained and based social scientist.

Concentrating on the tradition (which he labels relatively recent), the methods, the timing ("the policy analyst normally operates under a restrictive tyranny of time," p. 27), the resources, the personnel constraints, the quality ("maintaining objectivity in the course of doing an analysis is a constant problem for policy staff," p. 29), and the clients.³ House argues that the policy analyst is really a very different person from the typical--and typically more conservative--social scientist. While the latter expects to be in control of problem, data, and technique, the policy analyst expects no such luxury. The comfort of certainty which the scientist (putatively) possesses is unknown to the analyst, who operates under great uncertainty and with time restraints which are unknown in normal inquiry.

House has failed to note, however, that while the expected products and audiences are very different, most policy analysts now operating are trained in exactly the same tradition as scientists and by persons who train social scientists in general. Arguments regarding timing, personnel, resources, and the like aside, most policy analysts function exactly as their mentors--other social scientists--have trained them. As a result, they share not only methodological biases, but paradigms and philosophical persuasions as well. While policy analysts operate under very different circumstances and often in very different surroundings from most social scientists, they nevertheless emerge from an atmosphere which House himself tellingly described:

Science has its own training grounds, called universities; ...it inculcates its disciples with the beliefs of its tradition; ...the teachers and professors in these institutions are priests and the students are the faithful. The purpose of these

institutions is often to move the novitiates through the indoctrination process... (1982, p. 23).

It is hard to imagine these methodological and paradigmatic apples falling very far from their trees. While House argues that the policy analyst is a very different breed of cat, it seems unlikely, on the basis of House's own analysis, that they function in ways other than as traditional social scientists, trained in traditional social science programs and paradigms.

Nagel and House have been among the most persuasive of extant writers, and their premises look very much like those of other social scientists (see, for example, Carley, 1980; Jenkins, 1978; Lasswell, 1971; Lindblom, 1959; Ripley, 1975; Schulman, 1975; Stokey and Zeckhauser, 1978; and Wildavsky, 1979). The one labels policy analysis as research; the other disclaims the old traditions of science, but puts policy analysis squarely in the same category with operations research, systems analysis, and the old mold of the social scientist. The point of this brief excursion is that we remain an adequate, satisfactory or consensual definitions of policy analysis.

Toward a functional definition and sphere for policy analysis.

Gubá (1984) believes that there may be as many as eight different constructions of the word policy in the literature. These range from the statement that "policy is an assertion of intents or goals" to "policy is a strategy undertaken to solve or ameliorate some problem" to "policy is the impact of the policy-making and policy-implementing system as it is experienced by the client" (pp. 64-65). "It is nonsense," he asserts, "to ask the question, 'What is the real definition of policy?'" Since "all . . . definitions are con-

structions; none can claim tangible reality . . . [and] virtually any policy definition must be admitted so long as its proposer can make a rational case for his or her particular usage" (p. 70).

What is crucial about the definition of policy that one accepts is that

. . . not all definitions are equal in their consequences for policy analysis . . . Each definition calls for its own data, sources, and methods, and produces unique outcomes . . . [and] each different definition has an enormous impact on the processes and products of policy analysis (p. 70).

Whatever the definition of policy that may be adopted, it should fit the purposes that the analyst has in mind, that is, there must be resonance between definition and purpose.

Coleman, according to Carley (1980), has proposed still other "important distinguishing characteristics . . ." which expand on the purposes, the nature and fittingness of policy analysis as it is carried out:

- 1) the audience is a set of political actors, ranging from a single client to a whole populace, and the research [sic] is designed as a guide to action;
- 2) partial information available at the time an action must be taken is better than complete information after that time;
- 3) the criteria of parsimony and elegance that apply in disciplined research are not important; the correctness of the predictions or results is important;
- 4) the ultimate product is not a "contribution to existing knowledge" in the literature, but a social policy modified by the research [sic] results; [and the understanding that]
- 5) it is necessary to treat differently policy variables which are subject to policy manipulation, and situational variables which are not (Coleman, cited in Carley, 1980, pp. 25-26).

