Social Policy Assessment Research

The Establishment, The Underground

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IDRC/CRDI
Ottawa, Canada
February, 1998
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ABSTRACT

Social policy assessment research (SPAR) provides information for evaluating policies in terms of their effectiveness in moving society toward its goals. The practice of SPAR is still dominated by an Establishment of policy analysts and academics in the major social sciences. The Establishment's positivistic, reductionist, and technocratic methods have advanced systematic inquiry into the public interest, but this inquiry seems to have had little direct influence on actual policy decisions.

Establishment SPAR is initiated by the need to predict or monitor the outcomes of a specific policy proposal or decision. The goals may be particular to the policy, or more general, such as the goal of societal economic efficiency. Interest in environmental and social impact assessment has broadened the Establishment's scope in recent decades, but not its methodological approach.

The Establishment is challenged by an increasingly respectable SPAR Underground of NGOs and international development agencies. The Underground's fundamental concern is not with information generation by research specialists serving decision-making specialists but rather with information sharing by diverse stakeholders holding complementary knowledge and decision-making responsibility.

Whereas the Establishment focusses on information quality (precision, generalizability, believability, causation identification, and at best, comprehensiveness) the Underground focusses on information utility (timeliness, fairness, empoweringness, action implicability, and fundamentalness.) To achieve its purpose, the Underground employs methods that are participatory, holistic and heuristic.

Participatory methods are derived from the practice fields of participatory action research, participatory rural appraisal, and participatory planning.

Holistic conceptual frameworks are built from systems theory and the emerging disciplines of ecological economics, gender analysis, and social capital assessment.

Heuristic tools, such as scenario building and goals achievement matrices, produce insight rather than precision. The Underground applies these tools in a variety of settings, from the single workshop to the ongoing SPAR process.

Underground SPAR is instigated not by a particular policy proposal or decision but by concern about a social problem and the need to identify policy causes and solutions.

Most Underground SPAR is conducted by planners and researchers working at local levels through NGOs, service delivery agencies, academic outreach programs, or local governments. Here, the Underground has been effective in improving local policy making, but not in contributing from the bottom to policy-making at the top. One state-of-the-art question is whether and how such a bottom-up contribution can be made. The possibilities lie in:

a) conducting Underground SPAR locally on policies being formulated from above; b) feeding into senior level SPAR the local knowledge generated through SPAR originally conducted for local purposes.

Although most interest in Underground SPAR is in its local applications, there have also been a few significant successes in conducting Underground SPAR directly at or from the top. These have involved discrete SPAR exercises, conducted for example by the World Bank, on specific macro policy issues. For the most part, however, the Underground's methods remain unappreciated, indeed often unknown, within central agencies and major research institutions. Thus a second state-of-the-art question is whether and how Underground methods could augment and/or contextualize the Establishment methods currently favoured at the top.

A third state-of-the-art question is whether and how the Establishment can complement and enrich the Underground. For example, could the Establishment provide information that develops, tests and resolves ideas that arise in Underground processes?

The state-of-the-art questions can best be addressed by conducting empirical research on SPAR itself. Such meta-research could investigate the conditions under which Establishment and Underground SPAR approaches are respectively effective in helping to improve policy, and the opportunities and constraints to creating those conditions. It could also include experimental research in applying combinations of SPAR methods to various types of policy assessment situations.
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Bibliography: Works Cited
SOCIAL POLICY ASSESSMENT RESEARCH:
THE ESTABLISHMENT, THE UNDERGROUND
A State-of-the-Art Report

I. INTRODUCTION

1. Purpose

This report is a review of the state of the art of social policy assessment research (SPAR) methodology. It was commissioned as a contribution to IDRC's program on the Assessment of Social Policy Reforms (ASPR).

As reviewer, I was charged with examining general social research designs for determining cause-effect relationships, developing a typology of methodological approaches to policy assessment, examining the relationship of planning tools to research, and drawing conclusions about what constitutes effective, policy-relevant research.

The report is both analytical and normative. It is concerned with what is being said in the literature about existing and potential overlaps between the conceptually and behaviourally independent spheres of assessment and research. It is addressed to those who would increase the overlap, i.e. those who as researchers, research organizers, research funders, or policy advisers are interested in ways research can be designed to be more relevant to policy assessment, and policy assessment designed to make better use of research.

2. Approach

Much has been written on the connection between policy and research. I have not attempted to read it all. My approach has been to initially structure the review on the basis of previous reading on relevant topics (such as evaluation research, policy analysis, impact assessment, participatory

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1 The acronym "SPAR" is created purely for the purpose of reducing the paper's length. It is not an acronym elsewhere in use, to my knowledge.

2 "Through research, ASPR will contribute to build the capacity of governments and civil society institutions in developing countries to analyze and to undertake effective social policy reforms-- reforms that will lead to improved social services, reduced poverty, and ultimately sound social sector movements... [T]he approach adopted by ASPR-- assessment of impact and effectiveness of social policy reform options-- enables governments and non-government institutions to develop alternative approaches to reform social policies that reflect local circumstances and needs..." (IDRC 1996a:4 original emphasis).

The particular component of the ASPR program that this paper is intended to contribute to is "Development and Dissemination of Assessment Methods and Tools" in which "the focus is on the identification, classification and assessment of policy evaluation methods and tools and the development and testing of new tools" (IDRC 1996a:11).
planning, etc.), to discuss this with IDRC officers\textsuperscript{3}, to present the initial structure to a seminar in Santiago,\textsuperscript{4} to consider the explicit and implicit responses, to revise the structure on the basis of this consideration and the themes arising from the Santiago seminar, to browse recent volumes of selected policy and planning journals and monographs\textsuperscript{5} (perusing the works that explicitly address or further the state of policy assessment research methodology, plus analyzing some works representative of that state so as to identifying types of methods employed in various SPAR contexts), then finally to incorporate findings from the readings into this far-from-complete text.

The report takes the long view. It does not focus only on what is being said in 1997 about SPAR methods, nor even on what has been said in the 1990s. The evolution of SPAR has been a good half-century process. It is necessary to locate the state of the art within that history in order to appreciate what is now being said, and what is not being said, with regard to SPAR.

The structure of the report is based on a dichotomous typology of SPAR approaches. The dichotomy, which suggested itself after my preparatory reading, may be seen by readers as distressingly simplistic. But it appears to me to summarize well the major differences in applied SPAR approaches. It is almost a matter of two cultures. I have labelled the two approaches "the Establishment" and "the Underground."

My own philosophy, in part developed through various SPAR practice experiences,\textsuperscript{6} favours the Underground. Aware of this bias, I try to show the respective strengths and limitations of both approaches. Indeed, I come to the perhaps overly optimistic conclusion that a rapprochement is possible, if, those interested in SPAR from both sides can be self-reflective and experimental.

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\textsuperscript{3} I am thankful to Mario Torres, Denise Deby, Jennifer Moher, and others of IDRC for these helpful discussions, and for providing me with the opportunity to prepare this report.

\textsuperscript{4} Seminario de Investigacion y Metodos para el Estudio de Reformas Sociales en America Latina, 2 al 6 de Junio 1997, Santiago, Chile, organized by Centro de Investigacion y Desarrollo de la Educacion (CIDE), Instituto Latinoamericano de Doctrina y Estudios Sociales (ILADES), and SUR, Profesionales Consultores Ltda. Sergio Martinic of CIDE was especially helpful at and after the seminar in linking me with Latin American scholarly perspectives.

\textsuperscript{5} I am indebted to my colleague Tim McDaniels for making his library on risk assessment and other aspects of policy analysis available to me, and to a number of senior UBC planning students who through their current writings and research have introduced me to works relevant to this report. Among these people are Deborah Campbell, Mike Carr, Karen Chua, Pierre Fallavier, Nicholas Heap, David Lertzman, Steve Schneider, and the 1997 "Fundamentals of Planning Practice" class.

\textsuperscript{6} This practice has included policy analysis for governments and NGOs, social impact assessment of megaprojects, community-based action research, and capacity building for planning and policy assessment in communities and research institutions.
3. Definitions

*Policy* in this report refers to any general intention by any level of government, whether or not the intention is explicitly stated.

*Research* refers to systematic inquiry.

*Social policy* refers to government intentions to directly affect human well-being (health, education, consumption power, human rights) through regulation, expenditures, incentives, or symbolism.

*Social policy assessment* refers to the process of **making judgements** about the relative merits of existing or proposed social policies. This process includes the defining of policies to be assessed, the determination of criteria for judgement, the application of the criteria so as to draw conclusions about the significance of a given policy's costs and benefits, and the making of decisions as to which policies to recommend or approve, and which to support or follow. "Social policy assessment" refers both to diffuse processes and to discrete exercises, either of which may involve a large number and variety of people, not just professional analysts. It is a function of both the state and civil society.

Seen in this way, policy assessment is all of: a temporally distinct component (a step) in the linear process leading from problem identification to decision on what new or improved policy to adopt; a similar component in the parallel process of deciding what policy to follow or support in practice; and, a form of social learning.\(^7\)

It is as part of discrete, deliberate activities, whether they are of specified duration (e.g., a workshop) or continuous (as in structured monitoring) that social policy assessment is of interest to this report. Such activities involve people making decisions about issues to focus on, options to consider, criteria to apply, and optimal choices. Policy "makers," policy "implementors," and professional and citizen "advisors" all make such decisions, and thus all do policy assessment.

\(^7\) Armstrong (1995a:11, 5 original emphases) points out that policy making and implementation is an "iterative learning process" rather than a process of compliance" and that "policies are effectively reformulated during the implementation process." In other words, we could say that the relationship between policy and implementation is far from uni-directional (policy---> implementation) but rather a sequential series of feed-out and feed-back iterations (policy formulation---> implementation practice more or less consistent with policy---> learning---> policy and practice reformulation). My own observations lead me to go even farther in uncoupling the de facto relationship between governmental practice and policy making. Not only is there entropy in the implementation of policy through practice, and learning for policy from practice, but practice can often be independent of policy. Independence can result from ignorance of relevant policies, conscious flouting of policies for selfish or altruistic reasons, or contradictions between policies that make it impossible to follow them all at once. Government leaders, as well as their bureaucrats, often do not follow their own rules, let alone more softly stated policies. Thus policy and practice can be described as a system of two parallel, loosely connected processes (policy formulation and reformulation <--- // ----> practice more or less informed by policy). In this context, policy assessment, broadly defined, plays central roles on the policy track, in informing practice, and in learning from practice.
Social policy assessment research (SPAR) refers to any systematic (purposeful/planned) inquiry undertaken to gain new information about an existing or proposed social policy's positive and negative effects—whether or not the inquiry is conducted by professional researchers. This includes information on intangible (qualitative) as well as monetizable (quantitative) costs and benefits, those that indirectly (e.g., ecologically) affect well being as well as directly, those that are unintended (spin-offs, externalities) as well as intended, and the distribution of all of these.

The two preceding definitions help to distinguish between the abundant literature on policy assessment, including political process, (literature on how people do or should make judgements), and the literature on research methodology in a policy assessment context (literature on how data are or should be collected and analyzed). The former is not of direct interest to this report, the latter is. However, the dividing line is not always clear.

The field of "decision analysis" (Winterfeldt and Edwards 1986, Brown 1992, Kirkwood 1992, Kleindorfer et al. 1993, Payne et al. 1993), including risk analysis (Bodily 1992), has studied since the mid 1970's the ways people make decisions on matters including policy, and prescribed ways to structure decision-making in complex situations. This is methodology of assessment, not of empirical research, and as such outside the purview of this report. But the way decision issues are structured bears on the collection and analysis of data to inform judgement at the various steps of the decision-making process, and thus decision analysis literature cannot be overlooked in a review of SPAR methods.

Applied SPAR can be defined as decision-oriented research. It is conducted to meet the immediate information needs of particular assessors working on a particular policy issue. Its products are considered in discrete social policy assessment exercises.

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8 The distinction between the definitions of assessment and research may be illustrated as follows: stating that economic growth is more important than equity, then on that basis determining that a certain policy option for regulating competition is preferable to another, constitutes social policy assessment; collecting and analyzing primary or secondary data to produce new information on what appears to be the consequences when growth is given priority over equity, or on who prefers growth over equity and why, or on what various people think are good strategies for promoting growth, equity, or some balance of the two, are all SPAR activities.

9 Kleindorfer et al. (1993) date the beginning of the field to the formation of the Decision Sciences Group at the Wharton School, University of Pennsylvania, in 1974.

10 Economic cost-benefit analysis provides an example of how assessment and research are both distinguishable and intimately connected. Determining whether and how to use cost-benefit analysis (e.g., whether to treat it as the sole, as the dominant, or as one of several bases for decision-making) is a matter of assessment methodology. Determining how to gather and analyze data to identify costs and benefits of a particular policy is a matter of research methodology. But some matters, for example determining how much to discount future costs and benefits, involve value judgements, and thus issues of assessment, and empirical observation (how much do people care about the future?) plus analytical technique, and thus issues of research method
Pure SPAR, which includes basic social science research\(^{11}\) serves diffuse ongoing social policy assessment. Its sole purpose is to enlighten society and decision-makers; it does not attempt to identify and assess particular policy options, or contribute to immediate problem-solving.

Meta-research refers to research on research. The term is used here to refer to research on SPAR methods to determine their effectiveness and efficiency in serving SPAR's purposes.\(^{12}\)

SPAR methodology refers to meta-research and conclusions related to the following questions: i) who should conduct and control SPAR? ii) what data should be collected and what categories used for analysis? iii) how should data be collected and analyzed to identify effects of policies? Answers to these questions respectively determine: i) the manner in which research is conducted (e.g., technocratic or participatory); ii) the fundamental concepts (e.g., reductionist or holistic) of society guiding data collection and analysis; iii) the types of tools used (e.g. positivistic or heuristic) for data collection and causal analysis.

4. Scope

i) Applied SPAR: This review deals only with the methodological problems peculiar to applied SPAR. It does not address generic issues of social research method which both pure and applied SPAR must wrestle with. Those issues are the subject of many texts (on statistical analysis, surveying, grounded theory construction, etc., etc.).\(^{13}\)

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\(^{11}\) Some writers (e.g. House and Shull 1991:3) define "policy analysis" in way that is close to the definition here of applied SPAR, and reserve the term "policy research" for what is here called pure SPAR:

"Policy analysis refers to the process of computation and arranging of data to help political executives respond to the many demands of assorted interests in a specific policy context over a relatively short period of time. Policy research refers to the process of generating new detailed information and perspective on relevant policy issue over the longer term, in a more general political context."

Such nomenclature is rejected in this report because "policy analysis", as most of its practitioners including House and Shull understand it, clearly is, or at least includes, research. As well, it is only one of several ways SPAR is done.

\(^{12}\) Note that this form of meta-research is different than what is more commonly referred to (for example in epidemiology) as meta-research: comparative statistical studies of statistical studies. That more common usage refers to meta-research oriented to gaining an understanding of varying experimental and quasi-experimental substantive results, not to gaining an understanding of methodological effectiveness and efficiency.

\(^{13}\) If in a state-of-the-art report one were to address all new methods used by researchers who do policy-relevant work (pure SPAR)-- as opposed to research directly oriented to immediate policy decisions (applied SPAR)-- one would have to look at the whole corpus of quantitative and qualitative methodology literature. This would be too vast a scope for a report such as this. Examining the causes of racism, for example, could well be policy-relevant but the full range of methods for undertaking such examination is not dealt with here. Only methods used for gaining knowledge helpful to formulating immediate specific policies, e.g. for battling racism, are considered.
The methodological problems facing social scientists trying to do applied SPAR, as a number of observers have noted, are grounded in social science's disciplinarity, methodological rigour, and theoretical orientation. These traits make it difficult for social scientists to provide timely, user-friendly information that has clear, immediate policy implications. Social scientists are more effective doing pure SPAR which contributes to "enlightenment" and long-term social learning, and thus diffusely rather than directly affecting policy (Boeninger 1982, Weiss 1982, McCall 1984, Heineman et al. 1990, Heinz and Zapf 1994).

It should be noted that these assessments of SPAR's utility are made by observers (meta-researchers) of Establishment SPAR. Partly because of the Underground's newness, its effectiveness has received little scrutiny.

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14 Here are three observers' views on the efficacy of social science in applied SPAR.

"[G]reater scientific sophistication among government policy analysts may do nothing more than add a veneer of intellectual respectability to policies pursued for reasons that have nothing to do with 'analysis'" (Anton, one time editor of Policy Sciences, 1984:212).

"Researchers need to be aware that the work that they do, no matter how applied in intent and how practical in orientation, is not likely to have major influence on the policy decision at which it is purportedly directed... When competing with other powerful factors, such as officials' concern with political or bureaucratic advantage, one limited study (and all studies are limited in some way) is likely to have limited impact" (Weiss 1986:232, cited in Robson 1993:461).

"Viewed from... a policy sciences [see below] perspective, social science research has so far had precious little effect on public policy making, particularly at the national level. Policy sciences spokesmen find that a very large proportion of applied social science fails to derive any policy action implications whatsoever... In analyzing the causes of this general failure, the policy sciences movement... indicts the insularity of the separate social science disciplines... [the fact that research is not] undertaken for purposes of any application... [and that] applied research is a very much ancillary and rather poorly rewarded activity [in the academy]...

"In fact... conceptual influences of social science now appear to have been more significant thus far than have its directly 'instrumental' influence. Social science performs an enlightenment function within the public policy process, in providing or stimulating, among some participants, new ways of thinking about a social problem or the policy process itself...

"The application of knowledge becomes problematic only when the through the division of labour, producers of knowledge come to be distinct from the users of that knowledge... [A]ccording to several scholars... such social differentiation has proceeded to the point that policy makers and social scientists in fact represent two distinct 'epistemic communities'...

"[I]n the foreseeable future... social science knowledge.. application in the policy-making process will continue to be limited, selective, and relatively indirect." (McCall 1984:6-18, emphasis in original)

15 While Boeninger 1982:256,258) perceives that "in Latin America... the idea of making systematic use of social knowledge to solve concrete social problems has not yet [by early 1980's] been fully incorporated into the prevalent culture," he nevertheless offers examples of how SPAR, e.g. that conducted by CEPAL (the U.N. Economic Commission for Latin America) on agrarian reform in the 1960s, contributed to "political platforms and governmental commitments of many nations in the region and became high-priority goals of the Alliance for Progress".
ii) **Empirical SPAR:** Like most other work in research methodology, this review deals only with inductive, empirical\(^{16}\) research methods. These include, but go beyond, deduction.

All SPAR employs deduction, much of it relies totally on it,\(^ {17}\) and reliance on deduction alone can produce new insights and computational shortcuts (as in mathematics and much of economics). However, there is little of interest to be said about deduction in an applied SPAR state-of-the-art review which is concerned with *general* methodological issues, thrust of development, and elaboration of types. Important (not necessarily recent) advances in deduction, such as Boolean algebra and probability theory, just as advances in empirical data gathering and interpretation, such as hermeneutics, are rarely discussed in works on, or manifested in reports of, applied SPAR.\(^ {18}\)

What are discussed and manifested in the literature on applied SPAR are general empirical issues and their explicit resolutions. These issues centre on: cause-effect identification (what are relevant social effects to investigate? what are their policy causes?), research design and validity (how certain are we about our findings? how much can they be generalized?), and data gathering/interpretation (who has knowledge? who creates it? to whom is it communicated?)

Deductive tools (e.g. probabilistic decision-trees) are sometimes identified in the applied SPAR literature,\(^ {19}\) but not deduction issues. Deduction issues are left to technical specialists such as statisticians.

iii) **Prescriptive methodology:** This review focusses on what the methodological literature says explicitly about how applied SPAR should be conducted. Some examples of SPAR practice are provided; however, except at the most general level, the review does not attempt to impute from the abundant SPAR literature how much various methods are in fact practised by various types of researchers in various settings. Nor does it attempt to determine what have been the respective

\(^{16}\) "Empirical" here means observational (not necessarily quantitative), and inductive.

\(^{17}\) Basic deduction is probably the primary SPAR mode in use, at least as indicated by the numbers of pages written in the vast literature reporting SPAR products. In much of this literature, there is little or no systematic presentation of facts newly discovered through observation-- there is simply an implicit reliance on logic, applied in various ways, with or without fallacies, to make arguments based on assumptions (facts) that the reader is expected to know, take for granted, or accept at face value. This literature includes newspaper editorials, thoughtful magazines (e.g. *Atlantic Monthly*), think tank monographs and journals for generic policy analysts, (e.g. *Policy Options*, published by the Institute for Research on Public Policy in Montreal) as well as much of the professional and academic writing by and for various social policy specialists.

\(^{18}\) In any event, I am not qualified to discuss such specialized topics.

\(^{19}\) Deductive tools and approaches manifested in the applied SPAR literature range from the arcane in operations research journals, through basic statistical analysis in mainstream policy analysis reports and journals, to the implicit use of basic syllogisms in more popular media and studies.
impacts on policy of using various methods, except insofar as effectiveness is addressed in the prescriptive literature.

5. The Nature of SPAR: Roles, Activities, and Actors

**Roles:** The purpose of SPAR is to contribute to social policy assessment, i.e., to inform policy judgements. These judgements might be made immediately (in the case of applied SPAR) or far in the future (in the case of pure SPAR). They may be made by an individual (e.g., a voter, or committee member), a small group (e.g. an executive council or advisory board), or a very large group (e.g., an electorate). They may relate to a major or minor, a local or national, matter.

Applied SPAR is motivated by the need for information that can be helpful in making an immediate decision about what kind of policy (e.g. hospital management centralization or decentralization) to recommend, support, or approve in responding to a certain issue (financial cut-backs in the health care system, ineffective delivery, etc.). The actual influence of applied SPAR on immediate decisions may or not be significant. Whether or not it is, applied SPAR may have an important long-term general knowledge value, depending on the quality of the results, their dissemination, etc. Thus SPAR intended to be applied can also perform a pure SPAR function.\(^{20}\)

Any given SPAR exercise can attempt to be definitive in influencing an assessment (e.g. by presenting a numerical overall cost-benefit ratio) or can be content with contributing one perspective. It can attempt to produce non-discussable, "technical" knowledge, or heuristic (insight-producing) knowledge designed to stimulate discussion or further inquiry. It can be broad or narrow in its treatment both of policy effects and policy causes. It can claim to be value-free, or explicit about its normative assumptions.

SPAR can address local, regional or national policy issues.

**Activities:** SPAR happens whenever one or more people systematically try to identify policy effects. SPAR activities are designed to solve the trade-offs inherent in research desiderata (e.g. effectiveness vs. efficiency), and to meet the exigencies of decision-making processes (e.g., the timing of a vote or a reporting deadline).

Applied SPAR exercises take place within a fixed period of time. These can be as short as a back-of-the-envelope sketch, at an extreme, to a workshop of several days, to a process taking months,

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\(^{20}\) Pure SPAR may be initiated by a desire, for general but ultimately practical purposes (e.g., continuous influence of politicians), to gain fuller information, to reduce confusion, or to prove a point about the effects of an existing or potential policy (e.g., free trade), or, about the policy causes of a certain kind of social condition (e.g. racism). In these general purpose cases, SPAR is not contextuated by the need to make a specific decision at a specific time. It has an indirect, diffuse influence on policy.
or years. (Pure SPAR, in contrast, can be a life-long learning project.) Each exercise can involve a number of research methods.

**Actors:** SPAR can be conducted by a few people or many, for a few people or many.

People in a wide variety of occupations and avocations can conduct SPAR and be its intended or unintended beneficiaries. Researchers and beneficiaries can be social scientists, planners, bureaucrats, stakeholder advocates, NGO advisors, community leaders, voters, etc.

Central agency SPAR can be conducted on local policy issues; communities can conduct SPAR on national issues. SPAR is defined by its function (to inform policy) and general form (systematic inquiry), not by who does it or who it is done for.

6. Assumptions

In preparing this report, I start with the following assumptions about what constitutes good policy and good SPAR. These assumptions create the lenses through which I see (and typologize) SPAR methods.

Good social policy optimally supports all of society's highest level values and goals-- fairness, good health, etc.

Good SPAR helps assessors to make sound judgements about which policy options are best. To do this, good SPAR identifies causal chains, multiple causality, and feedback. It separates out the effects of one policy from those of another, and policy effects from policy-independent phenomena. It shows where and how policies, individually or in combination, have synergistic or contradictory effects. It helps in identifying directions for policy improvement.

