Substantive Theorizing[1]

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This paper outlines, for purposes of discussion and debate, an ecologically oriented approach to theory and research in psychology and related social sciences. This approach, labeled "substantive theorizing," is intended as a constructive response to recent critiques of the logical positivism paradigm. Substantive theorizing is presented as the intersection of a series of choices by researchers, including decisions to focus on limited but socially important domains; to use multiple methods; to develop intimate familiarity with chosen domains; and to examine processes in their natural social and temporal contexts. The approach emphasizes the process, rather than the product, of conceptual framing and development. Among the projected benefits of substantive theorizing are development of new concepts and procedures, blurring of disciplinary boundaries, greater understanding of socially important domains, and increased utility of research for policy and practice. Projected costs include long-term research commitments and lack of support from academic departments and research funding agencies.

A recent surge of published critiques has revealed growing dissatisfaction with the ideology that underlies most of our research on complex psychological and social processes. The logical positivism paradigm has come under direct attack, even from some of its former proponents. Detractors of

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the paradigm argue that under the cloak of science, researchers have claimed too much and delivered too little. Researchers have assumed or proclaimed the universality of their theories and an almost unlimited generality of their findings. Yet the empirical base for these claims is narrow and unrepresentative of the domains to which generalizations are made. The critics also say that the research establishment has embraced a single, narrow path for the practice of science, and that its claims of objectivity and value neutrality are false and misleading. (For a bibliography of recent critiques, see Fiske & Shweder, 1986, pp. 371-377.) In general, I agree with these appraisals. My goal here is to propose a constructive response to some of the key issues raised.

I propose that in our attempts to explore and understand complex psychological and social processes, we narrow the focus of our conceptual frameworks and research efforts to rather specific substantive domains — that is, to particular, delimited areas or topics of empirical inquiry. I contend that we should probe these domains using diverse theoretical and methodological strategies. My arguments are based in part on the belief that many prominent theories and most published investigations in psychology are not well grounded in the phenomena about which knowledge claims are made. Our scholarly literature often fails to reflect the subtleties and nuances of psychological and social events that can be discerned by close scrutiny. Moreover, our literature typically ignores important temporal, spatial, and social contexts that influence the phenomena in the larger social world.

The proposed approach, which I refer to as "substantive theorizing," incorporates some epistemological assumptions that are at odds with the dominant view. It also requires that we acknowledge and examine the scientific and personal values that orient us to particular research problems, and that we recognize realistic limits on our ability to make contributions to society.

Substantive theorizing, as I conceive of it, is compatible with — and in some cases exemplified by — the scholarly work of ecologically oriented community and environmental psychologists, many of whom share the misgivings that have been expressed about logical positivism. Scholars in these fields must necessarily deal with contexts such as places, behavior settings, institutions, communities; their psychologies are "relational" in that they link person-level events with larger social/physical units. These scholars are also typically guided by both scientific and humanitarian values. Such an intellectual community is well equipped to provide the analysis, debate, and illustrative cases that are needed to refine, expand, elaborate, and revise the ideas that are sketched here.

A number of caveats should be issued before I proceed. What follows is a preliminary and somewhat superficial outline of an approach whose elements are not, in any fundamental sense, new. I have attempted to piece

together positions on a number of issues that I believe are central to our scholarly work. My style is more argumentative than scholarly, however. And although I have included some key citations, I have not attempted to present either a full rationale or a complete documentation of references for the arguments I develop. Because it is so familiar to me, I have used my own research program to illustrate several points; numerous other examples might also have been cited.

SUBSTANTIVE THEORIZING OUTLINED

Anyone who undertakes a scholarly investigation makes a large number of choices that eventually determine the nature and quality of the product. I believe that many psychological investigators make a substantial proportion of such decisions in bunches and without much reflection. For example, researchers who regularly conduct psychological experiments using their department's subject pool may not consider the time, space, and population limitations that these choices impose (cf. Sears, 1986).