The characteristics most of note here include the emphasis on different sets of political actors, including clients; the general

worthlessness of parsimony and elegance, which usually are thought to characterize good research and theory development; the contributions to modifying, altering or otherwise re-structuring social policies; and finally, the recognition that some variables (which we would call elements or factors or patterns) are subject to manipulation or alteration, and that others, which Coleman terms situational variables (and which we would call contextual elements) are not. In fact, Coleman's discussion greatly amplifies some of the problems which have been associated with more traditional definitions of policy analysis as a form of research, especially those connected to and with the positivist paradigm, with its emphasis on causality which is linear, and a value-free objectivity which is impossible to attain.

The characteristics which Coleman proffers are used to mount a trenchant criticism of policy analysis as it is supposedly practiced by the analysts (Carley, 1980):

One could easily argue that most public sector decision-making is in the end the result of a political bargaining process. This being the case rational analysis carried on in an ignorance of political reality may well end up so divorced from social reality as to be of little use to anyone. By the same token, however, vague and unsystematic "political" research loaded with implicit causality and value judgments, and not subject to exposure or dissection, is of no great value to policy making either. A balanced perspective helps policy makers and researchers select criteria for judging the relevance of analysis to a particular policy problem. It does this by encouraging examination of the divergency between the problem as defined by the policy maker and as defined by the analysts, and by arguing that no analysis is understood until it is clear what, and whose, value judgments are part of the analysis--value judgments which must be considered an integral part of every analysis (pp. 6-7; emphases added).

These statements eloquently express the differences between policy analysis and research (except for Coleman's unfortunate use

of the term research itself). The emphasis on multiple audiences, the willingness to accept partial information in the interests of serving important decisions, the foreknowledge that "messy" may be better in some instances than "elegant," the insight that policy analyses are performed for the sake of critical action, not advancement of nomothetic knowledge, and the recognition of the differences between action options and contextual givens resonates well indeed with the emergent of naturalistic paradigm.

Given the earlier definitions for what constitutes disciplined inquiry, and with the assertion that policies are constructions, growing out of multiple realities and multiple levels of experiencing the policy, the definition in the literature which comes closest to our understanding is that suggested by Ukeles (1977): policy analysis is "the systematic investigation of alternative policy options and the gathering and display of evidence for and against each option" (p. 224). The emphasis on systematic investigation, on multiple policy options, on the gathering of evidence (with reliance on empirical evidence), and the display of that evidence seem to us particularly appropriate.

But we are still left with discomfort, since no definition fully satisfies all desirable criteria. That problem can be solved by a new proposed definition:

POLICY ANALYSIS is a type of DISCIPLINED INQUIRY undertaken to GATHER and DISPLAY EVIDENCE (including CONTEXTUAL DATA) for and against ALTERNATIVE POLICY OPTIONS (INTENDED, ALREADY IMPLEMENTED, or EXPERIENCED) in order to INFORM NEGOTIATIONS OVER CHOICES in terms of the MULTIPLE VALUES of RELEVANT AUDIENCES.

What are the implications of this definition? First, policy analysis is said to be directed to multiple audiences. For policy

makers, a policy analysis is concerned with policy-in-intention, that is, the intended achievements of the proposed policy options, with concomitant analysis of what the expected and unexpected outcomes might be (the outcomes-plus-unexpected fallout construction). For those charged with carrying out the policy throughout the various levels of the government or other policy-implementing agency, the analysis will address policy-in-implementation, that is, the policy as it might reasonably be carried out in adapted form in a variety of contexts (note that one policy-in-intention may spawn multiple policies-in-implementation). For some analyses this could mean, for example, looking at the effects of policy implementation of block grants from state to state, or within a specific state. Policies-in-intention invariably are shrunk, stretched, nipped, tucked, and otherwise tailored to fit what are seen to be local needs (including the needs of the implementers as well!). The policy-in-intention is once removed from the original vision (a political accommodation?) in the policy-makers' minds as it emerges into the policy-in-implementation stage.

At two removes is the policy-in-experience; the logical audience for an analysis at this level is the client or target group(s) envisaged. Such analyses are directed at enhancing receipt of service, considering alternative options for resource allocation (Is the way the resources are allocated actually meeting the greatest needs of the largest proportion of the client group?), clarifying the delivery mode (Can clients find their way through the delivery system?), and for refining interpretation (Is this policy providing for the most salient needs?) (Guba, 1994).