Good applied SPAR is both effective and efficient in aiding sound judgement. To be both, it cannot confront social policy's inevitable complexity by amassing ever more detail about policy effects (perhaps effective, but not efficient), or conversely by ignoring certain types of effects (efficient, but at a low level of effectiveness). Rather, it must develop "maps" that provide information on system dynamics, maps with sufficient completeness to warrant the risking of judgements about the
desirability of specified policies. Acquiring and presenting useful, timely information, rather than precise data, is the proper function of applied SPAR.

Useful information and system maps for policy assessment are effectively and efficiently produced by tapping a variety of knowledge sources, using methods that respect different ways of knowing and that enable various holders of knowledge themselves to create synergistically the maps.

In sum, good applied SPAR produces timely insight into the multi-faceted terrain that responsible policy-makers must navigate as they seek to serve the complete range of societal goals.

7. Outline

The body of this report first describes the traditional, Establishment approach to SPAR. The social science context, history, current fields, limitations, and contributions of this approach are discussed. The next major section similarly describes the Underground's alternative approach to SPAR. A third section presents case studies of Establishment and Underground SPAR. The final section draws conclusions about the state of the art of SPAR by summarizing Establishment-Underground differences, comparing their respective roles in current SPAR practice, and speculating on the potential for new applications of each approach.

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21 Consider the road map or marine chart. Not every geographical fact is included in these maps. Emphasis is on facts most useful to navigating a specific type of transportation. Shoals are highlighted on the marine chart because of their danger, but hills are rarely located on road maps because they are usually irrelevant to selecting routes. Conversely, specific town-to-town distances need to be on a map of winding roads, whereas a marine chart needs only to provide a general scale. Neither the marine chart nor the road map tells the navigator which destination to head for or which route to take. It can only provide basic information indicating important implications of journey choice-- travel time, danger, interesting views, etc. Road maps and marine charts are analogous to SPAR's system maps-- pure SPAR produces base maps, applied SPAR customizes these, or less often, starts from scratch. Navigating-- choosing destinations and routes-- is analogous to the actual assessment process in which high leverage points for intervening in policy systems are identified.
II. ESTABLISHMENT SPAR

The SPAR Establishment ascended with the Keynesian welfare state half a century ago. The Establishment dominates the journals that explicitly deal with policy assessment, the wide range of official assessment processes from intra-departmental commentaries to major public inquiries, and the expert commentary cited in the media.

The Establishment's approach to SPAR is positivist, reductionist, and technocratic. To understand the meaning and implications of these descriptors, and thus the assumptions underlying the Establishment methods described in this section, it is necessary to begin by locating the Establishment within its larger social science context.22

1. Pure Social Science

Much of pure, curiosity-driven social science is not interested at all in SPAR, i.e., in looking at policy as an independent variable.21 That which is, pure SPAR, attempts to understand society, not to contribute directly to societal guidance or self-guidance.

In the pure social science mainstream, understanding society has meant attempting to discover positive (universal, certain) truths about the functioning of society through quantitative, empirical science-- for example, truths about the relationship between division of labour and productivity, or between religion and the stress of social change. The truth-seeking has increasingly become, perhaps necessarily given the positivist ambitions, reductionist.24

22 In tracing the intellectual roots of professional planning, defined as the application of knowledge to action, Friedmann (1987) in effect presents a history of the different strands of what is called here Establishment SPAR. The focus, however, is on the evolution of epistemological and social assumptions underlying policy assessment rather than on research methods. He foresees the emergence of what is called here Underground SPAR, but again does not go into detail on its methods.

23 Pure social science is uneasy with SPAR because policy substance is an ever-changing product of consciousness, not a factor about which universal statements can be easily made.

24 Positive reductionist truths are what the classical natural sciences sought and produced. By reducing the number of variables studied in replicable experiments to a manageable few, natural scientists discovered universal relationships they called laws of nature ("if x then y"). Positive reductionist social science employs similar methods. In its purest form, such social science aspires to create knowledge at the level of natural science certainty. Making ahistorical probabilistic statements such as "x likely affects y" is seen as a step on the road to the greater certainty that will be produced by more research. To make such statements as convincingly as the natural scientists do, "x" and "y" must be quantifiable variables. Complex social phenomena are reduced to those variables. Their relationships can then be analyzed through sophisticated statistical tools of probability sampling, tests of significance, etc.

Economics has become the leading and dominant discipline in Establishment SPAR partly because it has been able to reduce
Pure social science can be interested in how decisions are made by individuals, groups, firms or governments, and, as pure SPAR, in the consequences of those decisions, but contributing directly to the making of those decisions it leaves (somewhat disdainfully) to applied social science.

2. Establishment SPAR: a Form of Applied Social Science

Applied social science is concerned with producing information that can help answer the question "what should be done?" rather than "how does it work?" Social science can be applied to personal, group, corporate, or public (political, governmental) decision-making. Social science that is applied to the formulation of social policies is a form of SPAR.25

Applied social science tends to take, like the mainstream of pure social science which provides its intellectual base, a positivistic, reductionistic approach.26 I label the taking of this approach to SPAR, because of its dominance, the "Establishment" approach. Thus policy-relevant applied social science is almost synonymous with "Establishment SPAR." (I say "almost synonymous" because I perceive from my readings that the vast majority, but not all, of research that is called social science and that is oriented to policy assessment takes a positivist, reductionist and technocratic approach.)

Establishment SPAR is conducted by government, lobby group, consulting, or academic professionals who have specialized expertise (as economists, sociologists, etc.)27 acquired through training in the pure social sciences. Accordingly, Establishment SPAR operates on the same positivistic epistemological base as pure social science, and depends on the same reductionistic

25 The section on the Underground will present other forms of SPAR, i.e., activities that have the attributes of research-- systemnic inquiry-- but which are not usually described as scientific.

26 Weimer and Vining (1992:3) make the following Establishment-oriented distinction: "Whereas academic research looks for relationships among the broad range of variables describing behavior, policy research focuses on relationships between variables that reflect social problems and other variables that can be manipulated by public policy. The desired product of policy research is a more-or-less verified hypothesis of the form: if the government does X, then Y will result."

27 Boneinger (1982) Anton (1984) and Nagel (1992) provide summaries of what each of the traditional disciplines substantively offers policy assessment. Nagel presents the Establishment response to the problem that each discipline considers only one part of the whole: they should work interdisciplinarily.
concepts and tools, e.g., econometric modelling, correlational analysis of census data, surveys using random sampling, and experimental design. Use of the tools requires advanced training.

While positivist, reductionistic methods are often appropriate to pure social science endeavours which content themselves with identifying relationships between phenomena, such methods are less than ideal (neither effective nor efficient) in applied SPAR which has the mandate to identify causal relationships—difficult enough for natural science—and to provide complete enough information about all significant effects of a policy, or all policy-relevant causes of a social condition, that sound policy judgements can be made. Nevertheless, the Establishment continues to apply positivist, reductionistic methods. Because the Establishment sees such methods as the only route to production of valid knowledge on social policy effects, it can be described as not only technical in its approach to SPAR, but technocratic.

In the ideal technocratic model, final decision-makers simply follow researchers' policy prescriptions. Of course, this model which had some considerable following in the few decades immediately following the second world war, is given little credence today. It is recognized by most in the Establishment that not only are political decisions based on criteria so complex that they cannot be reduced to positivistic resolution, but they inherently must be so. It is accepted that value-judgements as well as facts play legitimate roles in political decision-making, and further, that even the relevant facts themselves can never be completely determined through SPAR.

While the Establishment has abandoned the idea that its science can and should determine decisions, it has not abandoned the idea that only its form of research can provide decision-makers with the valid, factual knowledge they need. The idea that people not trained as social scientists could produce for policy makers useful factual knowledge of widespread general societal effects (as opposed, of course, to particular knowledge of particular effects on particular people) is foreign to the Establishment. Hence, it is technocratic in the sense of wanting to control SPAR, not in the older technocratic sense of wanting to control decisions.

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While pure social science has increasingly supplemented reductionism with other approaches for building universal knowledge (e.g., the case study that seeks to understand relationships among many elements of a system, or grounded theory construction that builds hypotheses from qualitative data in interviews), application-oriented professionals still prefer reductionistic methods— if not for the apparent certainty (or at least certainty of the probability) of the knowledge these methods promise attempt to provide, then at least for their clarity, replicability, and manageability.

The closest positivistic social science usually comes to causality identification is identifying probabilities that associations of variables are not random. Even when the probability is high, there is the notorious problem of determining whether the variables are associated through a common cause, and if not, which variable is the cause and which is the effect.

For example, the notion that decisions could be based solely on financial cost:benefit computations is now rarely advanced.
3. Current Methodology

The Establishment's research methods having been well established, the professional journals devoted to policy assessment mostly contain articles reporting findings from applications of the methods to various substantive problems. There are few methodological articles, and those published tend to deal with data collection and analysis technique rather than with broader methodological and epistemological questions, e.g., of relationships among researcher, client, and subject, or of difficulties in studying whole systems through analysis of the parts. (These questions are, however, dealt with in the journal, Policy Sciences -- see discussion on the policy sciences movement, below.) The Establishment prefers applying its well developed, and generally well accepted tools, rather than ruminating about their philosophical basis.

4. History

Philosophically, the roots of Establishment SPAR can be traced to the late 18th century utilitarian philosophy of Jeremy Bentham, perhaps the first person to consider policy assessment method, and thus, by implication, the conceptual foundations for assessment-oriented research.

Bentham explicitly addressed the question: how should we determine what is a good policy? -- not just, what is good policy? or, who should decide what is good policy? but, how, through what

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32 Perhaps the closest the Establishment comes to development of SPAR methods sui generis, i.e., methods that are not grounded in one or another of the social science disciplines, is the work being done in the field of "decision analysis." As discussed above, however, this field is more concerned with methodology of assessment, i.e., how to structure thinking about problems, than with empirical research methodology.

33 Adam Smith's 1776 Wealth of Nations can be seen in part as a work focussing on the assessment process. By arguing for policy makers to let the invisible hand of the market rather than state regulation determine economic activity, Smith and many others provided a blunt prescription for the policy making process: laissez faire. Bentham was inspired by Smith, but he was much more of a methodological fundamentalist, and as such provided the conceptual foundation for modern microeconomics.

34 John Stuart Mill (1838 [1962:48]) regarded Bentham as one of the "teachers of the teachers," who as "the great subversive":

"introduced into morals and politics those habits of thought and modes of investigation, which are essential to the idea of science; and the absence of which made those departments of inquiry, as physics had been before Bacon, a field of interminable discussion, leading to no result. It was not his opinions, in short, but his method, that constituted the novelty and the value of what he did... Bentham's method may be shortly described as the method of detail; of treating wholes by separating them into their parts, abstractions by resolving them into Things... and breaking every question into pieces before attempting to solve it."

Calculus should policy be decided. His widely acclaimed answer (1789) was to calculate and apply the criterion of "the greatest happiness of the greatest number." This criterion underlies modern economics, and seems to orient much of sociology's applied survey work.\(^{35}\)

In the late 19th century, what had been the integrated, largely deductive field of "political economy" evolved into the systematically empirical and increasingly specialized social sciences. Some social science in that period could be termed SPAR\(^{36}\), but for the most part the perspective was one of pure social science.

Economists, such as Alfred Marshall, focussed on developing methods for predicting market behaviour, an endeavour largely irrelevant to either the substance or process of policy assessment. Sociologists, such as Emile Durkheim, sought to understand the grand thrust of history. They universally concluded that for better or worse, history is a unidirectional, inevitable process of community disintegration and human individuation. Again, this observation had no apparent utility for policy-making. Nor was Marxism, the most significant non-liberal perspective, very helpful to policy assessment within a liberal state—it was as deterministic as the mainstream.

Into the 20th century, liberal social science, reinventing Bentham's spirit, began to apply itself to the development of techniques for policy assessment and social policy assessment research.

\(^{35}\) In modern "welfare economics", a policy's effects on individuals' utilities (happinesses) are aggregated, without regard for notions of distributive justice, to determine the policy's worth. This means that small gains for a majority can justify a policy even if that policy causes severe pain for a minority, as can large gains for a small minority (e.g., an elite) override small costs to the majority. Sociological attitude surveys, similarly lend themselves to the utilitarian calculus: finding that a large number of people are somewhat favourable to a policy, or that a modest number of people are very favourable, can result, through the application of various scaling devices, in a conclusion that the policy is socially beneficial, regardless of the effects on those opposed.

\(^{36}\) In 1857, the (British) National Association for the Promotion of Social Science held its inaugural meeting to exchange papers on "a series of highly important questions bearing vitally on the well being and prosperity of the country... public health and morality, education, crime with its causes, prevention, and punishment, the mutual relations of employer and employed [etc.]." (The Americana 1912:XIV)
5. The Disciplines

Economics: From the 1930s, economics worked on developing utilitarian principles into the practical, but limited, tool of cost-benefit analysis (Prest and Turvey 1965, Layard 1972), and produced conceptual frameworks (e.g., national accounts, gross national product) for managing national economies. The quantitative elegance of the economists’ tools, their apparent empirical basis, their disciplining of political whim, their assumptions (e.g., Pareto optimality principle) that favour those who already have, combined, conversely with their claims to impartiality (e.g., that throughput growth as measured by gross domestic product is good for all) have made the tools of economics the dominant approach to policy assessment and SPAR.

I only discuss economics, sociology and psychology in the main text because these are widely regarded as the most influential disciplines in Establishment SPAR. The less influential disciplines are those which are much less positivistic and reductionistic, and thus often not considered to be social science. They make methodological contributions to a SPAR which has more of the holism and heuristic quality of Underground, but not the participatory manner. History focuses on change in whole systems and offers as a tool document analysis. Political science in its institutional mode, focuses on control (power and decision-making) in whole systems. Perhaps most important of the “minor” disciplines for SPAR methodology is anthropology which, in its attempt to complete cultural and social organization systems has introduced to SPAR the methods of ethnology and the case study. From the 1960s, increasing attention has been paid, particularly in pure SPAR, to the potential of the case study for revealing cause-effect relationships in whole systems—relationships which may be present in other cases, and which, Bailey (1994) points out, are difficult to detect through statistical correlation of variables.

Operationalizing the utilitarian principles of “welfare economics,” cost-benefit analysis compares the total market value to society, within a certain jurisdiction, of the costs and benefits of whatever is being assessed. Effects, such as ecological diversity or social equity, that are not directly quantifiable in terms of market prices are either ignored or included in terms of their imputed market values (“shadow prices”). The farther into the future the costs or benefits occur, the more their current utility is discounted. Cost-benefit analysis was developed to assess and compare physical project proposals, such as dams on rivers, but it is equally relevant to assessment of policy options. When used as SPAR it can make a valuable contribution to understanding overall financial costs and benefits of alternative policies. Unfortunately, much of the Establishment has used cost-benefit analysis as the single SPAR tool, implying that the kind of efficiency it measures is the only assessment criterion worth considering (Gilroy 1992). A policy or project option promising a higher ratio of measurable economic benefits to costs for society as a whole than another option is usually assumed to be preferred regardless of distributive, sustainability, or cultural considerations.

Brunner and Ascher (1992:312-315) describe the failed attempt within the World Bank in the 1970’s to replace orthodox cost benefit analysis, which takes no account of the distribution of costs of benefits (except, in theory, through the Pareto principle that holds nobody should come out a loser), with a method termed “social rate-of-return analysis” or “social cost-benefit analysis.” Social rate-of-return analysis was to give greater weight to benefits targeted to the poor than to the rich. However, such analysis was hardly ever applied by Bank staff because of the extra “analytic effort” and time required. Its critics called the weighting of benefits arbitrary and judgemental, but Brunner and Ascher point out “the assignment of weights in the social rate-of-return analysis is explicit, while the arbitrariness of the conventional approach is implicit.” Bank staff also feared being accused of “loose analysis” in the absence of good data on income distribution and project impacts.

This dominance is explicated generally by Boeninger (1982) and Anton (1984), among others. More specifically, a recent review of 74 final environmental impact statements (which include social impact assessments) conducted for U.S. federal agencies in conjunction with planning for roads, bridges, dams, forest management, or dredging, found that they “tended to focus on the economic and financial impacts of their proposed actions” (Deng and Altenhofel 1997).
Liberal economics now enjoys solid political influence and support throughout the world, especially at senior government and supra-governmental (IMF, WTO, etc.) levels. There is no reason to suspect that the hegemony of its SPAR tools is at risk, at least for the foreseeable future.

One mission for meta-SPAR (SPAR on SPAR itself) could be to identify the implications of liberal SPAR’s hegemony in various circumstances—e.g. implications in terms of circumscribed or foregone conclusions— as well as to investigate the ways in which liberal economics SPAR and its alternatives are received by various elements of society. It could also explore opportunities for alternative forms of SPAR, whether from within or outside the Establishment, to contextuate and supplement perspectives on questions that liberal economics tools have been so well honed to answer (e.g., what is the most financially efficient way [in the short term] to run a health care system?) and to address questions liberal economics does not consider (e.g., which policies improve quality of working life for health care workers?)

Sociology: Historically, and perhaps in impact, it is sociology that has offered the first alternative to economics. In the 1940s and 1950s sociologists developed tools, such as sampling and surveying, for identifying correlations between attitudes or behaviour (e.g., racism or discrimination) on the one hand, and "independent" variables on the other. Some of the independent variables investigated had no direct policy relevance (e.g., sex, age, and perhaps religion and class), but some were manipulable (e.g., education level, inter-racial hierarchies in the military).

Survey research provides understanding of a broader range of policy impacts than economic analysis affords. The subjectivity of policy impacts can be investigated, for example by asking health care workers how they feel about themselves, how committed they are to their work, in newly changed organizational settings, or more speculatively, how they think they would feel. Such knowledge rounds out the assessment of total (not just financial) immediate costs and benefits. It also potentially provides the basis for making predictions about longer term systemic changes. For example, worker dissatisfaction could lead in the long run to more financial costs for repair of equipment or training of replacement workers.

Sociological research has the potential to make such contributions to policy assessment. Unfortunately, much of it is not driven by policy questions, whether such questions are asked by policy makers in power or by those who would influence the powerful. From a policy assessment perspective, much of sociology can still be accused of falling into the categories coined by the critic C. Wright Mills (1959). It is either "abstracted empiricism", i.e., data collection and analysis not connected to theory, or "grand theorizing" with no empirical basis. Even where the theory-data

41 "Liberal" here includes Keynesians and the putatively anti-Keynesian monetarists who have dominated policy assessment and SPAR since the late 1970s.
connection is well made, the research is primarily driven by the evolving interests of the discipline rather than by knowledge needs of policy makers and advisers at any level.

Even if the disciplinary limitations of sociological research are overcome so that policy-relevant questions are addressed with data derived from empirical surveys, the survey method still has inherent limited utility for policy assessment. The nature of the connections between statistically correlated dependent and independent variables is always at issue. Does policy x produce effect y always or only in conditions of q? Controlling for intervening variables (conditions) provides a clearer picture of the likely connections, but in any social system the complexity is such that the complete set of intervening variables can never be identified, let alone controlled for.

In any event, even when strong correlation is established the causal direction is not always clear, let alone the nature of the causal chain. Does policy x produce effect y which produces ultimate effect z, or does policy x produce effects y and z directly? The difference can be important in SPAR, especially if y is positive and z is negative, because there are different implications for mitigative policy interventions (fine-tuning).

Psychology: Psychology has added experimental design to the SPAR tool kit. Whereas sociological survey research typically focusses on the relationships between variables characterizing large populations, and thus variables largely outside the researcher's control, the psychologist's method focusses on a few independent variables that can be controlled-- typically in laboratory conditions.

Laboratory-like conditions could theoretically be created in SPAR by applying, for example, a certain policy stimulus (e.g. new work regime) to one hospital and comparing the outcomes with those of an originally comparable hospital that is left alone (the "control"). "Comparable" means qualitatively similar in the relevant variables, not necessarily quantitatively.

But experimental SPAR faces challenges. First, it is hard to identify policy-impacted "subjects" that are qualitatively similar, ideally identical, in terms of all relevant variables-- indeed even to know what variables are relevant and thus to be controlled for. In some types of non-SPAR experiments, e.g. testing a new pill, the impact of factors other than the intervention (stimulus) can be dealt with by assigning large numbers of individual subjects randomly selected to the experimental and control groups so that factors extraneous to the policy's impact are likely equally distributed between the two groups. But randomized assignment of subjects to large pools is usually difficult in SPAR. Applying a policy stimulus such as a guaranteed income to a randomized group of individuals may be difficult for administrative, ethical and political reasons. Applying the stimulus to all individuals in a certain jurisdiction then comparing them with those in another apparently similar jurisdiction would not be a true controlled experiment. Randomizing jurisdictions (municipalities, hospitals, etc.) is as problematic as randomizing individuals, and in most cases faces a small numbers problem.
Secondly, the experimental method itself can introduce one very important variable that sociological surveys can ignore: the impact on "subjects" of knowing one is part of an experiment.

In psychology labs and medical settings, blind (where subjects do not know if they are receiving the stimulus or not) and double-blind experiments (where neither do the direct stimulus administrators know) can often be used, though there can be serious ethical issues. But in SPAR, such solutions are less likely to be practical. Can we impose a new regime in one hospital without similar ones knowing?

Ex post facto research designs get around the subject-consciousness problem. Such designs look for natural experiments where previously similar subjects, or what is more likely in SPAR, groups of subjects such as members of a community or workers in an institution, received different policy-determined stimuli (e.g., higher incomes at one because of a nearby subsidized industrial mega-project) at some point in the past. Attempts can then be made to trace post-stimulus differences to the stimulus. The attempt is made difficult not only by the need to find cases with enough original similarity, but also by the fact that the stimulus may be part of a package of causal differences (e.g., the mega-project may have been accompanied by roads increasing accessibility and travel) or the causes may be independent of the stimulus of interest (e.g., an accident might have created a crucial change in leadership).

6. Fields within Establishment SPAR

Going beyond the social science disciplines which collectively structure its positivistic concepts, reductionist tools, and technocratic manner, and separately delineate its specializations, Establishment SPAR can also be analyzed in terms of the various ways that have evolved for framing the fundamental decision-making question SPAR is to address. Three major ways can be identified. Each has generated a field of practice. These fields are generally known as: evaluation research, which focusses on whether a policy meets its explicit, specific objectives; policy analysis, which is interested in whether a policy meets the general societal goal(s) it is implicitly designed to serve; and impact assessment, which asks whether a policy satisfies other societal requirements.42

42 These descriptions of the three fields are for the purposes of this paper. The descriptions are intended to capture each field's mainstream definitions. There are many other definitions in each case. For example, "policy analysis" sometimes includes evaluation research and/or impact assessment as here defined.
(a) Evaluation research

Evaluation research (Weiss 1977, Rutman 1984) uses social science to determine if a policy is having its intended results. Non-experimental, experimental, and especially, quasi-experimental research designs are employed to identify the various links between policy and the specific objectives for it-- e.g., is the policy actually implemented, do the implementation forms lead to objective-supporting actions, are those actions sufficient to reach the objectives? Drawing on Morah (1990) and Martinic (1997), the three basic designs can be summarized as follows.

- Non-experimental designs, such as the case study, attempt to identify effects of a given policy cause without using statistical controls. Deemed the least scientific, they have tended to be shunned by the Establishment.

- Experimental designs compare, over time, a group affected by a policy with a like group (control group) not affected by the policy. "There is almost universal agreement among evaluation researchers that the randomized controlled experiment is the ideal model for evaluating the effectiveness of a public policy" (Rossi and Wright 1977:13). Unfortunately, this ideal of the Establishment can rarely be implemented in SPAR, as opposed to medical research, for example. One reason is that "well conducted field experiments ordinarily take a number of years to conduct and still additional years to analyze" (Rossi and Wright 1977:15).

- Quasi-experimental designs (Cook and Campbell 1979) are in practice favoured by the Establishment. Rather than comparing experimental and control groups that are statistically alike because they are created through random assignment of "subjects" to one or the other group, quasi-experimental designs compare groups that differ statistically before their exposure to policy; or, they use statistical tests to compare a single group before, during, and after its exposure to a policy.