Substantive theorizing is portrayed below as the intersection of a number of deliberate choices by researchers. After outlining these choices, I describe several benefits and costs associated with substantive theorizing. The main features of research based on this approach are summarized in Table I.

Substantive Theorizing Represents
One of Several Alternative Research Paths

In this section I depict the research process in an admittedly oversimplified way in order to highlight differences between substantive theorizing and other approaches to research. Any research effort can be viewed as the combination of three facets: conceptual, methodological, and substantive. In carrying out their investigations, researchers use and are guided by concepts, hypotheses, and theories; they employ design, measurement, and analysis strategies to make and compare observations; and they examine particular substantive events in the social/physical world. When planning their investigations, however, researchers implicitly or explicitly give greater weight to one or another of these facets. The relative importance that they attach to the three facets determines the particular research path they follow (Brinberg & McGrath, 1985).

Most investigators assign top priority to the conceptual facet. They give secondary priority to methodology, and regard the substantive area as least important. Researchers who favor this path typically start with a theory, select

Table I. Main Features of Substantive Theorizing Research

Selection of substantive domains and conceptual/theoretical development take priority over methodological issues

Social significance is a major consideration in choosing substantive domains

Investigations focus on limited substantive domains

Psychological and social processes are examined in relation to their social, spatial, and temperal contexts

Substantive domains are explored in depth using multiple methods

Substantive theorizing is a continuous, open process that is grounded in a particular domain

Knowledge claims are limited to the substantive domains examined

Theoretical and empirical contributions can take a variety of forms

a method and design that is appropriate to the theory, and then select — often simply on the basis of convenience — a substantive area in which to evaluate it using the selected procedures. The preponderance of the research published in psychological journals takes this approach. Reports of such research are typically presented as theory-driven: Hypotheses guide selections of methods that are applied to designated populations.

Because this research path is so familiar, a very brief example (from Brinberg & McGrath, 1985) should suffice: Bales's (1950) early research on interaction processes in groups began with a set of concepts about instrumental and expressive functions. The concepts guided development of an observational scheme that was then applied to groups of the kinds and under the conditions that were suitable for his design: small, ad hoc groups, assigned to work on intellectual tasks, for relatively brief periods, in locations that were suitable for the observational procedures.

A contrasting path is one in which researchers consider the substantive area first, methodology second, and conceptual framework third. They begin with a problem or topic in a substantive domain, then choose methods that are appropriate to the problem or topic and, after the data are in, see what interpretations they can make. Much applied research seems to fit this sequence.

An exploratory study of 81 new retail and service firms (Mayer & Goldstein, 1961) provides an illustration of this research path. The investigators traced the operations of these firms over their first 2 years in search of characteristics that distinguish successful and unsuccessful firms. The project was undertaken for the U.S. Small Business Administration (SBA). The investigators wanted to supplement aggregate data on business growth and survival with interview and observational data collected from individual firms. May-

er and Goldstein said they began the research without "rigid hypotheses." They produced some useful insights into the founding of new retail and service firms, and made some practical suggestions for the SBA, but they did not characterize their results in terms of abstract concepts or principles (Mayer & Goldstein, 1961).

Two other paths to research are more compatible with the substantive theorizing notion: (a) placing conceptual concerns first, substantive area second, and methodology third, and (b) placing substantive area first, conceptual concerns second, and methodology third. In each case the methods selected are constrained by both the substantive domain being investigated and the conceptual framework.

My current research program reflects the first of these strategies. It is guided by a recently proposed conceptual framework that considers several previously neglected aspects of Barker's (1968) behavior setting concept. (Behavior settings are time- and place-bound social events characterized by regularly occurring activities—examples include a restaurant, a bank, an attorney's office, a high school geometry class.) The new framework considers the temporal stages, resources, internal dynamics, and contexts of behavior settings (Wicker, 1987). Exploring this framework was the prime concern. The second priority was not methods but the selection of a substantive area in which the framework could be examined and further developed. I selected small retail and service establishments as most suitable. Subsequently, my collaborators and I have employed a variety of designs and methods to explore this domain (see Wicker & King, 1988).