Second, good policy analysis facilitates choice, and choice is value-mediated through political negotiation. The value judgments must be clear and publicly inspectable (to qualify as disciplined inquiry), and must be tied to the multiple value perspectives of client or target groups as well as other relevant audiences. Carley (1980) implies that this criterion can be met if options are defined by both policy makers and analysts in a negotiated or collaborative way, but it should be clear that the client or target groups ought also to be involved in this definitional task. In proposing the delivery of services, benefits, goods, or other aims of public policy, the values of client groups must be explored and arrayed as carefully as those of policy makers and analysts.

Third, the definition requires that contextual variables be taken into account. In the recognition of those things that are subject to change (what Coleman calls policy variables) and those things which are not amenable to change (what Coleman calls situational variables) lies the roots of grounding, that is, embedding decisions in the data of local contexts. The appreciation of the stability of local conditions makes for sophisticated analyses, while the assumption of manipulability of local contexts makes for awkward and sometimes perverse adaptation of public policy.

Fourth, the definition highlights the negotiation processes which can, do, and should occur in policy making and implementation. This provision is both pragmatic, in that policies ought not to be designed unless they meet needs that have been identified with the aid of the client group, and ethical, in that individuals and groups have the right to self-determination and to control over major

portions of their lives. Negotiations between policy makers, analysts, and clients represent appropriate, equitable, fair, and respectful ways in which to proceed in building policy. Policy developed without consultation with the client (without the consent of the governed, as it were) is equivalent to research conducted without negotiation and reciprocity, but along the traditional "take what you need and get out" lines (what Shulamit Reinharz, 1979, calls the "rape" model of research). Policy built in this way stands a good chance of being ineffective, misdirected, badly received, and otherwise wasteful of resources.

Finally, the definition suggests that the results of a policy analysis must be moved into arenas appropriate for display and debate. The best analyses cannot be effective if they are not provided to appropriate audiences for argument and contention. Carley (1980, p. 30) concludes that in many instances it is perfectly appropriate for policy analysts to "concentrate effort on outlining broad alternatives and elucidating the value choices and the value sets of participants relevant to the problem." The purpose of policy analysis is, after all, to illuminate choices, not to close them out.

In that sense the group of social scientists that seems to have done the best job of outlining broad alternatives to the public in recent years is the economists. Regular columns in each of the national news magazines, sophisticated debate on issues/talk television, and constant coverage by the news media have brought economic issues to the fore. Competing perspectives and competing theories on how Western economies might reduce inflation, narrow national

deficits, encourage productivity, fight recession, bolster personal savings, and the like, have brought economic issues from the universities and the Federal Reserve to the living rooms of American consumers. Economic theory doesn't seem to offer much in the way of solutions, but the voter unaware of the term Reaganomics or unfamiliar with the basic principles (if not the name) of Keynesian economics is rare. As it turns out, the average citizen has little control over the Federal Reserve, or over interest rates, so the debate is one in which he or she can participate only indirectly, but economics serves as an exemplar for how policy issues might be brought to stakeholders and audiences by those who design and legislate policy.

Policy analysis also differs from both research and evaluation as a mode of disciplined inquiry. Research yields technical reports and evaluation assessments of merit and worth; policy analyses yield different outcomes not only from these but also from one another depending on which definition of policy is adopted (Guba, 1984). So for instance, if the operational definition of policy is "an assertion of intents or goals," then a policy analysis yields a prioritization of goals to be achieved. If policy is a "governing body's 'standing decisions' by which it regulates, controls, promotes, services, and otherwise influences matters within its sphere of authority," then a policy analysis yields a set of rules, as for example, that parents must be afforded due process before having their children placed in special education classes. If policy is a guide to discretionary action, then policy analysis identifies key action roles or recommendations for discretionary limits. For example, in the university