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43 Examples of Establishment SPAR questions that could be within the domain of the evaluation research field are: does free trade actually increase jobs and income (as promised)? do stiffer sentences actually deter crime? does privatization actually reduce health care costs? does competition among schools improve employability of students? does forced racial integration of institutions actually lead to increase quality of schooling for minorities? does a guaranteed annual income reduce work motivation, as some claim?


45 Martinic (1997: 140-141), however, accords a legitimate place in evaluation research to non-experimental designs:

"Los diseños no experimentales son aquellos en los cuales no existe una manipulación deliberada de las variables en relación. Estas se observan tal como se dan en su contexto natural y suceden independientemente de la voluntad del investigador. Las inferencias y análisis sobre las relaciones entre variables se construyen a partir de la observación y no desde la intervención...

"Este tipo de diseño se acerca más a la realidad que los diseños experimentales y, por ello, sus resultados pueden tener mayor generalidad. Sin embargo, en este caso, resulta difícil evaluar la importancia o peso de las variables de contexto en los resultados observados."
Within the field, or at least within the governments and institutions that support the field, there is strong interest in quantifying policy objectives, i.e., reducing them, or the indicators of success in meeting them, to quantifiable variables.

**Limitations:** Evaluation research questions are hard to answer because of the large number of intervening variables. Conclusions must be based on assumptions, often unarticulated, about the state of the many variables, including other policies and implementation faithfulness, that contextuate a specific policy intervention and its outcome. Thus either side of an ideological debate (liberal vs. conservative, socialist vs. liberal, traditionalist vs. modernist) can often be supported through policy assessment based on the evaluation research model.46

Evaluation research evolved in the 1970's to apply experimental design to public policy as implemented through social programs. Leaders of the field have come to the conclusion that the problems discussed above are intractable, and therefore, that effort should be put less into producing knowledge about program effectiveness and efficiency that policy makers can use in deciding whether to continue, modify or cancel programs, and more into knowledge that project leaders and other practitioners can use in meeting their own goals. Evaluation research of this "formative" kind thus turns its back on one of the essential functions of social policy assessment: to judge the desirability of guiding policy.

Apart from its challenges in attempting to draw valid conclusions about whether a policy is meeting its stated objectives, evaluation research is fundamentally limited as a SPAR approach by its narrow focus on such objectives.47

(b) Policy analysis

Going beyond the policy-specific objectives that are of interest to evaluation research, policy analysis considers how well policies serve the larger (wider and longer term) public interest that is

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46 For example: Yes, free trade generates domestic jobs if international demand is high for the products a country is well positioned to produce; but not, if external demand drops (e.g. because of external stock market crashes) or if domestic capacity falls (e.g., because forests are destroyed). Yes, raising education levels reduces poverty if the economy can absorb the higher educated; but not if the education disconnects people from traditional livelihoods without providing an alternative.

47 Hofferbert and Cingranelli (1982) discuss the limitations, difficulties, and negative effects of objective-oriented evaluation research under the headings of "premature goal-specification and quantification." Nagel (1982:70) wryly notes: "Policy evaluators should be concerned with trying to foresee what might otherwise be the important unforeseen consequences of the policies with which they are working... Someday evaluators may regularly take out malpractice insurance to protect themselves from paying damages for the harm their lack of foresight may cause."
assumed to lie behind specific policy objectives. For example, while a policy may be found through evaluation research to have achieved its stated objective of lowering health care expenditures, policy analysis extends the research to determine if meeting this objective has produced a net gain (e.g., economic) to society overall, perhaps over time, and/or if the success has been equally distributed, e.g., between rich and poor.

Policy analysis has been progressively concerned with monitoring and projecting policy effects on the following societal goals: (financial) efficiency, for example as measured by the cost-benefit analysis tool or changes in gross domestic product; equity, as measured for example by the gini coefficient; quality of life, including health (as measured for example by infant mortality), and education (most basically measured by literacy rates); and environmental quality (for which a complex of indicators exist). The order in which I have listed these societal goals reflect the historical order in which they have been articulated and systematically addressed in policy analysis methodology including indicator development.

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48 "Policy analysis is client-oriented advice relevant to public decisions and informed by social values... By looking at consequences of policy beyond those that affect the client, the analysis is implicitly placing a value on the welfare of others. Good policy analysis takes a comprehensive view of consequences and social values... [W]e believe that economic efficiency deserves routine consideration as a social value not only because it measures aggregate welfare fairly well but also because it tends to receive inadequate weight in policy systems." (Weimer and Vining 1992:1-2)

49 "Public policy analysis can be defined as determining which of various alternative public or governmental policies will most achieve a given set of goals... Methods of public policy analysis refer to: 1) How to draw a conclusion as to which policy to adopt... 2) How to establish the relations between policies and goals... 3) How to determine what policies are available for adoption and what goals are appropriate to consider... (Nagel 1990:ix-x)."


51 Murdie et al. (1992) provide a concise state-of-the-art review of work on quality of life indicators, based on perusals of the journal Social Indicators Research, among other sources. One interesting finding is that there seems to be little correlation between objective indicators (e.g. based on census data) of quality of life for a place, and subjective indicators (e.g. based on surveys of peoples' feelings.) They also note that "in the mid-1980's... there was a general rejection of modelling in the social sciences and a greater emphasis on differences and the unique qualities of local areas. There was also a greater interest in making QOL research more policy oriented by incorporating QOL studies into the planning process." They give Canadian examples of attempts to take a "more policy-oriented approach than has traditionally been the case with objective and subjective indicators," but do not report on the success of these attempts. My limited knowledge of the cases, and similar ones, suggests that the attempts did not succeed.

52 These indicators of quality of life are used in the United Nations Development Program's "human development index."

53 The literature on social indicators (e.g., Carley 1981, Willms and Gilbert 1991) is vast. Much of it points to the veritable impossibility of constructing a composite index that can rival the economists' GDP/GNP indicators. Clearly, when one goes beyond the market, there is no common metric for aggregating value-laden measures of social success. The consensus is: indicators must be created ad hoc for any given monitoring purpose. Nevertheless, UNDP has managed to get
Beyond formulating goal-specific indicators, policy analysts have had to create tools for managing data so as to reveal cause-effect relationships. House and Shull (1991:12-26) identify four quantitative policy analysis "eras":

- **Systems Analysis Era (1940s to 1960s)**-- generic, increasingly sophisticated methods (e.g. stochastic modelling, queuing theory) were used to "examine all parts of the system simultaneously," but "the system" could mean a very small unit, e.g., a highway, or a school.

- **Comprehensive Model Era (1970s)**-- the aim was to "integrate each component as a 'subsystem' in one grand, coordinated model, of the region, state or nation," attempting to replicate in social programming what mainframe computers had achieved in space exploration. "Everyone, from the President on down, wanted to know why we couldn't use the technology that got us to the moon to solve social problems."^53

- **Decision Model Era (early 1980s)**-- with the aid of minicomputers, and "the decision tree, a series of diverging lines, theoretically representing all possible outcomes from a decision, labeled with the estimated probability of each outcome," effort was spent "defining the full range of policy options and outcomes and specifying criteria." "Cost-effectiveness analysis, cost-benefit analysis, risk analysis, decision theory, social choice theory, and multi-attribute utility analysis" helped to guide policy assessors "through the forest of possible outcomes."

- **Personal Computer Era (late 1980s)**-- analysts working individually and in (perhaps politically competing) networks, manipulate data, especially using spreadsheets, in response to executive user demand. However, "as the results of an analysis become more condensed for executive consumption, the quantity and quality of available information becomes a hidden fact... The top official expects all insignificant factors to have been purged from the

some mileage out of its human development index which combines measures of literacy and mortality with GDP.

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^53 Interest in decision-support macro modelling of whole social systems, e.g. comprehensive modelling of urban regions in aid of urban planning, peaked in the early 1970's. This was also the period when the Club of Rome developed its "world model" to determine global industrialization limits, publicizing the results through the Limits to Growth (Meadows et al. 1972). The problems inherent in such exercises have been well documented and recently explained through "chaos theory" (see footnote 63): it is impossible for modellers to have adequate knowledge of all the relevant variables, their numerical values at any given point of time, and the specifics of their interactions. (And if garbage in, then garbage out). Nevertheless, sporadic attempts at comprehensive system modelling continue, as exemplified by the "Quest" model developed by UBC's Sustainable Development Research Institute to help people identify the implications of policy decisions on land use and other factors related to sustainability. To the extent such exercises attempt to produce definitive knowledge, they are repeating the mistakes of similar attempts two decades ago. Perhaps, however, they can be developed and explicitly used in heuristic ways to illustrate "if-then" dynamics rather than to predict concrete outcomes.
issue and wants to see a simplified political judgement." The personal computer's analytical power is most useful in resolving "single-variable issues (for example, whether to tighten or loosen a long-standing safety standard)." Complex issues affecting many jurisdictions and interest groups and involving many different technical facts... [present disagreement over] weighting and interaction of the variables 

Heineman et al. (1990) provide a similar (but non-historical) list of policy analysis methods. They discuss cost-benefit analysis, decision-tree methods, simulations and models, and experiments such as guaranteed annual income pilots.

Limitations: The methodological difficulties facing evaluation research are compounded in policy analysis. The outcomes of interest to policy analysis are even more removed, temporally and spatially, from policy intervention than the outcomes of interest to evaluation research, and are thus even more subject to complex systems of intervening variables. As a result, the reductionism required to undertake useful (i.e., reliable, communicative, convincing, intelligible) policy analysis is more severe than in evaluation research. For example, reducing the desired outcome "economic efficiency" to one operational variable, such as an increase in financial flows as measured by market value (GDP or GNP) is more of an arbitrary abstraction than is reducing the outcome of "lower health care expenditures" to a budget line item.

Beyond the limitations to policy analysis posed by the inherent difficulties of drawing cause-effect conclusions and reducing societal goals to quantified variables, policy analysis is also limited in its ability to be useful for good decision-making by the fact that it focusses in any given exercise on a limited set of assumed societal goals. (This reflects the fact that a policy is usually developed with one, or at most two, societal goals in mind.) Thus policy analysis not only fails to be definitive, it also fails to address trade-offs among the complete range of fundamental societal goals.

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54 "[E]verything connected with [policy] analysis has become more modest as the field has gained the experience of practice in the real world..." (Wildavsky 1991)

55 The outcomes of interest to policy analysis are in current management-by-results literature (e.g., CIDA 1997b) called "impacts." This, unfortunately, is a different use of the term "impact" than in the impact assessment field described below. In results-based-management, "impact" equals "long term effect." In the impact assessment field, "impact" equals "unintended effect" or "externality."

56 For example, the bundle of policies currently described as economic reform in Latin America most generally have, as they do in other current economic reform contexts, two goals: first and foremost, economic efficiency; secondly, in some cases, direct poverty reduction (as opposed to the trickle down expected from efficiency). Quality of life in its various dimensions does not seem to appear as a goal and is thus not considered in Establishment policy analysis.
(e) Impact assessment

Over the last quarter century, the institutionalization of environmental impact assessment (EIA) in many countries (Vanclay and Bronstein 1995), with social impact assessment (Wolf 1975, 1980; Finsterbusch and Wolf 1977) riding on EIA's coat-tails, has shown the potential for Establishment SPAR to become more comprehensive than it is in its policy analysis form.

Impact assessment focusses on unintended effects and spinoffs, or what economists call externalities--for example, the effects on the natural environment or on local communities of a dam built to generate electricity for a whole region. It is sobering to reflect on the fact that it has only been in the last three decades that such effects have been systematically considered in project planning.

Unintended effects are still rarely considered in policy planning. However, impact assessment does have the potential to supplement policy evaluation and analysis so that the three form a broad form of SPAR that asks not only, "will a policy achieve the initiating objective?," and "will a policy contribute to a specific broader societal goal (such as efficiency)?" but also, "how will the policy affect progress toward other societal goals, i.e., goals not initially planned for (such as sustainability, equity and health)?" (Wood and Dejeddour 1992, Boothroyd 1995, Bailey and Renton 1997).

Limitations: Unfortunately, as a supplement to policy evaluation and analysis, impact assessment is still deficient in four respects:

• Like policy analysis, impact assessment tends to be reductionist--it focusses on discrete, measurable impacts (e.g., loss of traditional foods by people dislocated by industrial development) rather than on whole dynamic systems (which could include inter-related traditional foods and traditional cultures and sources of meaning).59

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58 The central approach of impact assessment is to compare what a system's state (environmental and/or social) would be without a proposed initiative (usually a large physical project) with the state that would occur if the project were in place. Since its origin in 1969 with the passage in the United States of the National Environmental Policy Act which required environmental impact statements to be conducted on activities involving the federal government, and its subsequent spread as a legislatively required process throughout the world, impact assessment has been progressively applied to predicting and, occasionally, monitoring: impacts of physical projects (e.g., dams) on the natural environment (e.g., endangered species); impacts of physical projects on human livelihood in the natural environment (e.g., hunting, farming); impacts of physical projects on human social systems (e.g., traditional cultures); impacts of social programs (e.g., formation of farmer co-ops) on non-targeted people (e.g., the landless); impacts of policies governing projects and programs (e.g., green revolution, free trade) on natural, natural-social, and natural-social systems.

59 EIA theorists' sporadic attentions to "cumulative effects" have attempted to make EIA less reductionistic, more systemic. The theorizing has not significantly affected practice.
Impact Assessment is conducted primarily on the most concrete policy issues, i.e. project approvals (e.g., mines) and sometimes programs (mining exploration), avoiding the general policies (frontier expansion) which drive projects and programs.60

Impact assessment as practised is almost exclusively concerned with the externalities of efficiency-oriented physical projects-- the externalities of a trade regulation, or of a new literacy-oriented school curriculum, for example, are rarely assessed.

To the extent impact assessment of macro-policies is conducted at all,61 it is as an impotent add-on to policy analysis, just as physical project impact assessment has always been an add-on to engineering and financial cost-benefit analysis. As a side-show to the policy analysis main event, impact assessment has little influence on decisions. In Establishment SPAR, the main question still is, "will the policy achieve the initiating objective and implicit larger societal goal?"-- not, "what are the consequences of this policy for society?"

7. Establishment SPAR's General Limitations

Establishment SPAR's social science-based positivism, reductionism and technocratic approach, and its narrow focus in practice-- i.e., its focus on a narrow range of outcomes, of one policy at a time, under a constrained set of assumptions-- collectively serve to limit its ability to produce information that is of ready use in policy making.62 The information produced is not definitive in analyzing cause-effect relationships. It is not accurate or rich in identifying outcomes, because outcomes are operationalized into a limited set of quantitative variables. No matter what a

60 Policies are usually distinguished from projects and programs. In this report "policy" is understood as government intention, regardless of the scale.

61 One rare, though not very satisfactory, example was Canada's environmental impact assessment of the North American Free Trade Agreement (Boothroyd 1995).

62 One of the deans of the Canadian establishment, Anthony Scott, despaired (1987) as an ex-editor of Canadian Public Policy that:

"... most new policy issues do not come provided with data or information for academic research, and are understandably ignored by our younger academic contributors. Notwithstanding this problem, I must record my uneasy feeling that too much Canadian policy research is not aimed at illuminating really important policy questions...

"There is a stratum of policy experts who have not written for us because they have no interest in policy issues, preferring instead to keep up with the minutiae of each area's establishment network and to avoid offending those who will next commission task forces, arbitrations, expert witnesses, textbooks, keynote speeches, and the like... "

"..."
particular SPAR exercise finds about particular outcomes of a particular policy, there is always room for speculation and research on other outcomes that could occur, including outcomes that could eventually change the ones originally found.

Establishment SPAR, like the pure social sciences it issues from, strives for positive knowledge but unlike pure social science cannot deliver it. Pure social science has lots of time, tends to focus on unambiguous independent variables (cost, age, etc.), and contents itself with particular, reductionist correlations. SPAR has a) less time b) to sort out more ambiguity c) in order to produce more comprehensive knowledge. These high demands on SPAR stem from the facts that: a) policies, unlike "human nature" which is the primary interest of pure science, change frequently; b) the links among policy intent, policy statement, implementation (e.g., through administrative decision), and change in agent systems (e.g., schools) are difficult enough to sort out, let alone the complex links between agent system change and target system effects (e.g., literacy rates); c) the purpose, if not the execution, of SPAR, is to determine enough about policy outcomes that good decisions can be made, and good decisions consider all significant outcomes.

Thus even in situations where decision-makers, from voters to heads of state, do look to SPAR for guidance, as opposed to the usual less noble bases for decision-making (personal interest, grandeur, whim) they are not very well assisted. For guidance, they must rely on their ideologies, their hunches and a diffuse political process rather than on the results of thoughtful and empirical research that resolves contending positions.

This is not necessarily bad because ideologies, hunches and diffuse political processes reflect broader considerations than do individual reductionist SPAR studies. In any event, in the absence of any better way to order disparate information in deciding, people must rely on ideologies, hunches and communications with those they trust, respect or fear. These bases for policy assessment, whether or not the decisions they produce are consistent and reflective of reality, provide the same function that whole conceptual systems (worldviews, paradigms, theories) do for technocrats. The Establishment rejects these intuitive bases for judgement, but does not provide an adequate alternative. As will be discussed below, the Underground, on the other hand, attempts to

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63 Pure social science, using reductionist and other methods has yielded important more-or-less universal insights into human behaviour that are relevant to policy: for example, the role of cognitive dissonance in affecting reception of anti-smoking education policies, or the motivating effect that social experiments (pilot studies) have on aware participants regardless of the independent variable studied. But policy-specific assessment is concerned not with general causes, such as the effect of experimental attention on social behaviour, but rather with certain types of specific causes, i.e. policies. Policies are historically, administratively, and culturally specific interventions into social systems. Because of their high specificity (and often ambiguity) on the one hand, and the complexity of the systems they affect on the other, their outcomes are more appropriately considered through the lenses of Chaos Theory (Gleick 1987, Lorenz 1993) than Newtonian physics. Relations between policies and social life is not like that between gravity and mass. Policy outcomes are more are like cloud formation. But they are even much more unpredictable than weather, because humans have more variety than molecules, and they have the capacity to create their own intentions. Policy affects behaviour, but it does not direct it.
work with intuitive knowledge and make it more effective in producing good decisions by systematizing its use in SPAR.

8. Policy sciences

Critique of Establishment SPAR comes primarily not from the Underground, which is too busy doing its own work, but rather from the field (or movement as some put it) of "policy sciences."64 Since its post-war beginnings (Lerner and Lasswell 1951),65 66 policy sciences has attempted to develop an alternative to the reductionist perspectives of the Establishment SPAR disciplines.67

64 Policy sciences is a meta-research field, with its own journal, Policy Sciences. Its practitioners do empirically draw on case studies, content analysis, and personal analyses of Establishment SPAR, but rely much more on deductive analysis of Establishment SPAR's assumptions and logic. (It should be noted that some writers outside the field, such as Nagel (1990:x), use the term "policy science" (not policy sciences) to refer to policy analysis that "emphasizes quantitative methods." He also notes, from within the Establishment, that the terms policy science and policy analysis, along with policy evaluation, policy studies, and program evaluation, are often used interchangeably.)

65 A brief, rather Establishment-oriented, history of policy science(s) is provided by Doron (1992). McCall (1984) sums up the origins thus:

"Social scientists who had been directly employed in military research during World War II advocated the peacetime continuation of similar efforts. In their Manifesto, [Lerner and Lasswell 1951] called for the absorption of large segments of social sciences into a new supra-discipline of "policy-sciences" that would closely link social science with a policy making process increasingly beset by unprecedented human issues of world-wide ramifications. Having experienced applied social science research outside the confines of academia, these policy-sciences advocates-- like the earlier social science movement [of the late 19th century when the American Social Science Association was founded]-- emphasized the instrumental value of knowledge and called for a problem-focused rather than discipline-centred approach to the production of knowledge."

66 Primary credit is usually given to Harold Lasswell (1965, 1971). Though he feared technocracy, Lasswell saw scientific method as a means to improve policy making (Brunner and Ascher 1992). However, he had a broader view of such method than did the positivists. His perspective was closer to the instrumentalism of pragmatists such as John Dewey (Torgerson 1992).

67 "[E]conomics, sociology, and psychology have generated research approaches that promise to produce, in different ways and on different assumptions, information of use to policy makers. But individually, and even collectively they have failed to satisfactorily address the fundamental problem of complexity which policy makers and advisors must wrestle with. Consequently, social science has had little direct impact on policy... (1) [P]olicy research within a discipline tends to lack an adequate appreciation of the necessity for social invention and experimentation and for the search for plausible points of policy leverage... (2) Disciplinary frameworks lack any established criteria for evaluating the significance of various policy issues or problems, and thus disciplinary policy research is characteristically vulnerable to issue fads and fashions... [D]isciplinary policy researchers are often led to either utter naivete or profound cynicism in their development of policy recommendations... (3) Disciplinary policy research lacks the requisite flexibility in work assignments to permit timely research response, and its norms of methodological perfectionism constitute a further obstacle to timely completion of policy studies... More fundamentally, social scientists [are] not trained to relate their work to the needs and interests of any sort of client." (McCall 1984:7-8)
In the last two decades, policy sciences theorists (e.g., Dunn 1982, McCall 1984, Brunner and Ascher 1992, Torgerson 1992, Fischer 1993) have increasingly criticized not only the reductionism of the Establishment's specialized professions, but also its epistemological positivism and technocratic approach. These traits are seen as inhibiting the conduct of research that is useful to policy-makers and fair to all of society's members.

9. Establishment SPAR's Contribution

SPAR of any sort exists to aid decision-making, to enrich and expand pre-existing conceptual systems, and to make them more consistent, conscious and above all reflective of reality. Establishment SPAR's major contribution lies in its having identified the need for decision-making to be aided in these ways and in creating some tools, such as cost-benefit analysis and social impact assessment, that promote objective debate about the larger public interest. Even if it has not produced tools for resolving policy debates, Establishment SPAR does take us beyond the notion that decisions should be decided on the basis that might makes right.

Further, Establishment SPAR has shown politicians and technocrats the complexity of policy issues. To the extent it influences the media and formal education it also helps to develop this awareness in the broader society-- an awareness that is necessary if demagoguery is to be prevented.

Perhaps Establishment SPAR has the potential to contribute further to good decision-making by more directly influencing decisions. Such potential may be realized when the knowledge it produces is contextuated in planning processes that start by drawing heuristically useful holistic pictures of the social system of interest.

The evolution of the SPAR Underground takes us a major step forward to realizing that potential, even though the Underground is born in a rejection of much of Establishment SPAR's roles and assumptions.

68 "The underlying view here is that public policy decision-making will be improved, not by the presentation of more and better science, but by... mutual learning among scientists, policy-makers and the public.... (Torgerson 1992)"
III. UNDERGROUND SPAR

In contrast to the SPAR Establishment which consists of professional analysts and consultants from the traditional social sciences, the SPAR Underground is formed by epistemology radicals\(^69\) and planning facilitators. In contrast to the Establishment which provides information to those in power or the diffuse masses, the Underground works with communities and organizations. In contrast to the Establishment which strives to produce positive knowledge through reductionism, the Underground contents itself with helping groups of decision-makers think about the whole systems they want to affect. In contrast to the Establishment which conducts SPAR as a technocracy with specialized expertise, the Underground promotes broad participation in SPAR.

Underground SPAR recognizes that policy decisions affect total systems, that the impacts of policy on society are mediated by a host of social, technological and environmental factors, and thus that the specific outcomes of a specific policy are very hard to identify.

Underground SPAR so far has mainly focussed on geographically local systems which, compared to nation-wide systems, are relatively easy to map and through which it is relatively easy to trace the results of interventions.\(^70\) The work of the Underground is most visible in rural areas of developing countries, but it can also be found in the cities of such countries, and, to lesser degrees, in the rural and urban areas of industrialized countries.