An example of the other research path (substantive, conceptual, methodological) is found in the recent book, *Social Organization of Medical Work* (Strauss, Fagerhaugh, Suczek, & Wiener, 1985). The primary concern of the investigators was delivery of medical care. Second in importance was the discovery and elaboration of a set of concepts and theories relating to interpersonal negotiations, division of labor, and other topics that had emerged from previous research in hospitals (e.g., Glaser & Strauss, 1968). Methods were then chosen to identify new concepts and to further explore the concepts in a medical context.

This three-facet scheme for representing research is, of course, greatly oversimplified, and it is artificially discrete and linear, as Brinberg and McGrath (1985) recognized. Conceptual considerations are infused in methodologies and in construals of the empirical world. It is difficult to imagine any study or research program that does not begin with some kind of organizing framework and set of metatheoretical assumptions. As I conceive of it, substantive theorizing requires a much closer and more dynamic interplay of conceptual frameworks, methods, and data. Theory building and empirical research are not distinct activities.

Nevertheless, the Brinberg and McGrath (1985) scheme provided a more differentiated view of research than the usual basic versus applied dichotomy, and it portrayed a wider range of choices than social scientists may have contemplated. The scheme also called attention to the fact that choices regarding lower priority facets are constrained by the choices made to accommodate higher priority facets. For example, in the first path mentioned above, constraints imposed by theory and by method may greatly limit the choice of a substantive domain.

Substantive Theorizing Explores Socially Important Events and Processes

There are many reasons why researchers might choose to study a particular substantive domain, whether it is college students performing assigned tasks in the laboratory or nurses interacting with patients on a hospital ward. In my opinion, one of the primary considerations should be the social significance of the domain studied, even if the researcher's main interest is conceptual.

When conceptual concerns are the top priority, choice of a substantive domain is somewhat constrained, but less so than if method is also considered more important. Let me illustrate this choice in a case I know well. When I wanted to explore the life cycles — and especially the founding stage — of behavior settings, I considered a number of alternatives before deciding to study small retail/service firms. Among the conceptual considerations that led to this choice were the facts that such firms are typically single-behavior settings, they have short life expectancies, and the processes considered in the life cycle model are evident in these firms.

Retail/service establishments are also socially important: They provide essential goods and services, represent a significant sector of the economy, provide a livelihood for millions of workers including, for many, a first work experience. The owners of these firms typically invest all or most of their savings and considerable amounts of time and energy in staffing and maintaining their businesses. And perhaps because such firms are usually small and unglamorous (by comparison to high-tech corporations, for example) they have been largely ignored by researchers. I believe these factors make this domain a more appropriate choice than, say, groups of college students assigned the task of organizing a social event.

Social significance should also be considered when the primary impetus for research is to examine a particular substantive domain, such as stress among corporate executives or mental health services for the homeless. When researchers are able to chose domains themselves, they should assess whether each alternative has sufficiently clear and direct social importance to merit

a nontrivial investment of their professional lives. Even when the substantive domain is chosen by others, researchers should justify their participation on these terms, and they should search for ways to explore the domain that increase the potential social benefits of the research.

In addition to direct social importance, researchers might also consider a secondary societal benefit: that of improving the quality of theory and research in the social sciences. Substantive domains might also be selected in part because of the potential of research in that domain to have an impact on an existing scholarly community. Campbell (1986) has argued that scientific advancement requires dialogue, debate, controversy, and challenge. Social scientists working in nontraditional areas should avoid the temptation to isolate themselves from competitors. Rather they should present direct challenges to established ways of thinking.

Substantive Theorizing Probes a Contextualized, Limited Domain

In my image of the social world, the events to be explained or explored by social scientists take place at some location in a hierarchical series of interacting, interdependent systems. Often what appears from a narrow perspective to be a single, unidirectional cause is, when viewed in context, only part of a "causal college" linking different levels (London & Thorngate, 1981, p. 212). For example, the idea that the economic success of a retail firm depends upon the enterpreneurial motivation of the owner might be elaborated to include such factors as technological developments, a supportive legal system, local economic developments, a skilled staff, and the like.