accreditation process, evaluator-consultants may recommend non-accreditation if they believe the institution will be unable to provide funds for a viable program in the future, but those institutions may appeal if they believe that their situation has been misassessed or misrepresented. If policy is "a strategy undertaken to solve or ameliorate some problem," then policy analysis identifies common, special, or recurrent problems, and the development and exploration of sets of strategies for dealing with each. If policy is "sanctioned behavior," formally through authoritative decisions, or informally through expectations and acceptance, established over (or sanctified by) time," then policy analysis provides a set of role definitions and corresponding expectations, for example, that regular classroom teachers should consult with a resource teacher or a school psychologist when they are unsure about how to handle a case involving a special education student. If policy is a "norm of conduct, characterized by consistency and regularity, in some action area," then a policy analysis results in descriptions of satisfying behavior and corresponding norms, for example, that teachers with mainstreamed children in their classrooms ought to keep paperwork sufficiently up-to-date to satisfy a state department monitor who might wish to inspect the individualized educational plans (IEPs). If policy is defined as "the output of the policy-making systems: the cumulative effect of all the actions, decisions, and behaviors of the millions of people who work in bureaucracies; [or] an analytic category," then policy analyses produce descriptions of collective efforts of entire systems or bureaucracies. Finally, if policy is "the impact of the policy-making and policy-implementing system as it is experienced by the client," the chief policy analysis products are

client or target group constructions (positive and negative) of what the policy is doing in their lives (Guba, 1984). Guba's earlier (1984) analysis provides a set of handles by which the different definitions may be grasped:

In the case of Definition 1, policy "looks like" a set of ends. Definition 2 results in policy statements which look like rules, while definition 3 results in guidelines with some built-in discretion. Definition 4 results in a set of tactics. Definition 5 results in expectations, 6 in norms, 7 in effects, and 8 in encounters (p. 6; the preceding paragraphs are adapted freely from pp. 8-15; italics in original).

To recall the earlier discussion, definitions 1 through 4 can be described as relating to policy-in-intention, definitions 4 through 7 to policy-in-implementation, and definition 8 to policy-in-experience (pp. 64-65).

While the categories are not entirely exclusive, stakeholding audiences for the policy products corresponding to these different definitions will be policy-makers for policies-in-intention (although client groups have had and will continue to have, through advocacy groups, local and national level hearings, and court decisions, impact on intended policy); policy implementers for the policy-in-implementation definitions; and those who experience policy--client and target groups--for the policy-in-experience definition.

Are There Differences Without Distinctions?

To the question of whether research, evaluation and policy analyses are distinguishable the answer is yes, clearly each of these activities fits comfortably within the definition of disciplined inquiry (Cronbach and Suppes, 1969). But by the definitions proposed, and from a consideration of their implications, all three are unique activities. These definitions do not differ materially

from a consensus or combination of those commonly found in the literature, but they are stated in language that can be easily assimilated within either of the major paradigms, positivist or naturalist.

Systematic differences in intention or purpose of the activities signal profound differences in expected products, outcomes, and intended audiences. The distinctions drawn dramatize the need to view research, evaluation, and policy analysis as separate, discrete, and mutually exclusive activities. If that is the case, then research is research, evaluation is not evaluation research but simply evaluation, and policy analysis is neither evaluation in another form nor is it policy analysis research. It is, simply, policy analysis, although the tools, methods, and approaches may be similar, particularly during data collection and analysis phases. Correspondence occurs only to the extent that techniques used to arrive at data, and to draw conclusions from them, may occasionally overlap. And while methods may be useful to distinguish some paradigmatic choices, they are neutral with respect to the type of disciplined inquiry in whose behalf they may be utilized.

Does the Choice of Paradigm Matter?

The matter of paradigmatic differences cannot be overlooked. It is becoming increasingly clear that the dictum "believing is seeing" applies in all three activities; what we hope or expect to see blinds researchers, evaluators, and policy analysts to other questions or issues which may be of pressing, or at least of equal, import. Decisions about how to label an activity are important but the prior decision regarding the philosophical and epistemological

stance which will guide the inquiry is equally crucial. The current competition between inquiry paradigms in the social science community is founded on a fundamental disagreement about what we shall "see" (or what we should persuade our students to be able to see). So the question of what paradigm should guide disciplined inquiry moves to the forefront of the debate.