1. History

The SPAR Underground traces its beginnings to various emancipatory traditions in philosophy and revolutionary practice. Liberals of the Enlightenment, Marxists and anarchists of the industrial age, and liberation theologians in the developing world, have created and provided a conceptual sanctuary to the Underground. \(^71\)

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\(^69\) After comprehensively tracing the history of Establishment planning theory (which in effect equals policy assessment theory), Friedmann (1987:415) draws three "preliminary conclusions" adumbrating the emergence of what is here called Underground SPAR: "the new epistemology renders old fashioned technocratic planning illegitimate;" "the new epistemology turns both scientific and planning inquiries into a dialogic process between the researcher/planner and subject/actor;" "the language of scientific/planning discourse is changed into one capable of expressing subjective realities, a search for meaningful action, and the integration of the human with the social sciences." Reflecting the inchoate state of the Underground at the time, he does not delve into specific methods.

\(^70\) This is not to suggest that the Underground formed a strategy to work locally. The Underground is not an organization— it is a collection of people who individually feel more comfortable working with/for communities than in/for a bureaucracy.

\(^71\) If Bentham is the intellectual father of Establishment SPAR, the Underground's equivalent title should perhaps go to Karl Marx. Marx is sometimes seen as the first sociologist of knowledge, i.e., the first to consider the relationship between what we think about social issues and our social situation. For example, capitalists, and their scientists, will advance logical arguments, on certain assumptions, for laissez-faire; workers, on other assumptions, for socialism. Further, Marx, like the American pragmatists (Charles Peirce, William James and John Dewey) a generation later saw the value of knowledge not in
But the SPAR underground has its own identity. It is a product of, and in many ways a reaction to, the Bretton Woods world— a world of globalization, international aid, modernization, liberal individualism, and welfare states in formation or decline. The Underground comprises community developers, feminists, action-researchers, ecologists, and critical theorists. Originally aligned, in many cases, with social movements in the 1960s and 1970s they found organizational homes in NGOs, particularly international NGOs in the 1980s, have largely taken over the work of United Nations development agencies in the 1990s, and now are found even in the World Bank and other international finance institutions.

2. Methodological Approach

The Underground draws on methodological innovations that allow research to be linked more directly to decision-making processes than is permitted by traditional social science methods which emphasize detachment, rigour, and external validity. The innovations orient SPAR to action, immediacy, and empowerment.

The Underground has built on these innovations to create a variety of methods for involving the grass roots in local planning. These methods are used by outside experts (professionals knowledgeable about substantive or procedural technique) in working with local experts (people knowledgeable about their culture, social conditions, economy, and environment).

Underground SPAR methods facilitate joint investigation of opportunities and constraints to development, as development is locally defined. In their most complete forms and applications, the methods are oriented to the framing of policy options, their assessment in relation to local goals, and the identification of win-win solutions. SPAR suffuses these activities. It does not stand alone, as it does in the Establishment approach.

While all SPAR necessarily must be instrumentalist in its approach to knowledge, the Underground's instrumentalism is self-conscious; the Underground thinks about epistemology. It sees its research questions and methods as value-laden, and that it has an emancipatory bias. The Establishment, in contrast, tends to be epistemologically unreflective, with the consequence that it overlooks its biases— biases which inherently favour, for example, the partial quick fix, the technician's expertise, and the aggregated majority's self-interest. The Underground tends to be interested in its philosophical underpinnings; the Establishment eschews "navel-gazing." The Underground likes discursive footnotes— the Establishment prefers the crisp fact-oriented author-date referencing system.

[Original emphases] Of course, there was a side of Marx, the side which has been most historically significant, that was in accord with the Establishment's technocracy, positivism, and even its reductionism.

"Local" here means indigenous, as current residents and/or workers, to the societal system for which the particular policy objects of SPAR are being generated. Originally, and still primarily, the Underground has focussed on local systems in the geographical small-scale sense. However, as the Underground case studies presented below show, the Underground's methods are starting to be applied to SPAR for larger systems.
Research becomes not a one-time activity conducted by outsiders on, or for, locals, but an ongoing process conducted by locals for their own benefit. They change from being mere objects of development policy to being subjects of their own development. The research goal shifts from helping outside policy makers gain more certainty about the effectiveness of top-down policies, to helping local people gain more insight into the reasons for their situations and the prospects for changing these where desired. Identifying the directions of systems dynamics, e.g., toward more or less co-operation, replaces quantification of policy effects as the central concern of SPAR. The random survey is replaced by the workshop, trend extrapolation by the scenario, the chi-square by the goals-and-options matrix drawn on the flipchart, or even in the sand.

Underground methods have been found to be especially valuable in involving previously marginalized people in local planning, in melding external technologies with local cultures and ecological knowledge, in building consensus, in formulating comprehensive development strategies, and in generating plans that are actually implemented.\(^3\)

The Underground approach is a form of SPAR in the same functional sense that Establishment SPAR is-- both approaches are concerned with collecting data and marshalling it into information useful for making judgements about decision outcomes. The differences between Underground and Establishment SPAR lie in the identity and role of the researchers, the kind of questions asked, and the view on what constitutes useful information, not in the general purpose of the activity.\(^4\)

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\(^3\) IDRC's descriptions (IDRC 1996b:3-4) of i) its initiative with the International Union for the Conservation of Nature (IUCN), and ii) its Grassroots Indicators forum, provide good examples of the growing acceptance of the Underground's approach:

i) "Taking the view that sustainability results from people reflecting and acting on their situation, the approach is one of action and reflection as a continuous cycle. Diagnosis, monitoring and evaluation are key elements of the assessment process and these are reflected in the tools which the Team has developed. The approach encourages communities and organizations to identify and answer their own questions about their future. The approach is systemic, treating people and the environment together as one system, rather than distinguishing three components (social, economic and ecologic). Second, it is user driven, letting the users choose their own indicators, a critical distinction from other approaches which choose the indicators in advance; and also encouraging the users to build consensus and make values transparent.

ii) "Standard indicators used in national reporting systems are selected for qualities that support statistical analysis, such as universality and predictability over space and time, capacity for aggregation, and convenience of collection. Grassroots indicators are culturally specific, learned through experience, often qualitative and anecdotal (so are difficult to aggregate), and often not recorded. However, grassroots indicators tend to be holistic, participatory, based on highly detailed observation over a long time, and directed towards action."

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\(^4\) It may sometimes appear, even to some members of the Underground, that in its openness to, and incorporation of, ways of knowing foreign to the Establishment, the Underground does not really conduct research in the sense of systematic inquiry. Indeed, some of the more zealous members of the Underground, often the newly converted, do attack "Western rationality" and reject "rational planning." In fact, they are rejecting positivism, reductionism, and technocracy, and are mistakenly equating these Establishment traits with rationality. Even the zealots of the Underground do not reject logic and careful observation, the basic principles of systematic inquiry and of "rationality" ordinarily understood. In fact, the Underground appeals to these principles in proposing alternatives to the Establishment's narrow views of rationality, research, and knowledge. The Underground attempts to rationally show (prove and illustrate) that participatory research producing
In sum, the Underground's approach shifts SPAR methods from the positivistic, the reductionistic, and the technocratic to the heuristic (i.e., yielding insight), the holistic, and the participatory.75

3. Participation

The Underground's emphasis on participation derives from three types of practice related to SPAR: 1) participatory action research (PAR), 2) participatory rural appraisal (PRA), and 3) participatory planning.76 These three types of practice derive respectfully from the work of: 1) academically oriented researchers concerned with making their work more supportive of social change; 2) rural field technicians, such as agronomists, concerned with practical problem solving; 3) professional, particularly urban, planners concerned with improving the effectiveness and fairness of state planning processes.

(a) Participatory action research

PAR combines, to varying degrees, three interests of some professional researchers: a scholarly interest in participatory methods for generating knowledge, a pragmatic interest in research as an aid to action, and a social interest in the potential for learning-by/from-doing. Depending on the interest emphasized, or author's style, PAR can be known as participatory action research (Whyte 1991, Greenwood 1993, Selener 1997), participatory research (SPRA 1982, Hall 1984, Brown 1985, Kassam and Mustafa 1991, Narayan 1995)77, participatory evaluation (Vargas Vargas 1991,

75 It will be seen that this general orientation of the Underground is quite different than one particular attempt of the Establishment (Hofferbert and Hofferbert 1992) to deal with its own limitations: promotion of "barefoot evaluators" using rapid, but non-participatory, non-holistic, non-heuristic, SPAR survey methods.

76 Overviews of PAR and PRA are provided by Beaulieu and Manoukian (1994:57-61). Their third "family" of participative methodologies is termed "participative management" which is somewhat different than the third practice type identified in this report: "participatory planning."

77 The International Council for Adult Education, based in Toronto, maintains a web page that contains information on an international participatory research network: www.web.net/icae/english/resocntr.htm.

PAR involves people in studying their own conditions. In the fullest participatory form, the people set the research questions, are consulted on the research design, conduct much of the data collection and perhaps analysis, and interpret the findings. They control both the research and the action. "The people" may mean all members of a community or organization (the policy "beneficiaries"), or their representatives.

PAR can be extended from analysis of local conditions to assessment of policy effects.\(^80\) The research can involve gathering data and creating information to inform a new action (such as policy formulation) or to evaluate and learn from a past action.

**Roots:** PAR research has its roots in three traditions: Marxist praxis, liberal social learning, and liberationist action learning.

**Praxis** is a term probably coined by Eastern European "Marxist humanists" in the 1960s. Its roots in Marxism are deep.\(^81\) Praxis is learning through doing at the macro social system level-- not

\(^78\) Stringer (1996) sees community-based action research as a research form that "takes seriously the critiques of traditional research methodologies that are inherent in postmodern, feminist, and critical theory" and that is a "re-emerging tradition that links process of inquiry to the lives of people as they come to grips with the problems and stresses that beset them in their day-to-day lives." Besides acknowledging the seminal contributions of social psychologist Kurt Lewin (1946), who is usually credited with coining the term "action research", Paulo Freire (1974), and critical theorist Jurgen Habermas (1979), Stringer identifies recent contributions to the field by Kemmis and McTaggart (1988), Reason (1994), and others.

\(^79\) In an unpublished report, Alexander (1997) reviews the concept of community-based research for a Canadian Establishment-oriented agency, Forest Renewal B.C. FRBC has been attempting to incorporate Underground perspectives into the SPAR it sponsors on community economic development. Alexander describes thirteen research centres, mostly housed in Establishment institutions such as universities, that do community-based research.

\(^80\) "... a FAO project with a federation of NGOs (FONGS) in Senegal, which analyzed the impact of structural adjustment at micro-levels, brought pressure to bear on policy-makers at macro-levels. A similar effort is planned to analyse the impact of the Uruguay Round on small producers. A major lesson learned by UNDP is that organizations can foster policy dialogue among and between governments and civil society. UNDP, for example, has been able to work with multiple partners to foster policy dialogue among various stakeholders at national, regional and international levels to address complex issues of rehabilitation in Central America... " (CIDA 1997a:33).

\(^81\) Taking Mao Tse-tung as an authority on his own philosophy:

"Before the advent of Marxism none had proposed a theory of knowledge that takes account of the developing process of cognition that is based on practice, that proceeds from the elementary to the advanced, and that is dialectically materialistic... Aside from their genius, what enabled Marx, Engels, Lenin, and Stalin to formulate their theories was mainly their participation in the practice of the class struggle and scientific experiments of their time." (On Practice, 1937)

The following explanation is provided by the Central Committee of the Communist Party of China in a 1966 preface to On Practice.
simply technical learning, but learning about whole social systems by being engaged in challenging, modifying, or creating them. Praxis can lead to revolution, and to the building of a humane society within a socialist framework.

**Social learning** is the liberal correlate of praxis. The term that came to prominence in the 1970s. (Dun 1971, Schon 1971, Friedmann 1973). Social learning theory-- similar to "adaptive management" theory in the resource management field (Holling et al. 1978)-- posits, on the basis of many observed public policy failures, that policy makers cannot presume to know enough about complex social and/or natural systems to predict the future with certainty as decisions are made. Social learning applies the systems theory of feedback to the social development process. We cannot wait for certainty before deciding on action, but we must always be cognizant that the decision may not lead to the outcomes expected. Thus SPAR must provide continuous informational feedback loops to the policy advisors and policy makers, and policy making must be continuous and adaptive (Armstrong 1995b). Moreover, SPAR should contribute to the examination of assumptions, i.e., to "double loop learning" (Argyris and Schon 1978).

**Action learning** is a term used to describe the research approach of Paulo Freire (1979) who profoundly synthesized praxis's materialist insights (e.g., that social structures can be oppressive but not apparently so to the oppressed) with social learning's incrementalist insight that directed change is a continuous process rather than a cataclysmic event. To this synthesis, Freire added not only an explanation of why fundamental change needs to be from the very bottom up, i.e., through the "conscientization" of individual peasants and workers, but as well, how that can be done practically through dialogical "problem-posing" education.

Many would say that Freire began the current interest in PAR as a way not only to inform action (including policy formulation) through locally controlled research, but also as a way to promote local social learning through action and reflection. Freire advanced the radical philosophy of social change within the community development movement, a movement which as a self-help approach to development had been endorsed by the United Nations in the 1950s and which by the 1970s was becoming the development strategy of choice for international NGOs.

"There used to be a number of comrades in our Party who were dogmatists... overawing people with words and phrases from Marxist works, torn out of context. There were also a number of comrades who were empiricists and who for a long period restricted themselves to their own fragmentary experience and did not understand the importance of theory for revolutionary practice or see the revolution as a whole, but worked blindly though industriously. The erroneous ideas of these two types of comrades, and particularly of the dogmatists, caused enormous losses to the Chinese revolution during 1931-34... On Practice was written in July 1937 in order to expose the subjectivist errors of dogmatism and empiricism in the Party, and especially the error of dogmatism, from the standpoint of the Marxist theory of knowledge."

Bennett and Howlett (1992) analyze current "theories of policy learning and policy change."
(b) Participatory rural appraisal

PRA is a term recently coined to refer to a collection of processes and tools that have been developed to encourage villager participation in rural, particularly resource management planning. Chambers (1994) provides the standard overview of this field of practice and its history.

PRA is an adaptation of what was previously the more technocratic, but heuristic, "rapid rural appraisal." PRA was generated by extension officers, action-oriented academics, and NGOs in the Third World, particularly in Asia and Africa.

PRA as a practice draws on what social and natural scientists (e.g., Brokensha et al. 1980, Warren et al. 1989, Inglis 1993, Peat 1994, Sadler and Boothroyd 1994) refer to as traditional, or indigenous, knowledge, i.e., the knowledge, and ways of knowing, that are embedded in the cultures of aboriginal/indigenous peoples. Traditional knowledge methods are not readily accessible to outsiders, and would perhaps be endangered if they were. But participatory approaches to SPAR can draw on such methods indirectly by creating opportunities for dialogue between those who hold traditional knowledge, which is inherently holistic/heuristic, and outsiders, such as technical experts.

(c) Participatory planning

Participatory planning emerged within the urban planning field as it was being practised in the industrialized countries in the late 1960s (see e.g., Friedmann 1973). The participatory approach took longer to reach the international development field, but it is now widely accepted.

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83 A current annotated bibliography on PRA and other participatory planning tools can be found at a web page of the Institute of Development Studies, Brighton, U.K.: www.ids.ac.uk. Besides the many references to writings describing PRA at work in various settings, the bibliography lists more general analyses, including a review of participation manuals (Absalom et al. 1994) and articles on the following topics that seem particularly relevant to this report: linking PRA-based research to policy (Johnson 1995), participant-controlled adaptive planning practices (Scoones and Pretty 1995), PRA's role in addressing inequality (de Koning 1995, who argues "participatory methods themselves contribute very little to an emancipatory process"), and the limitations of group meetings as a research method (Orone and Pottier 1995).

84 See also: Case (1990).

85 Note the different use of the word "traditional" here from the usage elsewhere in this report where I refer to traditional (Establishment) social science. Different cultures have different traditions.

86 Friedmann's book, which refers to participatory planning as "transactive planning" may still be the most profound, and most readable, source on the conceptual underpinnings of good, professionally led, participatory planning.

87 For example, one late 1970s text on development project planning (Rondinelli 1977) does not even have a reference to participation in the index.
Participatory planning tends to be centred in the activities of professionals. Citizens participate in a range of ways, from becoming informed, to giving advice, to being actively involved in design and resolving trade-offs. Arnstein (1969) invidiously ranked these ways on a frequently-cited "ladder" of participation.

Arnstein's top rung was full empowerment. Rarely can participation mean total devolution of control, however. A complex society cannot allow a small group of people, e.g. in a neighbourhood, to govern themselves completely. Many actions of the group (e.g. providing social services, or not) will impinge on others.

Consequently, in current literature and practice, attention is increasingly being given to collaborative forms of participation -- collaboration between officials and citizens, and/or between outside technical experts and locally knowledgeable grass-roots people, and/or between central and local agencies. An increasingly common term being used in the policy and planning literature is "stakeholder participation." This term refers to participation in planning not only of intended beneficiaries (or more likely, their representatives), but also of others, in government or not, who have a stake in the implementation of decisions.\(^{88}\)

Over the last decade, participatory planning has been extended from the city to the nation, from the physical to the social, and from the project to macro-policy. The United Nations agencies, World Bank, and other international institutions are now playing leading roles in promoting participatory planning, often under the rubric of "stakeholder involvement processes" (Bhatnagar and Williams 1992, UNDP 1993,\(^{89}\) Beaulieu and Manoukian 1994, USAID 1995).\(^{90}\) Such processes can

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\(^{88}\) One example of a stakeholder process is British Columbia's Commission on Resources and the Environment which attempted in the early 1990s to produce forestry policies by bringing together environmentalists, corporations, workers and communities. Armstrong (1995b:26) notes that experience with this and similar processes points to one of the barriers standing in the way of effective participatory SPAR: it is difficult for professionals to "engage in profound change processes... because the very rules of their disciplines and power of their positions constitute the core values by which they define themselves."

\(^{89}\) "Participation, certainly not a new term, has been part of the development vocabulary since the 1960s, or even before. But it has generally referred to people's involvement in particular projects or programmes. In this [Human Development] Report, the critical difference is that participation is an overall development strategy... " (UNDP 1993:21, cited in Beaulieu and Manoukian 1994).

\(^{90}\) CIDA (1997a) provides an up-to-date and comprehensive, though concise, overview of the growing attention to "participatory development" by international agencies, the tools they use (some of which contribute to Underground SPAR), and the lessons learned. Now, CIDA notes, "the World Bank sees its role as one of encouraging local ownership of policy decisions at the macro level (economic reform, poverty assessment, public expenditure reviews)..." The case studies below illustrate how the Bank plays this role.
constitute a form of SPAR. (See case studies section of this report.) Manuals produced by international institutions on various aspects of participatory planning (e.g. Srinivasan 1990, Narayan and Srinivasan 1994, World Bank 1996) are proliferating.

4. Holistic Concepts

The participatory methods of the Underground are enriched by the substantive concepts it has introduced to help SPAR consider whole social and social/natural systems. These concepts enable SPAR to consider, for example: education as a process of empowerment, health as a function of socio-economic conditions, gender as a social construct, social capital as a determinant of economic vitality, norm-managed common property as an alternative to open access, livelihood as a component of rural ecology, and many others. Such process-oriented concepts, which identify the inter-relationships of policy effects, reflect the systemic sensitivity of the Underground.91 The concepts stand in contrast to the product-oriented, isolated variables of efficiency, equity, and environmental cleanliness that are separately addressed in the Establishment fields of welfare economics, social policy analysis, and environmental impact assessment.

Holistic SPAR, which attempts to grasp the nature of whole systems, or at least key relationships inherent in a system, is different than interdisciplinarity which often simply aggregates knowledge from different disciplines, or at most integrates knowledge structured by disciplinary categories rather than real systems' properties.

(a) Systems theory

The overarching substantive approach of the Underground is systems analysis.92 This does not mean that attention to systems in SPAR arose from, or is limited to the Underground-- there are many writers93 who do not pay much attention to participatory methods, a sine qua non of Underground SPAR, but who are exploring, directly (Backoff and Mitnick 1986, Daneke 1990, Hendrick and Nachmias 1992) or indirectly (Bailey 1994), SPAR applications of systems theory.

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91 In some cases, the concepts perhaps also reflect the Underground's receptiveness to learning from local people's worldviews and interpretations of experience.

92 Some systems theorists eschew the term "systems analysis" because analysis involves breaking wholes into parts and systems theory is concerned with the processes that create the whole. Identifying those processes, however, is in fact an analytical exercise.

93 And journals devoted to them, e.g., System Dynamics Review.
The study of whole systems qua systems is a vast field, much of which has operated under the name cybernetics, or alternatively and somewhat differently, the name General System Theory (GST). The theoretically inclined segment of the SPAR Underground has been sporadically intrigued by systems theory because of its potential for yielding insight into basic systems dynamics that mediate social policies and their effects—dynamics such as positive and negative feedback, organization, stabilization, adaptation, elaboration and management of complexity, surprise, entropy, and recursion. Reductionist social science ignores these crucial dynamics.

Identifying the essential functions that must be performed for a social, or social-ecological, system to be healthy, and assessing a policy's effect on the system's ability to perform those functions, is one example of the application of systems theory to SPAR.

Because the Underground is interested in systems theory for its heuristic potential, it focuses on what is sometimes referred to as "soft" systems theory.

(The alternative, "hard," perspective, often termed Operations Research, seeks technocratic, mathematical, computerized applications of systems theory to systems design. Operations Research may be useful in analysing narrowly defined social problems, such as optimal production rates, but there is now a virtual consensus, which includes the Establishment, that attempting to use quantitative systems modelling for SPAR is inappropriate.)

Soft systems theory (as presented, for example, by Beer 1975, Checkland 1981, Heylighen et al. 1990, Dobuzinski 1992, Boothroyd 1994) does not try to predict specific outcomes of change. Most simply, it seeks only to identify directional changes (+ or -) in variables. In assessment terms, this means it seeks to indicate whether social conditions (e.g. levels of health, education, job satisfaction) will get better or worse. It does this through mapping the relationships among key

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94 The founding of systems theory is often credited to Norbert Wiener, the mathematician who coined the term cybernetics (the study of self-steering systems). An accessible introduction to his technocratic hopes for cybernetics is Wiener's *The Human Use of Human Beings* (1950 [1954]). The term General Systems Theory was created by the biologist Bertalanffy (1968).

95 "Recursion" refers to the replication of systems properties in their subsystems. For example, the centralization-decentralization tensions at the state-region level are replicated at the region-district level and at the district-community level.

96 Reductionist SPAR attempts to identify connections between policy inputs to a system and their social outputs without looking into the "black box" that determines the connections. Systems theory helps Underground SPAR make the box transparent.

97 See footnote 53.

98 The role of systems theory in SPAR may be metaphorically stated as: systems theory potentially provides the base maps, on which pure SPAR produces current maps of changing societal systems (e.g., through case studies), which applied SPAR consults in providing navigational information to the policy maker. The Underground often undertakes pure and
systems components. In this way, it is similar to modelling, but soft systems analysis makes no attempt to quantify the degree to which change in one component affects another. It is content with indicating direction, including feedback.99

Some of the heuristic tools (see below) described in the PRA literature employ systems mapping. It is not surprising that persons concerned with relationships between productive humans and natural ecological systems should be drawn to systems mapping. And it is not surprising that they have found these relationships, at the village level, relatively easy to map.

Can social policy assessment that is at larger scales and concerned with more abstract systems, such as a regional education system, employ system maps to draw policy implications? At a general, theoretical level many social scientists might say yes. These include functionalists100 who focus on social system functions needed to maintain equilibrium, and Marxists who look for system contradictions (opposing forces) in order to understanding societal development.

Perhaps one of most effective (as determined by the attention it has received) uses of systems theory to illuminate policy outcomes is the misnamed but empirically sound paradox of the "tragedy of the commons"101 which was introduced to policy assessment by the American biologist, Garrett Hardin, in 1968. Hardin (like others less well known) showed with simple mathematics that if individuals who are not fettered by rules or norms act on their short-term self-interest to exploit a common finite resource (such as a forest or a fishery) they will wind up negating that interest. Each individual will knowingly add to the overexploitation of the resource because the alternative is to have a declining share of a declining resource. The accumulation of individual competitive decisions leads to collective ruin. The dynamic that causes this is positive feedback. (In Hardin's hypothetical example, an individual who puts additional cows on a common pasture, will lead others to do the same even after the carrying capacity is reached; their actions, which reduce the all cows' productivity even further, will cause the first person to try to add even more cows.)