Context also has a temporal aspect. I imagine a temporal texture somewhat like the hierarchy of systems: In most systems smaller scale, momentary dynamics help to shape larger, slower temporal trends (cf. Gerson, 1976). The nature and patterns of interactions over time determine the course of a social unit's development or history. To illustrate, a married couple's daily interactions in the home influence their ways of relating to one another when they start a new family business. And the pattern of such transactions influence (and are influenced by) the subsequent direction and success of the business (cf. Wicker & Burley, 1988). (See the following sources for recent discussions of the role of temporal factors in theory and research: Altman & Rogoff, 1987; Kelly & McGrath, 1988; McGrath & Kelly, 1986; Stokols, 1988.)

Many of our colleagues in psychology have not fully recognized the importance of context. We ecologically oriented researchers believe that context must be considered an integral part of the phenomena we study. Context is the dynamic interplay from which the events we are interested in have been punctuated or extracted. It is more real, more substantial, than the typical research focus. To deal with context in our theories, which inherently

reduce the complexity of reality, we may find it necessary or convenient to break the social world into discrete facets that we label "exogenous" or "moderator" variables. But such simplifications should be regarded as temporary, subject to the discovery of more dynamic relationships (cf. Altman & Rogoff, 1987; Stokols, 1988). Furthermore, our research should incorporate at least two levels of analysis (e.g., individual and behavior setting, work group and organization, institution and community) to assure that context is at least represented.

I also argue that substantive theorizing should be confined to a limited empirical domain (cf. Lincoln & Guba, 1985, chap. 5). Our language permits us to classify social entities and events into categories that are more and less inclusive. For example, this sequence represents increasing inclusiveness: restaurants, retail and service firms, business firms, organizations, social systems. In most categorization schemes, the elements belonging to the less inclusive categories are more homogeneous than those in the more inclusive categories.

I believe we should select for our initial research and theorizing relatively less inclusive substantive domains in which the elements are more alike. Even relatively narrow social worlds are likely to be sufficiently complex to challenge our capacity to understand and capture their essential features. It seems preferable to start with a relatively narrow domain, and then use what we learn from it to determine an appropriate subsequent domain, than to begin with a broad, diverse domain and to draw generalizations as if all the elements are alike (cf. Glaser & Strauss, 1967; McKelvey, 1982).

Just where to set the limits of a domain — that is, just how high or low to go on the inclusiveness dimension — is a matter of judgment. But I say it ought to be considerably lower than is reflected in current social science literature, which purports to deal with "leadership," "staffing levels," "social support," "empowerment," "problem solving," and so on. Overaggregation of data from broad areas can mask reliable local effects and can lead to the conclusion that a field is not fruitful for study because it yields no consistent pattern of results (Whyte & Whyte, 1984, pp. 271-272).

A few areas already have taxonomies or theoretically defined units that can be used to delimit a domain. For example, Barker (1968) developed a set of behavior setting genotypes (e.g., restaurants, worship services, court sessions) and McKelvey (1982) suggested classifying organizations according to their dominant competence, which he likened to the species notion in biology.

In some substantive domains practitioners have their own nomenclature for activity or problem areas. These may be useful, but researchers should carefully consider the possibility that adopting practitioners' definitions and boundaries imposes limitations on how problems and processes are conceived.

Substantive Theorizing Requires In-Depth Exploration of a Domain

The chosen substantive domain should be thoroughly probed. Social scientists need to develop the same kind of intimacy with their domain that geneticist and Nobel laureate Barbara McClintock developed in studying corn plants. McClintock stressed the need to take "the time to look," the patience to "hear what the material has to say to you," the openness to "let it come to you." Above all, one must have "a feeling for the organism." One must understand "how it grows, understand its parts, understand when something is going wrong with it" (Keller, 1983, p. 198).