Elsewhere (Guba and Lincoln, 1981; Lincoln and Guba, in process) we have made the argument that the emergent naturalistic paradigm is more useful and demonstrates greater power in inquiry, particularly social/behavioral inquiry, because its assumptions provide a better fit to phenomena of interest (especially as we have come to know them lately), because it is more resonant with emergent substantive paradigms in fields ranging from basic physics to brain theory (especially as delineated in the work of Schwartz and Ogilvy, 198__), and because it has been able to deal better with the crises (in the Kuhnian sense) that have afflicted the conventional, positivistic paradigm beginning about the turn of the century. Since research, evaluation, and policy analysis can all legitimately be viewed as exemplars of disciplined inquiry all of these observations apply to each of them. Insofar as more traditional definitions of these three inquiry forms have tended to exhibit bias in favor of the conventional paradigm, we have proposed new definitions which open the possibility of applying the new paradigm with equal legitimation, although we have been at some pains to frame the definitions in terms that would not close out older options for those who elect to stay with them.

In addition to these compelling arguments, we have voiced some additional considerations in favor of the proposition that the naturalistic paradigm should be the paradigm of choice. With respect to research, we are prepared to argue that use of the naturalistic paradigm obviates the basic/applied dilemma. If it is the case that all inquiry is in some sense context-bound, because phenomena take their meaning from their contexts as much as from any intrinsic characteristics, then all phenomenological studies are applied. If we cannot hope for generalizations but only for working hypotheses, the very idea of "basic" research is shaken to its roots. If there is no linear causality, the hope for a nomothetic social science is largely vain.

But even if one wished to maintain the basic-applied distinction, the argument in favor of the naturalistic paradigm can still be made. For naturalistic inquiry facilitates theory development (through the discovery of grounded theory) and provides the "thick description" in terms of which other researchers can further test hypotheses or determine the limits of transferability. In relation to applied research, the question of application--to a particular situation at a particular time and place--is central. Naturalistic inquiry is in the best position to determine those contextual elements that support the design and development process, or which need to be considered before an application can be made.

With respect to evaluation, we have made the case in detail in our earlier work (Guba and Lincoln, 1981) that the naturalistic paradigm is the paradigm of choice, at least insofar as one takes

responsive evaluation as the focus for the evaluation. To be responsive implies the identification of stakeholding audiences--which can only be done in context--and of interacting with those audiences to discover their claims or concerns with respect to the evaluand and the issues they may wish to raise about it. It is immediately evident that the conventional paradigm can test only those claims, concerns, and issues which the evaluator is in a position to foresee; others will necessarily go by the board (as Scriven so cogently points out in his discussion of "unintended" effects). Further, insofar as the evaluation may be concerned with worth (as most evaluations are), it must be conducted in the context of application. Evaluation rests on the valuing process, so that the values (perspectives) of different audiences must be taken into account. Since one cannot count on value consensus (indeed, value pluralism is today's mode), evaluation must culminate in a negotiation process. Good evaluations, as is coming to be more and more appreciated, cannot end with a simple report of conclusions and recommendations but in the delineation of value judgment options which must be further explored before any action alternative can be specified. Thus the evaluator becomes less technician than change agent; less objective scientist than active collaborator. All of these considerations are clearly more resonant with the naturalistic than the conventional paradigm.

Many of the same observations also apply to the policy analysis arena. Policies are never singular; policy options represent different realities and may exist at different levels (intention, implementation, and experience). Policy decisions are the culmination of a political

negotiation and bargaining process. Policies emerge as the outcome of a series of mutual shapings, which cannot be understood except as a whole. Value pluralism also characterizes the policy arena. Different contextual factors argue for different policy formulations.