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applied SPAR simultaneously— it maps changing systems as it provides actionable information.

99 Policy science theorists, Ascher and Healey (1990), for example, advocate participatory analysis of "vicious" and "virtuous circles" in the evolution of relationships among: resources, their management, and social development.

100 Functionalism has been the dominant perspective of social theory from Thomas Hobbes to Talcott Parsons. Critics point out that functionalism has a conservative bias to maintenance of the status quo, regardless of its fairness. But function analysis need not be focussed on stability— the function of some system components is to promote growth or change.

101 It is now widely recognized, including by Hardin, that the term "tragedy of the commons" is a misnomer. He was addressing situations where there are no norms or rules governing resource exploitation. "Open access" is now the usual term for this kind of situation because the true "commons" were governed by norms or rules. But the term "tragedy of the commons" has stuck as a phrase to describe the paradox where individuals acting on their unfettered short-term self-interest wind up negating that interest.
Hardin's paradox has relevance beyond the realm of resource management policy. The tragedy-of-the-commons concept can be applied as a framework for researching consequences of a wide range of social policies which indirectly affect natural resource use, or which directly affect use of social resources—e.g., policies on urban transportation, taxation, cultural assimilation, unemployment insurance. Taking urban transportation as an example, soft systems analysis shows that in the absence of good public transit, people who have the choice will drive a car, which reduces transit revenues and thus service even further, which leads to more car driving.

Underground SPAR sensitive to whole systems could contribute to the participatory, ongoing identification and re-identification of the public interest. Such SPAR would be an alternative to two different tendencies within Establishment SPAR: i) the use of SPAR by technocrats to further the public interest as they see ii) the rejecting of the very idea of a single public interest and the relegation of SPAR to describing competition among pluralist interests.

Despite its potential for illuminating social dynamics, systems theory is not yet well applied in Underground SPAR other than that focussed on direct human-nature relationships such as those found in agro-forestry.

The Underground's holistic approach is quite different than the Establishment's periodic attempts to use SPAR for creating comprehensive policies such as master-plans, or for informing comprehensive assessment tools such as a single (necessarily reductionist) index of development. Holism is not about addressing everything in one document, one deductive hierarchy, or one index. Holism is about instituting SPAR processes (e.g. dialogue among various stakeholders, forums for people with various kinds of expertise, environmental/social impact assessments,\textsuperscript{102}) for identifying the significant systemic effects of a policy and its alternatives.

(b) Emerging fields: ecological economics, gender analysis, and social capital assessment

While systems theory is still only beginning to be tapped as a conceptual basis for Underground heuristic, holistic methods, there are several emerging fields of study (some might say disciplines) which implicity take a systems approach and which are of growing interest to the Underground. These include: ecological economics, gender analysis, and social capital assessment. Each focuses on a type of policy outcome not usually considered in Establishment SPAR. Each is developing a

\textsuperscript{102} Environmental and social impact assessment processes, especially the mandated procedures requiring public involvement in such assessment, have promised to make Establishment SPAR more holistic. Unfortunately, impact assessment has in practice been largely restricted in making this contribution for the reasons given earlier in this report. The Underground has sometimes been able to use mandated impact assessment to its own advantage, however—e.g., by participatorily conducting SPAR on the impacts of megaprojects on traditional livelihood systems. Moreover, the principle of impact assessment— that unintended consequences be examined— is valuable to any form of SPAR. The Underground's systemic sensitivity is an asset in impact assessment.
distinctive methodological approach, but all three are grounded in a systems perspective and focus on generating heuristic insight rather than causal precision.  

**Ecological economics** (Krishnan et al. 1995, Costanza et al. 1997) is centrally concerned with the ecological basis of economic systems (as opposed to environmental economics which applies economics' tools to the study of environmental issues). The field is concerned with such substantive issues as impacts of economic processes on resource stocks (not just quantities but also on biodiversity and self-generating processes) and with methodological innovations for dealing with such impacts in SPAR. Innovations being considered include: the replacement of Establishment national economic accounts (GDP etc.) with economic development monitoring tools that consider natural capital depletion (Repetto et al. 1989); and the calculation of policies' "ecological footprints" (Wackernagel and Rees 1996)-- i.e. the amount of global natural resources consumed by, or the amount of the world's carrying capacity "appropriated" by, various groups as a result of the policies they adopt.

Ecological economics contributes to SPAR a long-term view. It challenges commonly held assumptions in the Establishment that the long-term should be discounted (as it explicitly is in cost-benefit analysis), that resources are infinitely substitutable, that natural resource destruction can be outweighed by technological capital creation, that local natural habitats and the livelihoods dependent on them are less important than capital and labour mobility. Ecological economics shows that SPAR on poverty, livelihood, and welfare must consider-- not only for rural areas--policy's fundamental impacts on natural and natural-societal systems.

**Gender analysis** (Moser 1993, CIDA 1996, Canada 1997) is receiving increased attention in Underground SPAR. Some approaches to gender analysis, such as disaggregating poverty

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103 In its rehabilitation of "abstractions", i.e., the concepts that underlie systems theory and the emerging fields of ecological economics, gender analysis and social capital assessment, the Underground reverses Bentham's resolution of abstractions into things. (See footnote 31).

104 The first issue of the journal Ecological Economics appeared in 1987.

105 Costanza et al. 1997 address the complementarity of natural, human, and manufactured capital. This is in contrast to the traditional economics focus on the substitutability of the last of these for the first two.

106 "... Problema ambiental, calidad de vida y pobreza son tres dimensiones que se vinculan y retroalimentan dentro de un gran marco que se denomina desarrollo sustentable." (Chile MPC 1996:216)

107 "Traditional approaches to poverty reduction combine the promotion of labour-intensive economic growth with investment in human resources. In addition to overlooking women who do not participate in the labour force, the multiple responsibilities of women and men and the resultant scarcity of their time for paid labour are ignored. Traditional approaches to poverty also pay insufficient attention to regional, national and international policies which affect the poor. This has resulted in anti-poverty projects which have
statistics by sex, can be seen as simply additions to the Establishment's tool kit. But the Underground goes beyond this to consider how social systems, including the cultural norms that govern relations between the sexes, mediate the differential effects of policy on men and women.\footnote{108}

Methodologically, the field of gender analysis has contributed to the development of qualitative, participatory, and action-oriented research tools (Parker 1993).\footnote{109} Particular emphasis is placed on methods for apprehending micro-level human experience, and on identifying structural connections among experience, cultural norms, institutions, and policy. These methods include the design of appropriate research environments (e.g., sometimes gender segregated) for the articulation and analysis of culturally sensitive experience. Such methods are applicable not only to SPAR concerned with gender but also to SPAR concerned with other culturally mediated conditions that differentiate policy's impacts—conditions such as ethnicity, age, occupation, and disability.

Sensitivity to gender also has implications for macro-level SPAR methodological. For example Waring (1988) and others have shown how the Establishment's national economic accounts ignore certain major economic contributions—e.g., work done in the home, primarily by women. Thus for

\textit{... actually increased poverty."} (Canada 1997:5)

\footnote{108} A recent United Nations Research Institute for Social Development document (UNRISD 1977:8-9) contrasts the Underground's gender analysis perspective with that of the Establishment:

"The academic/bureaucratic concern with identifying the poor, and measuring the extent of their poverty, very often takes precedence over elucidating the social processes through which people slide into poverty. From a policy perspective these processes should be of paramount interest... The critical gender issue that policymakers need to address therefore is not so much whether women are poorer than men (i.e., the relative pervasiveness and/or intensity of male and female poverty), but whether the social mechanisms through which they become poorer are in any way differentiated...

"[M]uch more work needs to be done to decipher how... institutionalized sets of gender relations, and the female poverty that is associated with them, are being altered under the complex processes of social and economic transformation that are underway....

"The UNRISD/UNDP project Technical Co-operation and Women's lives: Integrating Gender into Development Policy has sought to initiate debate and consultation—'policy dialogue'—among gender researchers, representatives of civil society and policy makers from key economic ministries...

"The proposed [new] research project would build on [that earlier] work... [and] follow the [same] 'action-research' methodology... in order to feed its micro-level research findings on poverty processes into national debates on macro-economic strategies... The country-level research will therefore be combined with a strong 'action' phase of debate and consultation among researchers, policy-makers and activists.

\footnote{109} For example Parker (1993:vi) provides a "community-based technique for the identification and analysis of gender differences in order to assess the different impact of development interventions on each gender," and "a process of analysis that identifies and challenges in a constructive manner assumptions about gender roles within the community."
social, as well as the above-discussed ecological reasons, the Underground calls for new methods of measuring economic health.

**Social capital** is a concept recently added to Underground SPAR. It refers to the shared knowledge, understandings and patterns of interactions that a group of people bring to any productive activity (Coleman 1988)\(^{110}\). It includes such features of social organization as networks, norms, and trust (Putnam 1993). In a healthy society, it can be self-reinforcing (Ostrom 1993), but it can also atrophy (Putnam 1995).

What we might call the emerging field of social capital assessment is becoming of interest to the World Bank, Asian Development Bank,\(^ {111} \) and other development agencies. Like the concepts of ecological systems, and gender as a cultural construct, social capital is important to SPAR both as a dependent variable (to use Establishment language) and as an intervening variable that mediates policy's effects on human welfare. If policies weaken social capital, e.g., by inhibiting the formation of co-ops or by favouring competitive individualism in the schools, then society is likely to be less productive in many senses. If social capital is already strong, certain poverty reduction policies -- e.g., encouragement of lending circles\(^ {112} \) -- will attain their objectives much faster than if social capital is weak. Social, or cultural, capital can also be the key to sustainability of natural environments, and therefore to the people who live off them. (Berkes and Folke 1994).

The concept of social capital is related to that of civil society (Cohen and Arato 1992), but the former denotes the productive role of social bonds, the latter their voluntary nature.\(^ {113} \)

\(^{110}\) Parallel to the interest in social capital as a SPAR concept is the attention that has been given in Underground research to community-based common property governance (Berkes 1989, Pinkerton 1989) and the social basis for co-operation in community economic development planning (Boothroyd and Davis 1992).

\(^{111}\) The World Bank held a workshop on social capital April 16-17, 1996. The World Bank (1997) sees social capital in a broader light than the original theorists, defining it as any form of social organization, "horizontal" or "vertical," including that sponsored by the state. In December 1997, the ADB engaged a consultant to prepare a working paper on the topic.

\(^{112}\) It has been found that Bangladesh's Grameen Bank is successful in recouping virtually all of its loans to lending circles not just because the circles take joint responsibility for loans to individuals but because the whole institution maintains a culture of social responsibility (Jain 1996).

\(^{113}\) The civil society concept dates to the work of Hegel and Marx. For the latter, civil society was usually used as a term of opprobrium to refer to bourgeois-dominated, capitalist society. Now the term is increasingly used to refer to voluntary association (e.g., in the form of NGOs) that is non-corporate as well as non-state.
5. Heuristic Tools

Creating SPAR that is both participatory and holistic poses the challenge of how to design a research process that enables many people to work together efficiently in answering broad questions. The Underground meets this challenge by adopting, adapting and developing heuristic tools which facilitate exploration and comprehension of the big picture.114

The Underground's heuristic tools, necessarily participatory,115 can be grouped into three broad categories: structures for organizing communication in participatory research, processes for collective exploration of systems dynamics, and techniques for joint collection and analysis of data.

(a) Communication structures

Structures that foster effective communication must address the activity dimensions of who, how, when, and where. Structures determine who will participate (raising issues of representativeness, legitimacy, numbers, etc.), how (meetings or other forms of communication, compositions and sizes of meetings and sub-groups, leadership, etc.), when (staging of meetings and other activities), and where (venues).

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114 The Underground's attention to heuristics is supported by policy science theorists. For example: "From a policy sciences perspective, the purpose of science in human affairs is not prediction with precision, scope, and accuracy, a purpose which presumes a deterministic world with little or no latitude for choice. The purpose of science in human affairs is freedom through insight. Insight brings unconscious and unperceived factors in the self and the environment into the focus of conscious awareness, so that people are free to take them into account in making choices. Insight is a potential base value for all value choices: this is the fundamental significance of science for freedom [Lasswell 1976:77]." (Brunner and Ascher 1992)

115 There are also heuristic methods that are not, so far, designed for broad participatory use. Lying between the domains of the Establishment and the Underworld, they offer promise for Underworld development and application. For example, "hermeneutics" offers methods for interpreting texts (Borg and Mohler 1994).

More generally, there seems to be a trend toward considering all methods as heuristic devices. As Heinz and Zapf (1994:11) put it with regard to social indicators, for example: "overall, in retrospective, the success of social indicators research is to be found more in the area of general social enlightenment than in the production of technical expert knowledge or the provision of special planning intelligence for politicians." Social indicators, they say, has met "a similar fate as other scientific instruments of political decision-making, e.g., cost-benefit analysis or PPBS [planning, programming and budgeting systems]." They find that "a model of enlightenment seems to be more realistic, a model according to which politics is connected with science rather indirectly." Promotion of general social enlightenment and indirect connections of SPAR to policy making, however, are fall-back positions of the Establishment. Underground experiences, at micro levels through PRA and at macro levels through the World Bank (see case studies) show that its approach to SPAR can have a direct influence on policy.
Structures may govern a single SPAR event, a sequence of events, or ongoing SPAR.

**Single events:** The Underground's favourite single-event structure is the workshop, where, typically, a group of one to three dozen people is convened for a few days to conduct SPAR (under a variety of names) following a sequence of steps with the assistance of a facilitator. Similar types of structures can be known as charrettes (an architecture term for participatory, usually community-based, physical design workshops), search conferences (Emery 1975) (a retreat for representatives of stakeholders to explore broad policy issues), or open space (where participants create their own structure). Electronic communications now permit virtual workshops.

Focus groups may have Underground application, but they originated as an Establishment tool to produce qualitative information for the benefit of the researcher, not to empower the participants to make good policy assessments through joint research in the form of mutual learning.

**Sequences of events:** SPAR structured as a sequence of events often takes place in support of, and in conjunction with, proactive or reactive planning projects. At the community level, these typically involve a series of workshops, plus shorter, open, community meetings, primary collection data activities (see section on techniques below), and perhaps task groups for the life of the planning project. At regional and national levels, planning projects using Underground SPAR may similarly involve a combination of workshops, public meetings, hearings, commissioned

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117 An example of a participatory meta-research event is the virtual, global conference on "Participatory Communication: One Approach to Sustainable Development (www.PanAsia.org.sg/conference.htm).

118 Focus groups (Greenbaum 1993, Krueger 1994) consist of four to twelve people brought together to express their views on a certain matter. "Focus groups have a rather narrow purpose for which they work particularly well-- that is to determine the perceptions, feelings, and manner of thinking of consumers regarding products, services, or opportunities... The topics of discussion in a focus group are carefully predetermined and sequenced, based on an analysis of the situation (Krueger 1994:19-20)."

119 Planning for "Coproduction" by clients and professionals of social services (Percy 1984), and "Co-management" by the state and communities of natural resources such as fisheries (Pinkerton 1989), are projects that Underground SPAR is particularly well suited to contribute to.

120 Public hearings are usually not associated with the Underground. But they can in fact be a powerful Underground SPAR tool, as is attested to by the success of Canada's Thomas Berger in bringing to national and international attention the research results of three different sets of community-based hearings: on a proposed northern Canadian pipeline (where the hearings drew attention to the indigenous holistic concept, "way of life"); on Alaska's aboriginal land claims settlement (Berger 1985); and on a proposed dam in India (Berger 1994).
research, working groups, etc. (See case studies below.) The more carefully planning projects and associated SPAR are structured, the more effective and efficient the research.

**Ongoing structures**: More or less ongoing structures for the conduct of Underground SPAR can be found in a variety of forms—sectoral advisory committees and community councils are common examples of such structures. A more innovative example is Brazil’s citizen "budget councils" (Abers 1996). Development of such structures can be seen as an Underground method.

The idea that structuring ongoing deliberation constitutes a research method seems strange from the Establishment perspective, because the Establishment considers research only as something professional researchers do. But if research methods are thought of as systematic means for generating information, means for trading off the desiderata of internal and external validity, efficiency, and ethics, then structuring a citizen budget council to ensure representativeness, effective information exchange, and sound drawing of conclusions is as much a research method as imputing shadow prices, conducting a series of random surveys, or organizing a focus group.

(Note that the attention here is to ongoing structures deliberately put in place to systematically develop information for resolving specific policy issues. These are quite different than ongoing, diffuse, self-generating, political discourses which, while enlightening, are not forms of systematic research.)

One of the first steps in structuring participatory SPAR is to identify the relevant actors, or stakeholders, who should be involved. Thus methods for "stakeholder analysis" (Gustafson and Ingle 1992, World Bank 1996, Morgan and Taschereau 1996) are addressed in the Underground-leaning literature. Stakeholder analysis in the Underground is analogous to sampling design in the Establishment.

**(b) Exploration processes**

Both affective (which the Establishment pays little attention to) and intellectual processes take place within participatory SPAR structures. Designing affective and intellectual processes that foster true dialogue—meaningful, thoughtful, mutual, respectful exploration of issues—is seen by

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121 Meta-research by Abers (1996) on the ongoing participatory budget councils established by Workers' Party municipal governments in Brazil in the 1990's, found that given favourable political conditions, citizens could participate meaningfully in the difficult SPAR tasks required for prioritizing urban improvement projects and revenue sources.

122 Yankelovich (1991) points out that the public opinion poll, an Establishment tool, does not effectively contribute to public dialogue. It fails to distinguish people's top-of-the-mind, off hand views (mass opinion) from their thoughtful, considered judgement (public judgement). See also Fishkin (1995).
many to be an essential method for ensuring that researchers/researchees (usually the same people in Underground SPAR) make the full contributions to research they are capable of.\footnote{See Mikkelsen 1995, for example.}

Designing SPAR processes is, like the structuring of SPAR, a major planning task. In the Underground spirit, this task should be done in as participatory a manner as possible. One means is to encourage participatory reflection on SPAR processes as they are being conducted.

**Affective processes:** As discussed above, gender analysts have shown (like some other Underground theorists including community developers) that for SPAR to be effective affectively, i.e., for dialogue to occur, attention has to be given to making the research settings comfortable for all participants. There are a host of methods for doing that, ranging from silly ice-breakers to the spiritual (such as the Quakers' acceptance of silence, or the aboriginals' offering of calming prayers). To most in the Establishment, these are not research methods; for the Underground practitioner they are methods as crucial to the success of any process, including a SPAR process, as proper random sampling is to the sociologist.\footnote{I am conscious that in making my point in this way I may be seen as trivializing religious practices that go beyond method. I recognize that they have more than the instrumental value I am focussing on, and that they should not be used casually.}

**Intellectual processes:** In essence, intellectual processes are sequence of topics for moving dialogue toward the SPAR goal: production of valid, significant, actionable information about the effects of existing or proposed policies.

To be effective, efficient, fair, and satisfying, intellectual processes within a SPAR structure need to be thoughtfully organized and skilfully facilitated-- the more people involved, the greater the complexity of the situation, the worse the potential for conflict, the more important that intellectual processes be carefully planned.

While each SPAR exercise is unique and thus requires its own plan, such plans can be, and usually are, based on one or more of the numerous process templates that the Underground has developed-- e.g., "force-field analysis" (Montgomery 1995), or "appreciation-influence-control" and "objectives-oriented project planning (ZOPP)" (World Bank 1996:203 and 1996:183-190). Many of these templates are variations on, or short forms of, generic rational planning processes which proceed in a series of steps from definition of problem, to explication of goals/values, to option identification and assessment, to conclusion/decision. (See, for example, Boothroyd 1991, Keeney 1992, Kaner et al. 1996.)
When applied to the development of social policy, rational planning processes are a form of Underground SPAR—the yield findings in the form of final conclusions about which policy option has the most desirable effects. Planning (or SPAR) processes also require detailed research at each step in the overall process—for example: in identifying people's goals (i.e., assessment criteria) relevant to the type of policy being planned (a research task alien to the Establishment); in analyzing the conditions potentially affected by the type of policy; in tracing policy effects on social conditions. The Underground has developed a rich kit of techniques for undertaking these various components of SPAR.

(c) Data collection and analysis techniques

Once structures and processes have been created for helping people to conduct SPAR together, they can benefit from techniques that aid knowledge sharing and joint thinking. These techniques have been developed by professional workshop and community planning facilitators working mostly through NGOs, but in some cases, through universities, governments or international agencies.

A common feature of Underground techniques is their user-friendliness, regardless of the user's literacy, research experience, or expertise, and regardless of the degree of heterogeneity of the users. Many of the Underground's techniques have been adapted, to make them a little more heuristic and thus more user friendly, from the tool kits of technocratic project planners (Delp et al. 1977)\textsuperscript{125} and policy analysts oriented to comprehensive analysis (Carley 1980)\textsuperscript{126}.

Pictures, diagrams, and simple maps are frequently employed in Underground SPAR (UNICEF 1993, Bradley 1995), as are methods that feature verbal communications, rapid exchange and feedback. (Chambers 1994, World Bank 1996). Easily understood by a wide variety of users, Underground techniques are powerful in producing insight into relationships, including the relationships between policies and their effects. The insights can be tested, as required, through Establishment SPAR methods (survey research, etc.) as required.

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\textsuperscript{125} Delp et al. describe a large number of "systems tools for project planning." Some of these have been derived from policy analysis. The tools include techniques for: generating ideas (e.g., brainstorming, nominal group technique); assessing qualitative factors (e.g., multiple criteria utility assessment); defining objectives (e.g., objective trees); describing complex relationships (e.g., oval diagramming); analyzing complex processes (e.g., flowcharts); accounting for alternative outcomes (e.g., contingency analysis); forecasting and prediction (e.g., scenarios and Delphi); analyzing projects (e.g., cost-benefit analysis, cost-effectiveness analysis); and planning, controlling and evaluating projects (e.g., GANTT bar charts).

\textsuperscript{126} Carley discusses the assumptions and applications of a wide range of "rational techniques in policy analysis"—e.g., cost-utility analysis, goals achievement matrices, planning balance sheets, dynamic modelling, and decision trees.

\textsuperscript{127} Writing as a systems theorist, rather than as a practitioner, Dobuzinskis (1992) promotes the use of metaphor as a heuristic SPAR tool. His own application of metaphor is at the meta-SPAR level. He considers how visions of different kinds of systems (controlled, chaotic, or autopoietic) do or could structure policy analysis.
The Underground's kit of techniques for rapidly gathering, displaying, and interpreting information that is locally held and important to SPAR, includes devices developed by PRA for use in village settings—such as seasonal calendars (highlighting activities, constraints and opportunities), "wealth ranking" to illustrate "ownership of or use rights to productive assets, life-cycle stage of members of the productive unit, relationship of the productive unit to locally powerful people, availability of labor, and indebtedness" (World Bank 1996: 204), and locally made maps that are cartographically rough but indicative of socially important features—plus more general tools, such as conceptual (Venn) diagrams that show overlapping spheres of activity, responsibility, etc.

**Major techniques:** The most used, and most broadly applicable, techniques of the Underground are the following.

**Systems "maps",** in which the causal relationships among key components of an community or organizational system are diagrammed, can be developed, adapted, and/or interpreted in workshops and other kinds of settings. Such maps are collectively developed on the basis of local knowledge of systems; their production is an exercise in articulating unconsidered relationships and testing these against other's perceptions; their interpretation can be an exercise in identifying high leverage policy intervention points or in tracing the systemic effects of a policy.

Because systems maps are heuristic devices, they are effective to the degree they reveal, or hypothesize: i) causal relationships that cannot be directly observed through the senses; ii) relationships that are fundamental to the system; iii) relationships that are indirect, but powerful; iv) relationships that are mutually reinforcing (through positive feedback) or attenuating (through negative feedback). The simpler the maps that have these characteristics, the more useful they are to Underground SPAR.

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128 Here, from a participatory resource management manual, is a generic example of a system map. The text in the manual is accompanied by a diagram illustrating with arrows the relationships among the variables.