To gain a feeling for the domain, researchers must be open to insights from a wide range of sources, including their intuitions as well as established and exploratory research strategies. They should sensitively interpret and analyze data, but they should also understand that analyzing systematically collected data is not enough. Data *always* oversimplify and distort — and sometimes enlighten. Researchers must continually look beyond what has been recorded in search of the dynamic, underlying processes that have produced the outcroppings they have captured (cf. Benson, 1977).

And while substantive theorizing is neutral as far as particular methods are concerned, it does require multiple methods to expose more of the domain than can be learned from a single approach. It also requires procedures that are sensitive to events that may not be primarily psychological, such as organizational structures and policies, legal practices, demographic trends, economic conditions, cultural norms, and technological constraints. Methods should be chosen on the basis of their potential to reveal new information on the domain, rather than on dogma proclaiming the superiority of any particular approach.

Researchers should adopt a stance that allows them to pursue promising leads as they develop. Research should be regarded as a process of discovery in which the next step taken depends on what was just learned. Such a stance often leads researchers in unanticipated directions and to the use of a variety of methods that cannot be specified in advance.

Over the course of my program of research on retail and service firms, we used a variety of methods: analysis of archival data from a state agency, a telephone survey, face-to-face interviews, and a longitudinal case study. We also examined relevant U.S. Census data, read numerous "how to" books, obtained publications from the U.S. Small Business Administration, subscribed to relevant trade publications, solicited comments on preliminary reports from scholars and practitioners, watched the news media for relevant stories, and conducted numerous casual observations and conversations

with owners or staff members while in their stores, at parties, and even on backpacking trips (see Wicker & King, 1988).

There is a danger in developing an intimate familiarity with the domain, however. Researchers run the risk of parochialism. They may come to see only the chosen domain, and even worse, to see it in essentially the same terms as practitioners do. Since researchers typically come to a substantive domain only after it has been conceptually framed by participants and practitioners, they may be tempted to adopt local definitions (cf. Weick, 1979). The danger is that by doing so, they may be unable to add anything important or to think about the domain in new ways. Often, however, participants holding different ranks and positions within the domain — such as administrators, technicians, clerical and production workers — have contrasting perceptions that can profitably be examined. The dangers of parochialism are not, of course, limited to field research. Parochialism is evident in the choices of theories, research methods, and study populations as well (cf. Poksakoff & Dalton, 1987; Sears, 1986).

One way to avoid parochialism is to search beyond the focal domain for useful models, metaphors, and methods (cf. Weick, 1979; Wicker, 1985). For example, founding a new retail firm is in some ways like implementing a new social program, so the literature on program implementation may provide some useful ideas. And since coping with the termination of one's business may resemble coping with other important life transitions such as retirement, loss of a loved one, or divorce, methods used in the latter areas may be adapted to the study of owners.

Substantive Theorizing Is an Open Process, Not a Static Product

Throughout this paper I refer to substantive theorizing, rather than to substantive theory. This choice of the verb form is deliberate. It follows Weick's admonition to think "ing" in order to emphasize process (Weick, 1979). Gaining first impressions and working through conceptual treatments of a domain are emphasized, rather than an end product that must conform to a rigid set of conventions about what a theory ought to be. Substantive theorizing, as I envision it, entails free and open discussion about developing ideas. Contradictions, exceptions, and problem cases are explored. Along with the goal of confirming or disconfirming formally stated hypotheses must stand the goals of expanding, elaborating, refining, and reorienting working concepts and propositions.

Substantive theorizing can have a variety of goals and it can take a variety of forms. As theorists ground their observations, they are likely to gain an appreciation for alternative views of reality. They may find it hard to

accept either a purely subjectivist or a purely objectivist perspective, but may attempt to incorporate both into their thinking. Few if any domains can reasonably be examined without considering individuals' perceptions, construals, knowledge, images, plans, and beliefs, and the social constructions, collective meanings and symbols of groups and larger social units (cf. D'Andrade, 1986). At the same time, there is something to be gained by assuming the existence of an ordered reality beyond that sensed by individuals or constructed by groups, and by attempting to understand some of its important contours (cf. Barker, 1968; Meehl, 1986; Secord, 1986).