When it is policy-in-intention which is considered, a policy analysis completed under naturalistic assumptions will facilitate determination of both policy-maker intentions and client needs. When it is policy-in-implementation which is addressed, naturalistic inquiry facilitates the discovery and description of informal (and occasionally formal) adaptations made by those charged with implementation ("street-level bureaucrats"). Delineation of discretion as exercised by these agents is still largely underdescribed; we know very little about the kinds of discretion that are exercised and still less about the differences in latitude that exist (or are exploited) between the policy as intended and as implemented. Naturalistic inquiry at this level of policy analysis would bestow insight into the process of local, impromptu decision-making as it is carried out with respect to the clients or targets of policy. Finally, we have virtually no studies which document and illustrate the policy-in-experience dimension. Policy studies have tended to be top-down, ethogeneous inquiries which tell about cost-benefit ratios (or more likely, which advance reasons why such ratios cannot be computed), about populations, income levels, neighborhood housing patterns, and the like, but they rarely aid us in seeing how clients experience the policy as enacted (as for example, that many Blacks feel the policy of informing them about sickle-cell anemia is simply a genocidal plot). Naturalistic inquiry provides the basis for vicariously

experiencing what the clients encounter as they attempt to negotiate the bureaucratic structure. Studies of this latter type would clearly have a major impact on altering norms of service delivery to affect groups.

It is our argument then that use of the naturalistic paradigm in all three inquiry areas--research, evaluation, and policy analysis--is both appropriate and warranted. While these areas differ in important ways from one another, as we have tried to show, paradigmatically they are all more amenable to providing meaningful results in inquiry when it is carried out naturalistically than conventionally.

Footnotes

¹ See, for example, Lincoln, Y.S., "The structure of promotion and tenure decisions in institutions of higher education," Review of Higher Education, 6 (Spring, 1983), 217-232, for a larger discussion of this example.

² The meaning of the terms policy-in-action and policy-in-intent will become clearer shortly. It is our contention that policies lead three lives: those which represent their intent, those which represent their implementation, particularly by "street-level bureaucrats (Lipsky, 1981), and those which represent the policy as experienced by its clients or targets. Thus there is a major difference between what a policy is intended to do, what it does, and what it is experienced as doing. See below, and Guba, 1984.

³ House implies that the clientele for a given analysis is singular, or at least highly convergent, since "often the content of a policy analysis is influenced greatly by the known or anticipated desires and demands of the decision-maker for whom it is being prepared." See p. 29.

⁴ The reader should note that a policy option is not a treatment, program, facility, performance, or anything similar; these are properly objects for evaluation and represent something done in the name of a policy. For example, negative income tax--a treatment--is put in place in the name of the policy of ameliorating the condition of the indigent (another treatment that might have been mounted in the name of that same policy is called welfare).

REFERENCES

- Braybrooke, David and Charles E. Lindblom: A Strategy of Decision. New York: Free Press, 1963.
- Cabresi, Guido and Bobbitt, Philip. Tragic Choices. New York: W.W. Norton and Co., 1978.
- Carley, Michael. Rational Techniques in Policy Analysis. London: Heinemann Educational Books, 1980.
- Caro, F.G. (Ed.). Readings in Evaluation Research. New York: Russell Sage Foundation, 1971.
- Cronbach, L.J. and Suppes, P. Research for Tomorrow's Schools: Disciplined Inquiry in Education. New York: Macmillan Co., 1969.
- Dror, Yehezkel. Ventures in Policy Sciences. New York: American Elsevier Publishing Co., 1981.
- Eisner, E. The Educational Imagination. New York: Macmillan Publishing Co., 1979.
- Gephart, William J., Robert B. Ingle, and Gary Saretsky. Similarities and Differences in the Research and Evaluation Processes. Bloomington, IN: Phi Delta Kappa, April, 1973.
- Guba, Egon G. The effect of definitions of policy on the nature and outcomes of policy analysis. Educational Leadership, 42 (October, 1984), 63-72.
- Guba, Egon G. The role of client-experienced policy in policy studies. Unpublished paper, Center for Public Affairs, University of Kansas, July, 1982b.
- Guba, E.G. and Lincoln, Y.S. Effective Evaluation. San Francisco: Jossey-Bass, Inc., 1981.
- Guba, E.G. and Lincoln, Y.S. Epistemological and methodological bases of naturalistic inquiry. Educational Communication and Technology Journal, 30 (1982), 233-252.
- Helms, Lelia B. "Policy analysis in education: The case for incrementalism." The Executive Review, 1 (May, 1981), 2-3.
- Hirschman, Albert O. Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States. Cambridge, Massachusetts: Harvard University Press, 1970.
- House, Peter W. The Art of Public Policy Analysis. Beverly Hills, California: Sage Publications, 1982.