"Components of an integrated farming system interact to form a functional whole. Proper integration of components can promote productivity and sustainability. In China, livestock, fish and specialty food crops are produced together to make good use of feed crops and crop by-products (such as straw used as medium for growing mushrooms). The livestock manure improves the soil's physical and chemical properties which increase water infiltration and reduce erosion. Add a biogas digester to the system and organic wastes are turned into cooking fuel, reducing the demand for fire wood, leaving the forests better protected against water erosion. Integrated farming systems should benefit whole communities as well as individual farm families." (IIRR and FAO 1996:124)

In this example, the systems map shows that stable (sustainable) positive outcomes for livelihood result from properly relating a variety of productive elements and practices. Another example in the same monograph uses a systems map to show how poverty results from soil erosion which itself is a product of, and contributor to, expanded cultivation, overgrazing, deforestation, drought, and nine other factors. Here, the system is not sustainable— it is tending to entropy (low productivity). While policies are not explicitly addressed in either example, they could readily be located as causal variables and thus their consequences assessed. Examples of such assessable policies would be policies on cropping (for mono-culture export? for reforestation?).
It is the direction of change inherent in component inter-relationships that is useful to understand. Attempting to identify quantitative relationships is usually too difficult, too mesmerizing and time-consuming, potentially misleading, and unnecessary from the Underground's perspective. The Underground leaves attempts at detailed, complete, quantitative mapping to the Establishment computer modellers.129

Scenarios are maps of possible (logically coherent) future system states. Alternative scenarios can be created, and evaluated, participatorily. "Backcasting" from the most desirable scenario (Robinson 1992), a group can identify a strategy for making the possibility a reality. Scenario building depends on and contributes to empirical research on the relationships among system components. (See discussion below on "Delphi.")

Brainstorming, and other simple techniques for collectively eliciting, exchanging, and generating ideas, are promoted by workshop facilitators. In brainstorming, people are encouraged to express verbally and spontaneously their ideas about problems or solutions, the only rule being "no criticism" within the brainstorming exercise. The technique has been well proven to lead to good ideas being synergistically generated by the group qua group-- i.e., ideas emerge that were not previously in the head of any of the participants because the expression of one idea by one person stimulates the creation of another idea by another person. The "no criticism" rule, if faithfully adhered to, induces people to voice silly ideas which stimulate other ideas that turn out to be creative but sound.

Brainwriting techniques (Van Gundy 1981 1984) are also sometimes used. These involve process participants writing their ideas in various iterations rather than spontaneously voicing them. Brainwriting techniques are intended to avoid verbal and intellectual dominance of knowledge sharing by people perceived to have greater authority.

Iterations of anonymous brainwriting combined with listing ideas on a flip chart, then ranking their importance through voting, has been called a Nominal Group technique because participants do not function as an interactive group. Nominal Group shares some characteristics of the Delphi technique (Delbecq et al. 1975) which was developed in the 1970s to improve prediction in esoteric fields.130

129 There is a mid-ground between the Establishment's positivistic, complex computer models and the homely diagrams of the Underground. The mid-ground is occupied by computerized simple models used for educational purposes and stimulating thinking about if-then relationships between policy options and system outcomes. (See footnote 53). In the cases I have observed, however, their heuristic benefits go mostly to the programmers who have to think about critical systems relationships, then to the teachers who run the machines. The Underground disseminates the benefits of modelling by involving SPAR participants in building the model, not just in applying it.

130 A still-relevant review of 12 methods for social forecasting, including trend projection (judged to be too simple), computer modelling (judged too complex), and Delphi plus other "holistic" methods (judged most suitable) was produced by the U.S. Army Corps of Engineers (CSSP 1975).
In one example, an application of Delphi to space exploration, different technical experts (rocket fuel specialist, physiologist, metal stress expert, etc.) were organized to write a series of anonymous notes to each other to state and correct each others' assumptions about the nature and state of the factors (e.g. fuel powers likely to emerge, or abilities of humans to withstand zero gravity) that will determine when humans might land on another planet. Underground SPAR similarly employs triangulation processes, but here the experts are not necessarily highly technically trained--they are system members or stakeholder representatives with a wide range of knowledges and perspectives (including traditional holistic) that are based on a wide range of experiences--and the triangulation does not require anonymity.

Schematic trees of various kinds are used by the Underground to structure problems and solution-processes (Delp et al. 1977). They may have a technocratic origin, as in computer modelling, but their application by the Underground is to the facilitation of information exchange and joint deliberation, not to quantifying risks or benefit allocations.

Matrices have been adapted from the professional (both urban and resource management) planning fields, and perhaps independently developed by PRA practitioners. Matrices enable a complete set of causal categories to be systematically related to a complete set of potential effects. They are used by the Underground to make SPAR simultaneously holistic, participatory, and heuristic.

Among the most common matrices are variations on the Goals Achievement Matrix (Hill 1968). In these, policy options (which head the rows of the matrix) are each evaluated against a common set of goals or criteria (the columns). Each cell of the matrix is filled with an ordinal number (e.g. from -5 to +5) which roughly indicates the degree to which the particular option being assessed appears to meet the particular criterion. In an example from social forestry in India, the options for species of trees to be planted in a village were each assessed against such utility criteria as fuel, lumber, shade, medicine, fruit, etc. The villagers, who were mostly illiterate, placed stones in a matrix drawn in the sand.

Other types of matrices are variations on the Planning Balance Sheet (Lichfield 1975). In these, policy options are evaluated against interests differentiated by gender, ethnicity, residential location, occupation, age, etc. Still other matrices are variations on the Leopold (1971) environmental impact matrix in which each component of a proposed policy (usually at the project level) is assessed in terms of its impact on each element of the host natural and social environment.

Matrices are misused when row or column totals of the ordinal numbers in the cells are taken too seriously. They are truly only heuristic devices which facilitate but far from ensure comprehensiveness in assessment. They also facilitate dialogue among SPAR participants when different judgements about a relationship (numbers in a cell) are made, or when people express confusion about the nature of a relationship. And they help identify the specific questions on which there is a need for further primary research (as indicated by the cells where there is disagreement or
lack of confidence about the number to insert) before a policy decision or recommendation can be confidently made.

Like other heuristic research tools developed and applied by the Underground, the matrix enables the production and analysis of data to be both systematic and participatory. Instead of the expertise of key informants being filtered through a professional researcher, as it is in Establishment methods, expertise of various kinds is directly and mutually exchanged, challenged, analyzed, and interpreted through the intellectual framework and item-by-item focussing that the matrix provides, (but does not impose-- the art of the facilitator is in balancing a group's need for focus with its need to be in charge of its own agenda and to roam where its interests take it.)

By collectively developing themselves the specific form of the generic matrix-- i.e., by determining exactly what goals, interests, or system components form the column headings, and what policy options form the row headings-- participants in an Underground SPAR process learn about each other's goals and assumptions, unravel complex policy option sets, share knowledge and ignorance on cause-effect relations, gain collective understanding on areas of disagreement, and identify policy trade-offs (because some options which strongly meet certain criteria may fail on other grounds) and win-win possibilities (where options meet all criteria).

**Priority setting** tools, including those based on matrices, involve various forms of criteria weighting and voting by informed stakeholders who collectively set priorities for further SPAR, for determining which option for action seems most appropriate, or for final policy making.

Abers (1996) describes how one Brazilian citizens' budget council established weighted criteria (e.g. portion of a population living in absolute poverty) for determining investment allocations among districts. Such criteria and their weightings may seem intellectually arbitrary but be socially responsive (as opposed to Establishment policy analysis criteria which appear to be intellectually well grounded but which are socially arbitrary). That is, if criteria and weightings are determined and applied in participatory structures then they reflect collective knowledge and values, and reduce complexity in a transparent manner.

**Underground techniques as research:** Are the Underground's techniques, which foster insight through participatory knowledge sharing and analysis of complex systems, really research techniques? They do not involve gathering and quantitatively analyzing replicable data. But they do involve "key informants" collecting data from each other, categorizing it (inductively), correcting each others' erroneous assumptions, drawing conclusions about causal relationships (conclusions which in their collective informed opinion have a high degree of validity), and thus generating new knowledge (or hypotheses) that can be tested through: action-research
(experimentation) involving adoption of a promising policy and monitoring its effects; further iterations of Underground SPAR; and/or Establishment research designs.\textsuperscript{131}

The Underground's techniques thus contain the essence of research: systematicness. As well, by fostering intellectual synergy, they attain the hallmark of good research: creativity.

\section*{6. Underground Effectiveness}

The participatory, holistic, and heuristic natures of the Underground reinforce each other in making SPAR effective and efficient in predicting and monitoring the full range of policy effects. Broad participation promotes heuristic and comprehensive (holistic) thought. Heuristic tools encourage participation and thinking about systems. Holistic concepts facilitate participatory and heuristic communication.

Underground SPAR is effective because unintended and spinoff effects of sectoral policies are considered organically (by enabling impacted people and various experts to define problems and voice concerns interactively using their own categories). It is efficient because the focus is on identifying and testing high-leverage policy intervention points in social systems rather than on accumulating and verifying data.

The Underground has gained such acceptance in the practice of small-system (local, micro, community) development planning, that within this field of practice it has almost become a new establishment.\textsuperscript{132} Its effectiveness in helping local people improve their knowledge so as to create

\textsuperscript{131} To ask a range of people with various relevant experiences, for example, to come together in a workshop and voice their thoughts on what the barriers to high quality education might be, can yield significant insight into the probable effects of current education policies and the directions new ones should take. (See case study 2A below.) The hypotheses generated through such brainstorming or similar techniques might be deemed to require testing with traditional Establishment SPAR methods before they can be accepted as grounds for policy decisions. (For example, a survey administered to a random sample of teachers might be deemed necessary to determine for sure whether a hypothesized barrier in the form of certain teachers' attitudes or behaviours actually exists.)

\textsuperscript{132} The momentum of the Underground, previously of little interest to the Establishment is now stimulating the occasional backlash. For example, writing in Policy Options, Howard and Widdowson (1996:35) attack the attention given to traditional aboriginal knowledge ("TK") in some recent Canadian environmental and social impact assessment proceedings. Subsequently (1997:46-48), they express the Establishment position succinctly:

"Scientific methodology is based on vigorous testing of hypotheses. Validity depends... on the efficacy of the test used..."

"The inconclusive nature of traditional knowledge 'research' means that it will be a cash cow for TK consultants and aboriginal leaders indefinitely. This money which should be spent on the various problems
better local policy is widely reported, though the evidence presented in these reports is usually in the form of field (e.g., workshop, project) reports by Underground practitioners, and thus is not necessarily convincing.

To round out the evidence in field reports, the most basic form of meta-research, it would be helpful for more sophisticated meta-research to be conducted on Underground SPAR's local effectiveness, using Underground and/or Establishment methods. Meta-research could address such evaluative questions as: what do various types (differentiated by policy-making role, gender, education level, etc.) of local people themselves think of the Underground approach? which concepts, approaches, and tools work best for whom? how useful and in what ways is the knowledge gained through Underground SPAR? how well do lessons from Underground pilot projects get disseminated from locality to locality? Addressing such questions, meta-research could identify the ways in which Underground SPAR plays both issue-specific and broader social learning roles in policy formulation processes.

7. The Underground's Limitations

A potential problem in Underground SPAR is that local people's research will ignore impacts of their policies on the larger society, or will in other ways (e.g. by denigrating concerns of certain kinds of people, or by ignoring indirect local systemic impacts) be inappropriately parochial. A challenge for the Underground is to develop methods for introducing broad considerations into local-action-oriented SPAR. Particularly important will be methods for facilitating the productive interface of theories-- indigenous and professional, general and specific.133

While apparently locally effective, the research tools and substantive concepts of the Underground are rarely applied to provincial or national policy making.134 (Recent exercises reported by the

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133 One way of looking at this issue is provided by Fischer (1993:338) who promotes "participatory policy analysis" which:

"is designed to facilitate the exchange between the everyday or commonsense perspectives of the social actors... and the available theoretical knowledge (empirical and normative) about the larger social system in which the action context is situated, i.e., knowledge about both existing societal condition and alternative possibilities... The task of participatory research... is to mediate between the tacit social theories and program practices of the actors within the policy process, and the analytical frameworks of social science." Forester (1993 1995) also addresses this issue-- see footnote 159 below.

134 If the Underground were active at senior policy levels, it would no longer be an Underground.
World Bank (1996) in conducting Underground SPAR at national levels are notable, but isolated\textsuperscript{135}—see case studies below). As the Underground itself would readily point out, the localization of its SPAR means that the most important decisions affecting local people tend to be taken without their input and without sensitivity to their conditions. Trade, agriculture, transportation, education, health and income security policies are made at the centre, to a modest degree with reference to the results of Establishment SPAR, but with little information on the effects of policy on peoples' personal lives, especially the quality of their lives as producers, community members, and reflective beings.\textsuperscript{136} In short, there is little articulation between SPAR at the bottom and that at the top.\textsuperscript{137}

For the time being, then, localities must wrestle with their own development challenges by using Underground SPAR to make plans within the constraints set by national and provincial policies.

Finally, there will always be a number of continuous potential limitations to Underground SPAR effectiveness that are associated with its participatory approach. These include the possibilities that the participation may exclude less powerful people, or include them only in a token way, that participating people are disingenuous, or that perspectives will be accepted on the basis of the number, authority, eloquence, or loudness of the people presenting them rather than on the basis of perspectives being subjected to reasoned consideration.\textsuperscript{138} Some of the Underground's tools (e.g. workshop ice-breakers and Nominal Group technique) are designed to deal with this potential limitation, but the Underground can never be complacent in its participatory research design.

IV. META-RESEARCH CASE STUDIES

This section presents one case study of Establishment SPAR, and two case studies of Underground SPAR. These simple case studies of research are presented to illustrate the differences between the

\textsuperscript{135} Nor have they been subjected to meta-research (evaluation) beyond reports by the responsible World Bank officials.

\textsuperscript{136} At the same time, some criticize the Establishment for not expanding its horizons to the global: "In recent years, social sciences have primarily examined local [i.e., regional/national] phenomena without considering the global issues that drive such phenomena" (CIDA 1997b).

\textsuperscript{137} The need for participatory development to occur "in a proper mix" at macro, meso, and micro levels is identified by Beaulieu and Manoukian 1994:34).

\textsuperscript{138} The Establishment seeks to avoid these problems by dealing with people as individual "subjects" so that they do not "contaminate" each other's answers to research questions. There is value in this, but there are offsetting dangers that questions and answers may be misinterpreted, and even more importantly, that the wrong questions may be asked.
Establishment and the Underground in practice, and to show how meta-research, of which these case studies are an example, can enrich our understanding of SPAR methods' effectiveness.

1. An Establishment SPAR Proposal: Nigerian Civil Society

A Canadian contribution to IDRC's ASPR program proposes a research agenda, with specific examples, that illustrates what I mean by the Establishment approach to SPAR. By studying this case of the Establishment approach, and by comparing it with how the Underground might alternatively study the issue at hand, we can some insight into contrasting strengths and weaknesses, and differing applications, of the two approaches.

The case is the report prepared by Blair Rutherford (1997) on "research priorities for analysing the role of civil society organizations in social policy reform." Rutherford develops what I would call an Establishment SPAR agenda. It is for research into the effects on Nigerian social services of policies governing community organizing and service delivery by the state.

I have selected this case to study because it is in the same family as my own: it has been prepared under the IDRC ASPR program, it is Canadian, and it is methodologically prescriptive (though its focus is on defining significant research questions). Also, the case is intellectually stimulating and at the cutting edge of an important SPAR tranche. Finally, the case is of a broad but coherent research agenda. (There would be little incremental illustrative value in analyzing a typical Establishment policy journal article which applies cost-benefit analysis to some narrow social policy issue.)

Rutherford reviews the literature on the role of civil society, including NGOs, in the "New Policy Agenda" (often referred to as "social policy reform") where "the dominant role for the state is to provide a supporting environment for private provision and [to] reduce and rationalise public expenditures on social services" (p. 2).

Three clusters of research questions "pertaining to the presumed viability and equity of this New Policy Agenda" (p.2) emerge from his literature review: questions pertaining to civil society's general role in social policy processes (e.g., the impacts of social policy reform on state-society relations and the ultimate consequences for social services), questions pertaining to the roles and impacts of NGOs in particular, and questions pertaining to the most informal ("marginalized") of social policy processes (pp. 47-50).

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139 Rutherford offers an excellent analysis within a Establishment research agenda. I acquired Rutherford's report by chance late in the process of preparing my own report when I had already formulated in my own mind the Establishment-Underground dichotomy. It did not come from IDRC. I was not asked to review it. I read it because of my substantive interest in civil society and my methodological interest in how one sets priorities. Rutherford's report was of great assistance to me in a number of respects— one of which was to enrich my understanding of the civil society problematique, another of which was to help me discern Establishment-Underground differences.
impacts of NGOs in particular, and questions pertaining to the most informal ("marginalized") of social policy processes (pp. 47-50).

To answer the questions, Rutherford proposes

"methodologies which... are those used for relatively in-depth qualitative studies such as participant observation, interviewing (structured, semi-structured and unstructured), and focus group discussions. They come from disciplines such as anthropology, geography, political sciences, and sociology. Such methodologies are able to capture the complex and changing nature of institutional arrangements under social policy reform. They are also more adept at probing below the usual assumptions and agendas guiding the discourse on the topic. Moreover, they are being lauded and put to use by more and more researchers looking at civil society-state dynamics in development [references provided by Rutherford]. Quantitative methodologies are also indicated as important tools for providing a more representatives picture of the institutional arrangements and any changes to them discussed by the qualitative studies." (p. 46)

An embedded Establishment SPAR case: Rutherford provides concrete examples of research projects that could be undertaken under his proposed agenda. One addresses the "state / civil society blur" in Nigeria where the federal military government in the late 1980s "began to form Village Community Development Associations in its approximately five hundred local government areas and provide state funds to their development activities" (p. 12).

Rutherford's theoretical question on the Nigerian case he embeds in his report is: "are these Village Community Development Associations part of the state or civil society?" (p. 12) His research questions relate to how their origin affects their roles in formulating or implementing social policies, and their legitimacy in different parts of the country and in the eyes of donors (p. 47).

Methods relevant to a Nigerian case study would include observing meetings and instances of social service delivery, interviews, focus groups to flesh out the dynamics of practices, analysis of service delivery records, sample surveys, oral histories, and participant observation "amongst a certain community of users over at least a six month period", all of which "would put to test claims made about the improved effectiveness and equity of social policy processes with a greater role played by civil society organizations" (p. 48).

Potential contributions from the case: As this example shows, Rutherford's general research agenda indeed promises to "provide useful insight into how social policy reform is affecting the provisioning of social services and the decision-making over their direction." The methods are rich and the knowledge they produce could inform policy makers and advisors in many contexts -- for example by indicating whether the state should attempt to create local community development associations. Rutherford is proposing an exciting program that would make important contributions to IDRC's ASPR Program initiative. It represents the best of what the Establishment offers.
(a) An Underground alternative

How might the Underground approach differently the kinds of civil society issues Rutherford raises? In general, there would be differences in the control and immediate clients of the research, in the questions asked, and the fundamental methodological approach. Rather than the research questions being derived in the academy, oriented to general policy making, and answerable through professional research, the Underground's questions would address practical issues faced by local people who would be full participants in deriving the answers.

Underground research questions: The Underground's research questions would be derived not from a review of the literature but by people working in the field seeking specific knowledge to solve specific problems.

Taking Rutherford's Nigerian case as an example, research questions in that context would emerge from a dialogue between local people and outside professionals wanting to work with them (academics, extension officers, service specialists, etc.). It is unlikely that this dialogue would deal with the theoretical issue of whether the Village Community Development Associations reflect more of the state or of civil society, or with how their origins affect their functioning and effectiveness.

Social policy assessment research questions from the Underground in the Nigerian case would more likely start by considering individual communities' needs (problems) and goals. Once these had been determined by the communities themselves articulating them, research questions could address the specific opportunities and constraints to community development (i.e., to meeting needs and goals) posed by current and alternative policies of various kinds at various levels. The knowledge gained could be applied directly to policy reformulation.

Whereas the Establishment (Rutherford's) questions to the Nigerian case are in certain senses positivistic (seeking general knowledge), reductionistic (beginning and ending with the impact of militarily imposed civil associations on social service) and technocratic (professionally generated and oriented), the Underground's potential questions would be characterized as heuristic (seeking pragmatic knowledge, knowledge sufficiently informative to guide action in a concrete case), holistic (beginning and ending with the communities as whole systems in which policies play complex roles), and participatory (broadly generated and oriented.)

The Underground research methods: The Underground's methods would be derived not from the social science disciplines, but from the growing body of grey literature (manuals, field reports) being produced by people who have created the methods for immediate knowledge-generation purposes in a variety of community development settings, and through specific adaptations and methodological inventions of professionals working with local leaders in each community.

Taking Rutherford's case as an example, participant observation in Nigerian communities (e.g., professional researcher joins activities in order to gather information for herself) would be replaced
by participatory action research (professionals and community members share and jointly analyze information they agree is necessary for local problem solving). The need for systematic surveys, document analysis, and focus groups, if any, would be determined jointly.

Methods would be selected not for their effectiveness in gaining accurate information "to test claims" made by policy makers or academics outside the community, but for their effectiveness in showing what needs to be done by whom (including policy makers at all levels) to solve local problems. Timeliness and efficiency would be primary methodological considerations-- likely leading to the conclusion that participant observation "over at least a six month period" would waste both time and effort. As well, attention would be given to the impacts of the research methods-- do they empower? create new conflicts? open up new communication channels? Underground selection criteria and processes might lead, for example, to the organization of a recently atomized "community of users" to investigate together why mutual aid norms have withered and what needs to be done by the users, the Village Community Development Associations, and the national government, to reinvigorate those norms.

Thus, whereas the Establishment methods in Rutherford's Nigerian case would be positivistic, (aspiring to internal and external validity), reductionistic (focussing on a specific hypothesis or "claim") and technocratic (controlled and conducted by professional researchers), the Underground's methods would be heuristic (settling for decision-relevant information), holistic (addressing whole system states then seeking the causes, including policy causes) and participatory (of all who have relevant knowledge).

(b) Potential rapprochement

The analysis of this case, like the preceding sections in this report, is itself reductionistic. It boils highly nuanced approaches down into a simple Establishment-Underground dichotomy and frames their differences in terms of rich categories, such as "heuristic," which do not easily lend themselves to either-or analysis.

Clearly, it is not a question of there being two choices about how to conduct SPAR related to Nigerian civil society, much less a question of which is right and which wrong. The most general point to be made is that the SPAR art is at a state where fundamentally new approaches are being evolved from those that the academy, government, and major research institutions are used to. These approaches, which I have collectively called those of the Underground, are based on a different epistemology, are dedicated to a different purpose, and involve different relationships among research actors, than those followed by the established institutions.

Respective strengths and weaknesses: The Establishment and Underground have their respective strengths and weaknesses. Taking Rutherford's whole report as a general case of Establishment research and his hypothetical Nigerian example as an embedded case, we can see that social science:
offers an increasingly rich tool kit of methods (e.g. the recently added focus group tool) for "triangulating" our perspectives when conducting empirical social policy assessment;

is able to build intellectually satisfying general/theoretical knowledge of policy consequences on the basis of both inductive/empirical policy assessment (e.g., case studies of government imposed community development associations) and deductive policy analysis (e.g., deconstruction of widely used terms such as "civil society");

provides, through continuously evolving theories, the conceptual knowledge needed
  i) to frame significant questions (as illustrated by Rutherford's linking of civil society literature to the general question-- problem statement-- of how the New Policy Agenda is affecting social service) and
  ii) to expose the intangible structures (e.g. norms) that mediate policy impacts.

What Establishment SPAR does not do, again as illustrated by the Rutherford report, is:

- provide information of direct use to policy makers and advisers at any level, because: a) the Establishment focus on learning about one universal causal relationship (even a major one such as the impact of government cut backs on social functioning) per research agenda means that less attention can be given to whole specific societal contexts; b) the desired positive knowledge takes a long time to acquire;

- build widespread (as opposed to professional) societal capacity to conduct SPAR.

Underground SPAR would address these deficiencies in Rutherford's Establishment approach to studying Nigerian civil society, but it would have its own limitations. The local knowledge generated by the Underground, because of its specificity, would be hard to apply to national Nigerian policy. The knowledge might also be seen as of limited direct use to theory-building, and thus to other countries, because it would not be explicitly grounded in existing theories of civil society. The academic enterprise would have to become one of connecting the local knowledge to theory after the knowledge was generated, rather than in making the connections from the beginning by having the research design (starting with the problem statement and hypotheses or research question) reflect unresolved theoretical issues.