Social events have a life of their own that can only be partially comprehended. Our understandings cannot capture the full complexity of events. Nevertheless, theorists should try to make a domain "more intelligible," to expose regularities and reveal insights, and to discover nuances (cf. Packer, 1985; Taylor, 1979), as well as search for general, formally stated propositions that identify causal networks. Accordingly, describing and interpreting events are just as acceptable activities for substantive theorists as are formulating testable hypotheses.

The social sciences in general and psychology in particular stand to gain from escaping the current dogma that equates theory with formally stated hypotheses and that limits scientific research to "tests" of preformulated hypotheses. Some specialties in the social sciences have so aped the hypothetico-deductive method that research reports published in the leading journals appear to be obedient attempts to follow recipes for getting published, rather than serious intellectual inquiries. The tyranny of the hypothesis has, for example, led authors to propose "hypotheses" — which according to the hypothetico-deductive logic are statements of enduring relationships between concepts — that are written in the future tense and that predict statistical significance on particular statistical tests.

It is worth considering what benefits and costs might result from wider use of substantive theorizing within psychology and the social sciences. I attempt such an analysis in the following paragraphs.

SOME BENEFITS AND COSTS OF SUBSTANTIVE THEORIZING

Potential for Scholarly Contributions

Among the potential scholarly benefits of substantive theorizing are the following:

1. New concepts, procedures, and insights will arise from close examination of domains that have not been thoroughly probed. Our most commonly used tools are not adequate to capture the range of events with which

substantive theorists deal: individual and social meanings; dynamic process-
es such as negotiations and sense-making; and temporal, spatial, and situa-
tional contexts. To illustrate some steps in this direction, D'Andrade (1986)
has outlined a nonlaboratory, experimental method for studying systems of
meaning. And McKelvey (1982) has provided a theoretical base for classify-
ing organizations that could aid researchers in selecting samples and logical-
ly ordering research findings.

2. The artificiality of disciplinary boundaries may become more evi-
dent as researchers work with multiple levels and use a greater variety of
methods (cf. Sherif, 1979, p. 121). There are some costs associated with
loosening disciplinary boundaries, however. One is the strong temptation to
paste together incompatible concepts from different contexts—a tendency
toward superficial eclecticism (Kaminski, 1986). Another is that researchers
may be too inclined to dabble in methods without recognizing their suitable
applications and their limitations.

3. Blind spots in traditional viewpoints may be revealed and may be-
come subjects for discussion and debate. For example, an in-depth study of
a group of workers in a warehouse might reveal the extent to which current
theory and research on small groups neglects such matters as division of labor,
the role of humor, group members' interactions with material objects such
as machines, tools, and supplies, and the effects of constraints from larger
entities, such as organizational policies, labor contracts, and technological
systems (cf. Goodman, 1986).

4. More generally, some assumptions that are inherent in the
predominant research paradigm may come to be questioned. If, in time, a
broader range of research procedures and forms for theory were accepted,
scholars might become more open to discussions of issues that are not now
widely debated or even recognized. For example, the issue of how the in-
terpretation of evidence is affected by the interests, values, and motivations
of researchers could become an acceptable topic for discussion among psy-
chologists, as it now is for historians (Morawski, 1984).

Potential for Societal Contributions

I can foresee several kinds of contributions beyond the academic en-
terprise. Our credibility with the public, policy makers, and funding agen-
cies will increase if we make less grandiose (and less naive) claims about our
findings, if we can talk intelligently about important substantive domains,
and if we can produce significant knowledge gains in our chosen domain.
We may also generate concepts and theories that will give practitioners and
lay people new insights into familiar domains. This kind of outcome has been
reported, for example, by Glaser and Strauss (1967) in their work with hospital

staff members: Nurses' greater sense of loss after the death of some patients than of others was rendered more understandable when presented as reflecting the social values of people in our society.