- Jenkins, W.I. Policy Analysis: A Political and Organizational Perspective. New York: St. Martin's Press, 1978.
- Lasswell, Harold D. A Preview of Policy Sciences. New York: American Elsevier Publishing Co., 1971.
- Lincoln, Y.S. The structure of promotion and tenure decisions in institutions of higher education: A policy analysis. Review of Higher Education, 6 (1983), 217-232.
- Lincoln, Y.S. and Guba, E.G. Understanding and Doing Naturalistic Inquiry. Beverly Hills, CA: Sage Publications, Inc., in press.
- Lindbiom, Charles E. "The science of muddling through." Public Administration Review, 19 (Spring, 1959), 81.
- Mann, J. The outcomes of evaluative research. In Weiss, Carol H. (Ed.) Evaluating Action Programs. Boston: Allyn and Bacon, 1972.
- Mitroff, Ian I. and Pondy, Louis R. On the organization of inquiry: A comparison of some radically different approaches to policy analysis. Public Administration Review, (September/October, 1974), 471-479.
- Nagel, Stuart, Ed. Improving Policy Analysis. Beverly Hills, California: Sage Publications, 1980.
- Nelson, Michael. "What's wrong with policy analysis." The Washington Monthly, 26 (September, 1979), pp. 53-59.
- Parlett, M. and Hamilton, D. Evaluation as Illumination: A New Approach to the Study of Innovative Programs. Occasional Paper No. 9. Edinburgh, Scotland: Centre for Research in the Educational Sciences, University of Edinburgh, 1972.
- Patton, M.Q. Qualitative Evaluation Methods. Beverly Hills, Calif: Sage Publications, 1980.
- Perrow, Charles. Disintegrating Social Sciences. NYU Education Quarterly, (Winter, 1981), 2-9.
- Popham, W.J. Educational Evaluation. Englewood Cliffs, N.J: Prentice-Hall, 1975.
- Provus, M. In Gephart, Ingle and Saretsky, q.v.
- Reinharz, Shulamit. On Becoming a Social Scientist. San Francisco, Ca: Jossey-Bass, Inc., 1979.
- Ripley, Randall B. and Franklin, Grace A., Eds. Policy-Making in the Federal Executive Branch. New York: Free Press, 1975.

- Schulman, Paul R. "Non-incremental policy-making: Notes toward an alternative paradigm." American Political Science Review, 69 (1975), 1, 354-70.
- Schwartz, P. and Ogilvy, J. The Emergent Paradigm: Changing Patterns of Thought and Belief. Analytical Rpt. No. 7, Values and Lifestyle Program. Menlo Park, Calif.: SRI International, 1979.
- Scriven, Michael. "Goal-free Evaluation." In E.R. House (Ed.) School Evaluation: The Politics and Process. Berkeley, Calif.: McCutchan, 1973.
- Scriven, M. The Methodology of Evaluation. AERA Monograph Series in Curriculum Evaluation, No. 1. Chicago: Rand McNally, 1967.
- Stake, R.E. Evaluating the Arts in Education: A Responsive Approach. Columbus, Ohio: Merrill, 1975.
- Stokey, Edith and Zeckhauser, Richard. A Primer for Policy Analysis. New York: W.W. Norton and Company, 1978.
- Stufflebeam, Daniel L. and others. Educational Evaluation and Decisionmaking. Itasca, Ill: Peacock Publishing, 1971.
- Suchman, Edward. Evaluative Research. New York: Russell Sage Foundation, 1967.
- Tyler, R.W. Basic Principles of Curriculum and Instruction: Syllabus for Education 360. Chicago: University of Chicago Press, 1949.
- Ukeles, Jacob B. "Policy analysis: Myth or reality?" Public Administration Review, 37, pp. 223-228.
- Weiss, Carol H. Knowledge creep and decision accretion. Knowledge: Creation, Diffusion, Utilization, 1 (March, 1980), 381-404.
- Wildavsky, Aaron. Speaking Truth to Power: The Art and Craft of Policy Analysis. Boston: Little, Brown and Co., 1979.