The potential: There is much to be done in advancing SPAR so that the strengths of the Underground are added to those of the Establishment. Simply to show the potential, we can readily speculate on how Rutherford's general research agenda and hypothetical Nigerian case could be enriched by Underground projects, and thus how the agenda might more directly assist policy making.

For example, linking the agenda to participatory action research perhaps being conducted under another aegis could lead to reformulation of research questions (e.g., contextuating the issue of Village Community Development Association impacts within other policy and civil society
dynamics). Or, the agenda could be directed to assisting local policy makers to develop their capacity to articulate to themselves and others the consequences of policies governing the Associations. Or, Underground research at various Nigerian sites could be aggregated using Underground as well as Establishment methods.

Such examples show there is potential for furthering the state of the SPAR art through a program of meta-research-- a program which could include, for example, experimentation in linking Underground and Establishment approaches in research conducted on issues like those brought forth by Rutherford in his Nigerian civil society case.

2. Two Cases of Underground SPAR

The World Banks' Participation Sourcebook (1996) provides a number of mini case studies of Underground SPAR (not under that name, of course). What is most interesting about some of the cases is that they involve the conduct of Underground SPAR at national levels.140

Here are two of the cases. Their focus is on participatory policy formulation processes, processes which include a significant amount of what I call Underground SPAR.

Caveat: The cases are based on reports of the World Bank personnel who led the processes; others' perspectives might be less positive, or might highlight different process features.141

(a) Yemen education sector adjustment

The Bank's "Task Manager" for planning Yemen's Education Sector Adjustment Program, Yogendra Saran, describes the Bank's process as follows:

"When the minister of education arrived at the Bank to negotiate the Basic Education Project for Yemen... we agreed that it should focus on the development of human resources... that the quality of secondary education was the crucial issue.. [and] on adopting a participatory approach...

"[W]e proposed... the idea of convening a national workshop of professional educators and other parties... the Bank team offered to facilitate the workshop in a participatory manner. Our first decision was that Bank Members-- staff as well as consultants-- would act as facilitators, rather than experts... We agreed[:... First, the whole system had to be

140 In the PRA literature, case studies abound of Underground SPAR being conducted at community, as opposed to national, levels. Chambers' (1994a,b) bibliographies provide a number of references to such cases.

141 For example, the Yemen teachers and Benin villagers who participated in the World Bank's workshops might see their roles differently than the workshop leaders who prepared the reports.
addressed, not just a part of it as we had in past education projects. Second, those in the system had to do the learning about what was wrong at present and how-- in a Yemeni way-- improvements could be made.

"Choosing a Methodology: As a long time trainer, I knew of a number of techniques to foster participation during the workshop...

"Identifying the Stakeholders: ... We decided that what we needed were people working on education in both the private and public sectors. Unfortunately, we could not identify any NGOs, women's groups, or parents associations that might be able to contribute significantly to this work.... We proposed that the workshop include thirty people, one-third of whom should be women, with a wide distribution of professionals in the education system...

"The First Workshop: Working group members for secondary education, consisting of high Ministry of Education officials, had concluded that Yemen needed more classrooms, equipment, and textbooks to avoid overcrowding and really nothing else to improve the quality of secondary education. They did not see the need to hold a workshop...

"We didn't challenge the conclusion of the working group but instead engaged the members in a discussion of just how they believed more investment in improved facilities alone would increase the quality of education. In this long meeting it became obvious to the members of the secondary education working group that they really could not answer the 'quality' question or develop a comprehensive strategy without involving professionals, researchers, administrators, and teachers in the dialogue. The invitations were then sent...

"Small Groups / Plenary Sessions: We decided to set up three working groups of about thirteen participants each. The workshop would have four stages....
- Define the quality problem
- Determine what to do about it
- Identify the barriers and decide how to overcome them
- Develop the methodology for measuring and ensuring that quality would be produced by the actions taken...

"Prioritization by Bid Allocation: During the plenary reporting sessions, we recorded all points made on large flip charts... We then had the participants prioritize their conclusions by using a bidding system. Each participant had to allocate a total of 100 points to the various problems or issues developed by the group as a whole.

"The workshop unleashed a tremendous amount of energy and creativity. We were pleased and a bit surprised by the way the participating women made themselves heard and served as a real force for ideas and consensus... Another surprise was that the original notion that all that was needed was more schools and textbooks had vanished. Indeed, after the
bidding, another objective turned out to be the first priority by a large measure, that is, teacher performance.

"Workshop Results: The workshop produced the diagnosis of the quality problem in the Yemeni education system. It also set objectives that would constitute a Bank sector operation... [e.g.] teacher performance, physical facilities, curriculum development... Community college workshops would also be held in two cities outside the capitol with broad private sector participation to identity the needs for mid-level personnel in the emerging modern sector of the economy.

"The Second Workshop: We... asked the minister to invite school headmasters to attend a workshop... In certain respects, the headmasters were really the voiceless members of the education system. At the bottom of the rung, they were expected to do what the ministry directed...

"All told, forty headmasters joined us... The participants first reviewed and discussed the output of the national workshop... and discussed how the local schools could participate. They then broke into small groups...

"School-Based Subprojects: What came out... was a decision to include a school-based sub-project component of the project in which local schools could get funding for their own proposals to produce higher quality in education. As a practical matter, relatively small amounts of money could empower up to 100 local schools to innovate and become an integral part of the national program...

"[W]e from the Bank liked this part of the project best. It confirmed... [that] the closer you get to the people, the more practical and useful are the actions that can be taken. Although this component was small, we saw it as the opening wedge to bring local people in communities into the process of school development and management.

"Detailed Planning: Following the second round of workshops... the detailed work of preparation began. Here the experts began to take on a larger role in developing strategies, timetables, specifications, detailed action plans, and resource needs... We expect that the implementation specifics will comes as no surprise to the stakeholders, who will be ready to act swiftly and surely once the [Banks'] credit becomes effective.

"Government Changes: ... When the preparation was well advanced... [W]e feared that the new minister might want to start from scratch. We called a one-day meeting, however, with his new education officials and others in the system to go over the project. After that one-day session, the minister said let's go ahead as planned... [W]hen a project is prepared in a participatory manner by a large network of stakeholders... its chances of surviving a personnel change at the top are greatly improved.
"Costs": The preparation cost [was] close to $1 million. Bank staff input was about ninety staff weeks, much fewer than the normal 130-150 staff weeks... We had done, however, a great deal of detailed implementation planning by this time, which is unusual.

"Reflection": [Would we] have done anything differently?"No, not really." We would have liked to have more local community involvement than we had, but to get that we would have needed more leaders within the system with an understanding and practice of participation. Such leaders did not exist at the start of this project, but they do now, and we will work with them in future projects." (World Bank 1996: 117-120)

(b) Benin health services development

The Bank's "Task Managers" for the Bank's Health Services Development Project in Benin, Michael Azefor and Denise Vaillancourt, describe the Bank's process as follows:

"In 1972 Benin became a leading innovator in primary health care, when it designed--without outside help--a unique, state-of-the-art primary health care system involving rural populations and covering the entire country. By 1986, however, Benin's primary health care ranked among the poorest in Africa.

"Identification Mission": When the government of Benin asked the Bank for help... we suggested we start by finding out why the original strategy failed. In February 1988... we joined forces with staff from Benin's Finance, Planning, Health and Rural Development Ministries... [T]o learn more about the problems... we had to begin with the local health centers and communities they serve.

"We decided to visit three districts... Before arriving in a district, we requested that an open meeting be arranged... to find out what the people of the community expected from government by way of primary health care and what they were willing to do themselves... [W]e held eight meetings that were attended by representatives of some thirty-two villages. Sometimes the entire village showed up.

"Participatory Discussions": Long a Marxist state, Benin was just beginning to change. Needless to say, local people had some difficulty in participating in open discussions. Some said they were too 'busy'... and no women showed up at all. Nevertheless, we were able to get across that our objective was to learn from the people about their situation and what they felt they needed... We asked the communities to appoint a committee of five or so local people who were wise about money, life, health, and how the community worked. We also stipulated that at least one or two mothers be included...

"Preparing the Project": [W]e set up a workshop to generate a diagnosis of the existing primary health care system... The minister of health issued [eighty] invitations.... About fifty participants came from the various communities we had visited. They were ordinary
citizens, including about twenty mothers, rather than the tribal chiefs who usually represent the villages. A few technical staff from local German and Swiss projects also attended. In addition... we invited officials from the central ministries, regional and district health offices, and local health centers... to be sure we would be working on the entire system of health care rather than just part.

"Brainstorming: On the first day we brainstormed... Each participant had the opportunity to cite a problem. We went around the room again and again until all problems were written up on sheets of flip chart paper... The participants then assigned the problems to several categories they established: buildings and facilities, medicine, staffing and skills, primary health care, and so on.

We then spent a significant mount of time discussing the diagnosis of Benin's current health care system, using the categorized list of problems... to be sure that the different types of people attending the conference.... understood the problems in the same way.

"Small Group Work: ... [T]he second day... we broke into small groups, each of which dealt with one of the major problem areas. We made sure that the officials responsible for the areas being addressed were part of the group. The villagers chose for themselves the[ir] groups... A [plenary] discussion of the [groups'] recommendations [followed].

"A small group of officials... wrote up the conclusions.. and shared them with all participants. The proceedings subsequently served as health policy and guided the work of ministry officials in preparing the specifics of the project proposal.

"Feedback: Before completing the mission, the joint Bank-ministry team again visited the original villages to discuss the results of the workshop and see if the recommendations were what people really wanted. The villagers supported the work of their representatives...

"Preappraisal: In April 1988 the Bank team returned to Benin ... [W]e held a workshop with representatives of the same four stakeholder groups (villagers and officials from [three levels])... [P]articipants reviewed the written project proposal... [finding it] a good reflection of what [they] wanted. Two new concerns appeared, however. The first had to do with who really represents and speaks for the villages. After considerable debate the participants decided that village representatives should be elected democratically and that the village should enter into a legal contract with the Ministry of Health (MOH), defining the responsibilities of both parties...

"The second had to do with implementation priorities. The communities with which we were working were not necessarily those with the greatest need... [N]evertheless... [a]ll concluded that it would be best to continue working with the same set of stakeholders during initial implementation.
• **Appraisal:** The bank team returned in June 1988...
For a third time, we organized a workshop with the same stakeholders to review the final version of the project... [O]ur proposal did indeed reflect what they wanted and had been proposing all along...

• **Cost:** The Bank's applied time devoted to this project... was about [sixty-four] staff weeks...Government paid the modest costs of the three workshops-- around $6,000. Preparing this project in a participatory manner was neither expensive nor time-consuming.

• **Implementation Experience:** ....[T]he first year went extremely well... [owing] to the high levels of commitment of all concerned and to the thorough understanding of objectives, strategies, and tactics all stakeholders developed in working together... [I]mplementation ran into trouble during the second year. A new democratically elected government cleaned house at the center... [E]very aspect of the project involving the MOH came to a halt. The dynamism at the local level, however, did not wane... By the third year we were pretty much back on track, and the project is doing well in all important respects.

• **Second Project:** The design and development of a second project, presented to the Bank's Board in May 1995, closely followed the participatory process, which had proved so effective the first time around...

• **Achievements:** With only about 50 percent of the credit disbursed and a closing date scheduled for 1997, assistance under the first project has already resulted in a number of notable achievements...

  • The creation of local health management committees... with real authority and autonomy through which communities throughout Benin manage cost recovery funds and participate in the planning, implementation, and evaluation of sector activities carried out in health facilities. The members are elected democratically, and anyone may serve, provided that at least one member is a woman.

  • The establishment of a central procurement agency... which assures the affordability and constant availability of essential generic drugs at all levels of the health system and is managed by an autonomous board, composed of various stakeholders and including representatives of local health management committees. Previously, drug procurement was done-- poorly and corruptly-- by the MOH itself. Given the fact that no drugs are produced in Benin for its small market, this wasn't a job that could be handled well by the private sector...
- The establishment of interministerial committees to undertake period assessments of the progress made in implementing the objectives set out in the national health strategy...

- The reorganization of the MOH...

- **Issues:** Local health committees... have demonstrated their potential [but] some... members lack motivation... understanding... skills... opportunity to exchange information and ideas at the departmental and national levels... [E]lections have not been held [on time]... Furthermore, accounting capacity is lacking. [Interministerial committees] have not been sufficiently active [or representative]...

"In addition to the Bank's success in strengthening and concretizing the language on participation in the draft national health strategy for the period 1995-99, we... worked with government to prepare a revision to... the bylaws of the [local health committees]. Major amendments were introduced to (a) expand membership to... NGOs, indigenous social groups, school teachers, personnel working on relevant development projects such as water and sanitation, and so on... (b) clarify aspects of financial management... (c) establish two additional seats [to] be filled by one woman and one youth... and (d) specify procedures for hiring... independent auditors...

- **Results:** ... Three years into the first project, an independent survey directed by a local sociologist was commissioned to obtain feedback from people who participated in preparing the project.... [T]he following was learned:

  - Village people now know more about what health services are available.
  - People are satisfied with the increased availability and decreased cost of drugs...
  - Funding for essential drugs is guaranteed, because local health committees, not the minister of health, manage the cost recovery funds.
  - People appreciate the local control they now have over funds collected by the health facilities...
  - The involvement of women in the project is a strong factor in building community support and has raised the status of women as community leaders.

"Perhaps the most significant... is that local health staff are performing better... Increasingly, MOH staff... are accountable to... their clients rather than exclusively to their superiors... The participatory approach is evolving beyond the preparation and implementation of Bank-financed projects to becoming a permanent way of doing business for the health sector in Benin." (World Bank 1996:23-28)
(c) Discussion and lessons

With due regard for the fact that the World Bank case studies are self-reported by the protagonists, and for the implied need for caution in evaluating the results, we can nevertheless draw on the studies to analyze the Bank's approach to SPAR.

**Was the Bank doing SPAR?:** To a proponent of Establishment SPAR, it might not be readily apparent that the Bank was engaged in SPAR in the Yemen and Benin cases. The word "research" is in fact not even mentioned in either case study. The closest we get is the reference in the Yemen case study to "researchers" as one type of workshop participant, and the reference to a sociologist in Benin being asked to "obtain feedback" on the Bank's project.

Yet, a strong argument can be made that the Bank was engaged in research on social policy effects. If research is defined as systematic inquiry, as it is in most dictionaries, then the Banks' activities meet that test.

The methods for collecting information were deliberate. They addressed the central issue of validity through: a) triangulation-- as wide a range of stakeholders as possible (Benin seemed to offer more) were consulted to gain information; b) attention to complete systems-- the focus in the two cases was to get as complete as possible an understanding of "what was wrong at present" in the "whole system" of Yemeni education, and "to learn more about the problems" with the "original strategy" for health care in Benin, "to be sure we would be working on the entire system of health care rather than just part;" c) re-iterations-- each case involved sequences of workshops in which the output of the first was tested in the subsequent.

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142 Indeed, neither "research" nor "researcher" appear in the index of the World Bank's Participation Sourcebook. There are numerous page references for the terms "poverty assessment", "social assessment", "beneficiary assessment" "environmental assessment", "needs assessment" "consultation", "appraisal" "force field analysis" "listening", "mapping", "matrix ranking", "participant observation", "preference ranking", and "wealth ranking" -- all of which can be considered to be research processes. This absence of the term "research" reflects on the one hand that the whole book is about research and thus no part could be separated out for that word, and on the other hand that participatory generation of information is no more considered to be research by much of the Underground-- including the respectable part that is inside the World Bank-- than it is by the Establishment. The gulf in SPAR between hands-on policy planners and detached, academically respectable, professional researchers is thus maintained by the agreement on both sides to say "research" only in referring to the work of the latter. The idea that there is a tradeoff between policy relevance and academic respectability is thus continuously reinforced.

143 For example, the Collins dictionary (1986), defines "research" as: "systematic investigation to establish facts or principles or to collect information on a subject." The fashionable American Heritage Dictionary (1988) is an exception: it first defines research as "scholarly or scientific investigation". This restrictive usage perhaps reflects the increasing technocratization of the term.
While the Yemen and Benin information gathering was in large part oriented to **projecting** future outcomes of policy changes (the ultimate purpose of applied SPAR, but an activity not usually referred to as research), it was also grounded in **empirical analysis** of existing policy outcomes (a role of research as the term is usually understood). The two case studies each described the empirical analysis as "diagnosis."

In both cases, the SPAR produced at least some new (or wider) knowledge on reasons for past policy/program ineffectiveness, and at least some useful, apparently accurate, predictions of policy options' consequences. For example:

- The SPAR in Yemen led to dismissal of the "original notion that all that was needed [to improve education] was more schools and textbooks." The notion (assumption) was found (assessed) to be false on the basis of local educators' intimate knowledge of classroom dynamics.

- The SPAR in Benin revealed major reasons for collapse of the health care system: drug procurement by the Ministry of Health had been done "poorly and corruptly," and local health centres had lacked local accountability. The SPAR found that the particular centralization assumptions underlying previous procurement policy had not taken into account the realities of Benin's bureaucratic culture and capacity, with the unintended effects that drug procurement became inefficient and local health services ineffective. Conversely, the understanding of local realities gained through the SPAR led, apparently, to the correct predictions, *inter alia*, that involvement of women in local health committees would enhance the centres' effectiveness, and that making those committees responsible for cost recovery of drugs would improve drug availability.

The Yemen and Benin research processes were not explicitly oriented to theory development-- they were very much in the applied SPAR mould. However, even in the academic, theory-oriented sense of research, the Yemen and Benin processes have made theoretical contributions now that they have been presented as case studies. First, the cases enlighten us substantively on what can go wrong in social sectors (ineffective delivery, e.g. of drugs or knowledge, inefficiency because of corruption or poor cost-recovery, inequity in benefit distribution) and the policy roots of these problems. Secondly, the cases enlighten us about the consequences of alternative policy-making processes (centralized vs. de-centralized). Finally, as instances of meta-research, i.e., research on SPAR, the studies of the cases enlighten us about the outcomes of certain participatory SPAR tools (workshop structures, brainstorming, participant selection, etc.), primitive as this meta-research (personal recollection by project leaders) might be.

In sum, the processes studied in the Yemen and Benin cases can fully be seen as instances of research: the processes meet the methodological canons for research, they are empirical as well as speculative, and they have theoretical as well as practical application. That they are research processes concerned with assessing social policy, there can be do doubt. They are thus good examples of SPAR, of SPAR in its Underground form.
Methods applied in the Yemen and Benin cases: Procedurally, the World Bank leaders in both cases put strong emphasis on involving a wide range of stakeholders in the SPAR.

The participatory approach drew on the perspectives of participatory planning (which addresses the challenges of involving citizens in state-centred planning), participatory action research (which involves people in problem diagnosis and attends to consciousness raising), and participatory rural appraisal (which concerns itself with village-level participation as occurred in the Benin case144).

The participatory tools used to engage stakeholder representatives in generating heuristic knowledge included: structured sequences of events, including workshops; processes within the events for helping people feel comfortable with participating, and for focussing their intellectual energies; and specific techniques for generating knowledge such as brainstorming, and priority setting through "bidding" with points.

Substantively, both cases were careful to consider whole service sector systems, i.e., health or education sectors. However, the complete systemic contexts for these sectoral systems were probably not considered. While special attention was paid to gender relations (as research categories, not just in terms of balancing research participation), social capital seems to have been considered only to a modest degree (e.g., in the identification of the need to build trust through the institutionalization of auditing), and ecological economics not at all.

Lessons about the limitations of Underground SPAR methods: The limited degree to which whole systems were considered in the two World Bank cases illustrates a central limitation in Underground SPAR: each of the simultaneous goals of i) having the methods broadly participatory and ii) having the outputs quickly useful to decision-makers-- let alone those goals in combination-- make it difficult for the process to address profound systemic dynamics that are not immediately manifested to SPAR designers and participants.

In the Benin case, for example, important macro-system dynamics that ideally should have been considered include the macro-economic forces that affect such matters as disease morbidity, drug prices, and income distribution and that in the long term are themselves embedded in local, national and global resource management processes. The dynamics also include the processes by which disease-preventing social capital (e.g., information systems, mutual aid, resource conservation norms) is formed or dissipated as a result of policy choices in many sectors (not just health, but also transportation, education, taxation, etc.)

144 The Benin case also put a particularly strong emphasis on building lasting self-management structures at local levels, i.e., on community development. This is not a SPAR activity as such, but it is an important possible outcome of taking a participatory approach to SPAR that not only generates valid findings but also a citizenry (civil society) empowered by learning, skills, confidence, and connections gained by participating in SPAR.
The emerging challenge in Underground SPAR is to ensure that in addressing the participatory and temporal exigencies, the processes do not overlook the need for true holism which largely inspired the Underground's development by NGO workers, action researchers, and critical theorists. The challenge can be met perhaps by putting more energy into developing heuristic holistic methods that yield insight into fundamental relationships, and by conducting experimental and evaluative meta-research on their applications.

Lessons about the benefits of Underground SPAR methods, and opportunities for applying them: The SPAR lessons in the Yemen and Benin cases include these:

- The greater the variety of stakeholders consulted the more complete the information on policy outcomes provided. The Bank actually only came fully to that realization itself in the process of preparing its Participation Sourcebook.  

- Involvement of senior government people (starting with the appropriate ministers in the Yemen and Benin cases) encourages stakeholders to take the process seriously and facilitates implementation.

- Involvement of local people, such as villagers in the Benin cases, and local officials in both the Yemen and Benin cases, creates a broad sense of ownership of the SPAR and a momentum for the implementation of the decisions informed by it. This reduces the risk that a change in senior government will nullify SPAR efforts.

- Not all stakeholders need to be involved for participatory SPAR to have at least some effect, as the Yemen case shows-- one can start with what is politically and

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145 "When we began preparing the Sourcebook, we assumed we would be writing about 'popular' participation, that is, participation of the poor and others who are disadvantaged in terms of wealth, education, ethnicity, or gender. It seemed obvious to us to focus on the[m]... because, although often the intended beneficiaries, they are usually without voice in the development process.

"But, as we started documenting the [case studies], we noted that... a range of other stakeholders for Bank-supported operations existed. These stakeholders could affect the outcome of a proposed Bank intervention or were affected by it. Because of this, their participation was critical... [They] include the following:

- Borrowers, that is, elected officials, line agency staff, local government officials, and so on...
- Indirectly affected groups, such as ...NGOs, private sector organizations...
- The Bank, that is Bank management, staff, and shareholders" (World Bank 1996:6)

146 "We also noted, that... sponsors and designers of development activities had to work with and through powerful stakeholders to serve the needs of the poorest people. Attempts to bypass powerful stakeholders often resulted in opposition from them..." (World Bank 1996:6)
socially possible without losing sight of the need to have eventually the broader involvement needed if SPAR is to lead to full equity.

- Ongoing SPAR, which is necessary if SPAR is to be of continuous efficacy, can be fostered by assessing and developing policies governing decision-making and monitoring structures-- as is shown by the Benin case, which created an ongoing SPAR system at local and national levels.

- Workshops are effective, efficient, and potentially fair (i.e., entertaining of all experiences and needs) mechanisms for gathering information about existing and prospective policy effects, i.e., for conducting SPAR.

- There are a range of techniques that can be used within workshops to encourage broad participation, to elicit intellectual synergy, and to produce valid information-- these include brainstorming about problems and solutions, use of flip-charts to facilitate instant communication, clustering ideas, breaking into small groups, vetting of workshop reports with participants, ensuring various stakeholders are involved in discussions on each issue.

- Participatory SPAR can have immediate policy impacts-- the Benin and Yemen cases saw change from SPAR resulting within a few years of the processes' beginnings.

- Participatory SPAR can result in policy change at all levels from local to national.

- Participatory SPAR is efficient in terms of researchers' time and dollars.

- Participatory SPAR can produce what seem to be sound policies. More time and more careful meta-research (evaluation) is needed to conclude this in the Benin and Yemen cases, but the results documented to date are encouraging.

(d) An Establishment alternative

Confronted with the anecdotal evidence of health care system collapse in Benin, the Establishment would construct (in fact, may have constructed) a research design for an objective analysis of the linkages between the previous policy's components and individuals' health. This research would be led by highly trained professional social science researchers, drawing on the resources of less qualified field assistants. Document analysis would identify key components of Benin's health policy. These could be compared with similar or contrasting components in other countries, and an international comparison of effects attempted. A questionnaire might be constructed to identify changes in the dependent variables (personal health) that could be attributed to changing or static policies and/or their implementations.
Prospectively, new policies could be identified through some means (likely, through advice to senior officials from professional international health care consultants) and the prospective new policies tested on some communities. The prospective policies could then be assessed by comparing changes in personal health in the experimental communities with those in a control group of communities. Issues of cost-recovery, administrators' understanding of and commitment to the new policies, and village empowerment might well be considered as falling outside the scope of the research.

Such an Establishment approach to assessing past and prospective policies would yield time-specific quantitative data, the quality and generalizability of which professional researchers anywhere in the world could rapidly and consensually evaluate. But compared to the Bank's participatory approach to health sector SPAR in Benin, an Establishment process would likely take longer, be less influential, and produce less complete and less widespread understandings of Benin's health system dynamics.

V. CONCLUSION

Social policy assessment research (SPAR) provides information for evaluating policies in terms of their effectiveness in moving society toward its goals. Applied SPAR, the focus of this report, provides decision-oriented information in specific policy assessment contexts. Its mandate is to help policy makers and advisors determine which policy is best.

Applied SPAR methods can be divided into those of the Establishment which supplies specialized expertise to controllers of the various social policy sectors, and those of the Underground which facilitates collective understanding of whole social systems from within.

The typologizing of SPAR into an Establishment-Underground dichotomy does violence to the great variety within each approach, the overlap, and the fuzzy boundaries. It also tends to connote a good vs. evil perspective on the dynamics that fashion SPAR.

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147 The planning profession provides an example of where the dichotomy between holistic-heuristic-participatory and positivist-reductionist-technocratic breaks down. The urban-oriented wing of the profession developed holistic, heuristic tools such as the Goals Achievement Matrix and Planning Balance Sheet but initially applied them technocratically. Similarly, the resource management wing developed technocratic but somewhat holistic, heuristic "multiple accounts" frameworks, starting with the U.S. Principles and Standards for water basin management (United States 1973) which added to traditional economic cost-benefit analysis, consideration of costs and benefits to: i) social well being, ii) regional economic development, and iii) the environment. Conversely, it is possible to do participatory cost-benefit analysis which involves various stakeholders in discussing discount rates, shadow prices, and methods for calculating them. Further, holism need not be coincidental with heuristics, as the example of the technocratic positivist but holistically oriented 1970s systems modellers illustrates; and holistic heuristic research need not be participatory, as the best of qualitative social science shows.
The value of the dichotomy is that it offers insight into the most general methodological issues that SPAR practitioners must wrestle with. These issues go beyond the traditional social science concern with validity of research findings and conclusions. At issue also is whether the research is relevant (to decision-making), complete (in addressing policy effects on all significant aspects of life and on all kinds of people), and empowering (in that the nature of the research process itself has a social effect).

1. The Establishment

Establishment SPAR is initiated by the need to predict or monitor the outcomes of a specific policy proposal or decision. The outcomes of interest may be goals particular to the policy, or broader societal goals such as economic efficiency, equity, and sustainability.

The Establishment consists of policy analysts and academics in the major social sciences. Its positivistic, reductionist and technocratic methods--for example, the experimental designs of evaluation research, the spreadsheets of policy analysis, and the community studies of impact assessment--have advanced systematic inquiry into the public interest. But many observers have noted that the products of Establishment inquiry seem to have had little direct influence over specific policy decisions.149 In fact, it seems the Establishment fuels the information explosion (a kind of entropy) more than it contributes to (negentropic) societal self-guidance through effective policy making.

The Establishment is challenged by its disciplinarity and its social science assumptions.

The disciplinarity challenges are substantive and methodological. Substantively, each social science discipline is inherently limited in the range of policy effects it can consider. Each has a specialized substantive interest (e.g., cash exchange, social relations, individual psyche, or power) that cannot alone be the object of good SPAR.

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149 It may be that the narrowest and most technocratic Establishment method, cost-benefit analysis, had some significant influence on specific decisions in the 1950s and 1960s. (Brunner and Ascher (1992) suggest that within the World Bank, at least, this influence may have been more apparent than real.) By the end of the 1960s, the narrowness of cost-benefit analysis was becoming widely recognized. To round out Establishment SPAR, new tools such as environmental impact assessment were created. The Establishment's reduction of its reductionism improved the quality of its work but also reduced its positivistic promise for immediate decision-making. With its growing array of tools, the Establishment has been asking more questions than its approach can answer. Despite a few desultory attempts (e.g., by the social indicators movement) to develop a reductive meta-tool (e.g. a single index of human progress) for enhancing the determinacy of Establishment SPAR, nothing satisfactory for actual policy making has been developed. The Underground would say it's impossible. (For example, the UNDP's reductionist ranking of countries on a single index of human development could possibly influence policy-makers to invest more in public education and health, but it could also justify giving corporations tax breaks so they can produce wealth that trickles down to the poor who can then buy private schooling and health care.)
Methodologically, each of the disciplines has generated an approach that is more or less effective in answering its own questions, but not for answering broad questions of policy effect. In pursuit of accuracy, each of the traditional disciplines restricts study to variables that its methods and categories can grasp.

Aggregating traditional social science categories and techniques provides a more complete picture than can any one discipline alone, but aggregations still only address a limited, though wider, set of variables. Aggregation does not equal the study of whole systems functioning.\(^{149}\)

The traditional social science assumptions of the Establishment inhibit the identification of policy causes of social conditions, let alone the prediction of policy effects. The canons for making internal and external validity claims are difficult to follow in investigating the fluid, complex, opaque connections between policy and society. Experimental models (before/after, with/without stimuli) and correlational analysis of survey data, which work well in fields such as medicine where variables can be administratively and statistically controlled, are difficult to apply in SPAR for ethical, managerial and social reasons.

The growing social science interest in qualitative methods partially addresses the challenge of finding valid cause-effect relationships, but for the most part qualitative research is only seen as expanding the ambit of social science by encouraging more creative attention to generation of hypotheses (e.g., through such inductive methods as key informant interviews and focus groups); it is not seen as replacing quantitative (and thus reductionistic) methods in the positivist realm of hypothesis testing.\(^{150}\)

Because it is very difficult to positivistically test SPAR hypotheses, i.e., hypotheses about the necessary and sufficient policy conditions for certain social effects to occur, the Establishment’s contribution to practical policy assessment is seen by many observers as necessarily limited to societal “enlightenment.” In other words, applied social science is always in the process of generating hypotheses for policy advisors and makers to consider. It can never give definitive support to one side or another of a debate.

\(^{149}\) For example, “environmental economics” applies traditional economics tools to issues formerly within the domain of the natural sciences. This is quite different than reframing the environment-economics relationship in terms of whole natural and human production systems as “ecological economics” attempts to do. As another example, “socio-economic impact assessment” combines traditional sociological survey methods with economics to identify financial costs and benefits to various of society’s groupings. It does not assess the systemic impacts that attention to “social capital” facilitates.

\(^{150}\) Moreover, qualitative methodology in itself (as opposed to the way it is built on by Underground participatory research methodologists such as Guba and Lincoln (1989)) does not change traditional social science assumptions about the proper role (detached) and nature of the researcher (highly trained). Qualitative research can still be technocratic.
The enlightenment function of SPAR is, however, better served by an altogether different approach than the Establishment's, an approach termed in this report, that of the Underground.

2. The Underground

Underground SPAR is able to provide information that not only is at least as enlightening as the Establishment's-- in fact often more so because Underground SPAR is intended from the beginning to be heuristic-- but information that also is more timely, comprehensive, and, because its prescriptive implications enjoy wide support, actionable.

Underground SPAR's epistemological roots are deep, but as a practice promoted by international NGOs, and now supra-governmental agencies, it is only a couple of decades old. One indicator of its growing influence is the very recent adoption of Underground practice by the World Bank.

The Underground's fundamental concern is not with information generation by research specialists (e.g. statisticians) serving decision-making specialists (e.g., lobbyists or politicians), but rather with information sharing by diverse stakeholders holding complementary knowledge and decision-making responsibility.

Whereas the Establishment focusses on information quality (precision, generalizability, believability, causation identification, and at best, comprehensiveness) the Underground focusses on information utility (timeliness, fairness, empoweringness, action implicability, and fundamentalness.) To achieve its purpose, the Underground employs methods that are participatory, holistic and heuristic.

Underground SPAR tends to be initiated not by interest in a particular policy proposal or decision but rather by concern about a problem (e.g., poverty or ill-health) for a particular social grouping. It continues by defining the problématique (e.g., the connections between livelihood, natural resources, and market, or the connections among disease, income stability, and health care availability), then seeks to understand how existing policies affect the social system of concern, and how alternative policies might aid it (e.g., by influencing local resource consumability, or disease prevention). In short, whereas Establishment SPAR proceeds from cause to effect, asking what a given policy leads to in terms of social outcomes, the Underground proceeds from effect to cause, asking how a given social condition is affected by existing and alternative policies.

Most Underground SPAR is conducted by planners and researchers working at community levels through NGOs, service delivery agencies, academic outreach programs, or local governments. Here, the Underground has been effective in improving local policy making, but not in contributing from the bottom to policy-making at the top.

Although most interest in Underground SPAR is in its local applications, there have also been a few significant successes in conducting Underground SPAR directly at or from the top. These have
involved discrete SPAR exercises, conducted for example by the World Bank, on specific macro policy issues. For the most part, however, the Underground's methods remain unappreciated, indeed often unknown, within central agencies and major research institutions.

3. State-of-the-Art Questions

The preceding discussion prompts three fundamental questions about the directions SPAR might take in the future. These questions relate to potentials for: the Underground applying its tools to higher level policies; the Establishment adopting Underground tools; the Establishment contributing to Underground SPAR.

- Could local Underground SPAR make significant contributions to regional and national policy making— a) by applying Underground tools locally on policies being formulated from above? b) by feeding into senior level SPAR the local knowledge generated through SPAR originally conducted for local purposes?

- To what extent can Underground methods be directly employed by central agencies so as to augment and/or contextuate the Establishment methods they currently favour?

- What is the potential for employing Establishment methods at local levels so as to complement and enrich Underground SPAR, particularly that which feeds into higher level SPAR? For example, could the Establishment provide information that develops, tests and resolves ideas that arise in Underground processes?

(a) Tentative answers

Focussing on the Underground's potential, it does not seem unrealistic to suggest that in the coming decades it could make major contributions to national and provincial planning. At the most general level, this could be achieved by designers of SPAR processes paying attention to what the

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151 The case studies, above, of World Bank participatory SPAR in Yemen and Benin strongly suggest that the Underground's participatory, holistic, and heuristic approach is effective, efficient, and equitable. The fact that many in the World Bank are adopting the Underground approach suggests that the Underground is about to surface.

152 Abundant documentation of Underground experience around the world shows that it is possible for research to meet four critical SPAR desiderata—validity, relevance, completeness, and empowerment—when SPAR is undertaken locally. What is not known is whether policy making by the central state can also benefit from SPAR that creates relevance through heuristics, completeness through holistic attention to systems, and empowerment through broad participation.
Underground as well as the Establishment may have to offer in any particular context. Fundamentally, it is a matter of research design.\textsuperscript{153}

More specifically, enhanced Underground contributions to macro-policy might be made by: 1) the Underground locally applying its tools to higher level policies; 2) the Establishment adopting some of the Underground's tools; 3) the Establishment enriching bottom-up Underground SPAR.

\textbf{i) Local Underground SPAR on higher level policies:} Underground SPAR at local levels could be applied not only to local decision-making but also to the local assessment of policies that have been or could be adopted by higher level governments. If this were to occur, Underground SPAR would be not only at, but also from, "the bottom." This would mean, for example, that communities would not only be aided to apply SPAR tools to their own opportunities for action—such as founding a co-op, or launching a health education campaign— but also to providing input to the national government on the impacts of its policies or policy opportunities— such as the impacts of policies on co-op formation or contagious diseases.

Local people are in a strong position to trace the links between general policies and concrete experience in all its dimensions. To do this, they need to be able to identify the policy reasons for both government and community action (or inaction), and to determine the rippling effects of such action through community social and environmental systems.

Underground tools could facilitate communication between government and communities, thus enabling the identification of policy sources of action, and they could facilitate the tracing of systemic effects. The results of these investigations could be fed back to provincial and national policy analysts and policy makers through a number of channels— the bureaucratic chain of command, political representatives, special inquiries, the media, and over the long term, the classroom.\textsuperscript{154}

\textsuperscript{153} Research design should not only consider how to combine methods and tools for maximizing effectiveness and efficiency in the production of knowledge about policy effects, but should consider as well the social impacts of methods and tools themselves. In complex ways, research design can affect individual empowerment, legitimation of authority and leadership structures, and collective capacity for policy assessment, planning, and decision-making.

\textsuperscript{154} "CIDA has gained relevant experience in the area of participatory development at the micro level. We also believe there have been interesting experiences at the macro and meso levels. But... without a proper mix of intervention at the macro, meso, and micro levels, and unless proper participatory development components are included at these levels creating synergy linkages, the development process may not be sustainable." (Beaulieu and Manoukian 1994:34).
There are sporadic examples of localized, bottom-up policy assessment, but systematic processes for such practice are not yet being advanced in the numerous manuals of the Underground.

**ii) Employment of Underground SPAR tools by the Establishment:** The Underground could make a direct contribution to the conduct of SPAR at national and provincial levels. Underground methodological tools and substantive concepts could be introduced to central agencies and research institutions so as to augment and contextuate Establishment SPAR.

As examples: goals achievement matrices could be used to frame SPAR, with certain cells (e.g., the comparative economic efficiencies of the policy options) being targeted for attention by Establishment researchers, and others being targeted for Underground attention (e.g., the impacts on minority community gender relations of each option); or, traditional social science post hoc experimental methods could be harnessed to the concepts and frameworks of Underground ecological economics.

There is some synthesizing activity of this sort already underway. For example, over the last three decades, multiple accounts frameworks have been increasingly adopted by agencies as the macro approach to SPAR in an attempt to broaden assessment beyond financial cost-benefit analysis (United States 1973, B.C. Crown Corporations Secretariat 1993). Such steps, however, have been more in the nature of rhetoric. The frameworks tend not to be used, not participatorily so if they are used, and the results not disseminated even within technocratic policy-making circles.

However, some recent writing on "full cost accounting" and "integrative policy assessment" methods (McDaniels 1994, Boothroyd 1995) shows how rigorous methodology originating in the Establishment tradition can lead to Underground-like prescriptions for achieving holism through participatory and heuristic methods.

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155 One example is the 5-year program to be launched in Vietnam by a partnership of two Canadian universities (UBC and Laval), Vietnam's National Center for Social Sciences and Humanities and five Vietnamese universities, in association with IDRC and the World University Service of Canada (UBC 1997). The program, under the directorship of this author, is entitled: "Localized Poverty Reduction in Vietnam: Building Capacity for Policy Assessment and Project Planning."

156 McDaniels is concerned with elaborating a full-cost accounting approach that addresses economic, environmental and social value trade-offs in resource management. Referencing decision analysis literature (e.g., Edwards and Winterfeldt 1987, Keeney 1992) his paper shows how such a holistic approach must also necessarily be participatory to at least some degree (e.g., through a "multi-stakeholder panel") and heuristic: "From a practical perspective, decision analysis can be illuminating for public decisions if one accepts that the objective of analysis should not be to reveal the 'right answer' (which is never achievable), but to provide insight. Great progress can be achieved in public decisions by clarifying the objectives relevant to different groups and the importance they place on different objectives." (1994:22). Boothroyd (1995) locates policy assessment at the interface between policy analysis and impact assessment. I suggest that to be effective, policy assessment will not only have to be holistic in addressing originating policy goals and externalities, but also participatory, by combining the formality of impact assessment's legal requirements for screening and public involvement, and heuristic, in the way that government in-house policy analysis is.
iii) Contributions of Establishment Research to Underground SPAR: If positive knowledge adequate for policy assessment is not gainable through traditional Establishment disciplines, what is the best contribution they can potentially make to SPAR, and what needs to be done to realize that potential? Perhaps the best contribution the Establishment can make is to provide information that tests ideas and resolves disagreements that arise in Underground processes. The Establishment then would become the servant rather than the driver of SPAR: Establishment SPAR products would be fed into systemic Underground mapping of policy causes and social effects.

Academic research of the Establishment could also be applied to the strengthening of Underground SPAR methods, e.g., by testing which heuristic tools work best in which kinds of workshop settings.

Barriers to realizing the Underground's potential: SPAR experience to date suggests there are three fundamental barriers to Underground SPAR making contributions to higher levels of policy making. First, because of its emphasis on grassroots empowerment, the Underground seems to threaten established power, regardless of its ideology. Secondly, reaching agreement on analyses and decisions is the harder the more people involved; it is inherently more difficult to make widely supported policies for whole countries than for individual communities. Third, there is the methodological problem that heuristic whole-system knowledge satisfactory for making policies for a large society seems to be more difficult to acquire than for a community.

157 "Testing" ideas is primarily an Establishment term and concept, although the Underground does testing, in a sense, through its own methods of triangulation (e.g., through wide participation in identifying policy effects, and through mapping of systemic linkages). The Establishment tests for replicability, the Underground for decision-making significance. In fact, SPAR in general can be said to be about generating and testing (in various senses of the word) ideas about policy effects.

158 The Establishment field of decision-analysis (see above) could be particularly relevant here. For example Payne et al. explore the mental strategies ("heuristics") people use to solve problems by trading off accuracy and effort, i.e., by finding "a reasonable compromise between the desire to make a good decision and the desire to minimize the cognitive resources used in making the decision (1993:xii)."

159 Criticizing a critic of his 1993 book, Critical Theory, Public Policy and Planning Practice, John Forester (1995:388, 391-92, 395, original emphases) points to the needs for (in my words): 1) Underground SPAR to be tested by Establishment methods; but 2) the Establishment to be continuously challenged by the Underground; and thus 3) SPAR to be both positive, in the truth-seeking sense, and heuristic, in the pragmatic sense.

1) "[The critic's] concern with 'who gets to say what and why,' privileges voice and dismisses the problems of judgment, evaluating in non-arbitrary ways what's voiced. We have to worry not only about who says what about health, for example, but about what's substantively said and claimed. We have to assess, too, the political-economic influences upon citizens' substantive understandings of their own health and hazards to it. If we fail to distinguish between 'voice and argument,' we fail to see that we can agree to something but yet be wrong about it... In democratic politics, 'voice' is necessary but hardly sufficient..."

2) "[My] book is about the politics of agenda-setting, selective attention, inclusion and exclusion, the management of belief, trust, and consent, and other political aspects of the policy process down to the specifics of what analysts do... [A]nalysis' shapes attention selectively in many subtle ways, politically and sociologically... The larger policy process can therefore be viewed, I argued, not as a problem of abstract
(b) Meta-research

Reflexive research by SPAR on itself is needed to understand and overcome the barriers to realizing the Underground's potential. More broadly, meta-research is needed to identify the appropriate roles and relationships of Establishment and Underground SPAR.

Meta-research could investigate the conditions under which Establishment and Underground SPAR approaches are respectively and jointly effective in helping to improve policy, and the opportunities and constraints to creating those conditions.\textsuperscript{160}

Three general approaches could be taken to meta-research: 1) \textbf{evaluation} of existing SPAR programs; 2) \textbf{experiments} in applying Underground methods to SPAR on higher level policies, and in incorporating Establishment methods into an Underground context; 3) \textbf{formation} of SPAR meta-research \textbf{networks}.

\textbf{Evaluation:} A portion of the resources of SPAR programs, such as IDRC's current programs in Latin America and Africa, could be allocated to program evaluation so as to capture their full learning value. Such evaluation could be conducted by the researchers themselves: a) using Underground methods to assess the \textbf{systemic value} of the research in terms of societal development criteria (e.g., did the research lead to a wiser society? how do studied people feel about the research) b) using Establishment methods and criteria to assess the \textbf{quality of the research outputs} (are the findings in fact valid? are they replicable?); c) using both Underground and Establishment methods

'analysis' but as an evolving structure of interactions in which participants with different levels of authority and other resources continually make and negotiate claims...
3) "Critical social and political theory can give us powerful questions to ask, insightful dimensions to explore, but one theoretical account cannot do more than schematically indicate specific organizing or resistance strategies, tactics, skills. The theory can generate and call our attention to the structural space in which such strategies and skills come into play, but the choice of a given strategy and the appropriate place of any skill can only be determined in specific settings."

\textsuperscript{160} Meta-research refers generally to any research conducted on research; in this context, it refers to research on SPAR effectiveness. Another specific form of meta-research would be meta-SPAR, i.e., research on how various social policies affect the capacity of various social systems, e.g., communities, institutions, regional governments, and policy advisory agencies, to conduct SPAR in its various forms. A meta-SPAR agenda would be worthy of development, but is beyond the scope of this report.
to evaluate program effectiveness in terms of SPAR criteria *sui generis* such as utility (is the research useful to policy-makers? is it used?)\(^{161}\)

**Experimentation:** Researchers could pro-actively experiment in applying local Underground SPAR to higher level policies, and in introducing Underground concepts to national and provincial SPAR. For example, alternative budget scenarios or school organization programs could be compared in terms of their respective impacts on social capital.\(^{162}\)

**Networks:** Evaluative and pro-active meta-research could propel, and benefit from, the formation of SPAR networks dedicated to this purpose.\(^{163}\) The networks could exchange meta-research ideas and findings within and among countries.

(c) **IDRC's potential contribution**

Given IDRC's solid track record in Establishment SPAR and its openness to the Underground, the Assessment of Social Policy Reforms program initiative could be a hospitable environment both for the furthering of Underground methods and for exploring the potential of a rapprochement with the Establishment.\(^{164}\)

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\(^{161}\) In the specific case of the IDRC Latin American program, an evaluation by the researchers themselves could consider the degree to which their projects fall in the Establishment or Underground categories, why, and with consequences. Do the projects make valid, important, and usable used contributions to general understanding of policy effects? How, and by whom, are the contributions used? What alternative approaches could have been taken to the research topics to enhance their relevance to policy making that improves social conditions? What evolving international experience in applying Underground methods to national SPAR can be drawn on to generate alternative approaches?

\(^{162}\) In this example, it might be best to consider social capital not as one more product variable for Establishment SPAR to consider, as in "how much will Option A reduce social capital, as measured by volunteer hours, in comparison with Option B?" but rather to consider social capital formation as a process variable, as in "will Option A or Option B most exacerbate the vicious circle of insecurity, mistrust and erosion of volunteering."

\(^{163}\) The Vietnam program described in footnote 155 will attempt to establish such a network in that country, with initial external links to interested people in other countries of Southeast Asia and la francophonie, and in Canada. The potential for other linkages is constrained only by language.

\(^{164}\) Portions of the ASPR PI prospectus indicate ASPR's interest in i) participatory and ii) holistic methods:

i) "This [ASPR] perspective... enables analysis of new partnerships that integrate non-state actors in public policy decisions. It also considers the role that grassroots knowledge plays in the formulation and implementation of social policy, particularly in societies where social protection is rooted in the practices and values of communities..."

ii) "The prevalent approach to policy assessment is piecemeal and technocratic, with emphasis on quantifiable indicators... ASPR promotes the analysis of the qualitative, socio-political dimensions of policy making and delivery by examining the less obvious or unintended impacts of policy change...(IDRC 1996a:4-5)"

What is not apparent in the prospectus is recognition of the need to help researchers become comfortable with the heuristic tools that make participatory, holistic methods effective. The ASPR initiative could make significant contributions in this
The implications of the Underground's surfacing for a research agency such as IDRC are: first, its officers should become well acquainted with the Underground approach and compare it to the agency's current culture and program priorities; secondly, the agency could begin to involve itself in Underground research by becoming a joint sponsor of such SPAR in particular projects; third, the agency could play a leadership role by sponsoring and disseminating meta-research on Underground methods, e.g., by systematically evaluating the World Bank cases presented above.
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