The above gains require that we disseminate our findings on important substantive domains to the general public, to policy makers, and to participants in the domains we have chosen to explore. We need to consider a wider range of outlets for our work—including legislative hearings, memos to agency personnel, newspapers, magazines, radio, television, trade and professional publications, and meetings.

Interventions guided by substantive theories will have more realistic limits and will take into account more of the variables that influence everyday events. I should note, however, that generalized applications are not likely to flow immediately and directly from substantive theories; purely local factors will still need to be taken into account.

Long-Term Commitments by Researchers to a Domain

Considerable time and effort are required to become familiar with any substantive domain. For this reason domains should be chosen thoughtfully and deliberately, as I have suggested. There are, however, some offsetting benefits to the considerable start-up costs: Researchers are likely to conduct multiple-study programs of research, rather than one-shot investigations. They can chose different methods that have nonoverlapping weaknesses to explore the reliability of their findings (cf. McGrath, 1981).

High Levels of Scholarship Required

Substantive theorizing is the process of discerning or "punctuating out" the most important processes, events, relationships within a domain. Good substantive theorizing registers more of the complexity of a domain than is available to the lay person, but at the same time simplifies the domain by calling attention to selected important aspects. This is not an easy task: It requires of individual researchers, specialized sensitivities, discipline, critical analytical skills, and clarity of thought and communication. Collectively, researchers of a domain should have heterogeneous backgrounds and skills (Koch, 1985, p. 95). Good substantive theorizing is at least as difficult as traditional theorizing; the guidelines are less clear and the range of options is wider. Not all researchers or graduate students are suited for this activity, and there are few guides on how to proceed (Glaser & Strauss, 1967, is an exception). And some of its requirements, such as immersion in field settings, may not be particularly compatible with academic life (cf. Lofland, 1976).

Uncertain Support From Academic Departments
and Funding Agencies

Under the present circumstances, substantive theorizing is a high-risk endeavor. It counteracts the predominant ways of thinking in social science departments and among most journal editors and reviewers. Graduate students planning academic careers and untenured professors in particular should recognize the risks of devoting time and effort to substantive theorizing: Academic review committees may not see the value in their efforts.

Moreover, the prospects of obtaining research funds to support substantive theorizing are poor, especially from agencies (such as the National Science Foundation) that emphasize their "scientific" mission. Opening up scientific research in the ways suggested is viewed by many scholars as lowering standards, admitting that previously defended strategies were wrong, and/or running the risk of appearing "loose and soft" to representatives of other "harder" disciplines that are competing for the same funds.

One might think that the prospects would be better in mission-oriented agencies, particularly if review panels have previously had to deal with proposals based on universalist theories and research that does not fit the problems to be studied. However, status concerns and gnawing doubts about "quality" and uncertainty of outcomes of new strategies are likely to lead decision makers to choose standard approaches that are less subject to criticism by established academics. If one considers research (and not political) outcomes, such a strategy is not conservative, but risky, since all the agency's investments are concentrated in one paradigm.

The priorities and interests of private foundations are often hard to learn precisely, but these funding sources may be more open to unorthodox approaches, particularly if the substantive topics proposed for research are valued within the foundations. (For example, my research program on retail and service firms was supported for 3 years by the John Randolph Haynes and Dora Haynes Foundation of Los Angeles, which funds policy-related social science projects in the Southern California area.)

DEVELOPING THE SUBSTANTIVE THEORIZING APPROACH

I hope that this admittedly subjective assessment of the potential beneftis and costs of substantive theorizing leads readers to the conclusion that I would draw — that the approach merits further consideration, scrutiny, and debate.

Although substantive theorizing departs from the dominant beliefs and practices in psychology, it does not necessarily challenge the core assumptions and values of science. The phenomena examined following the sub-

stantive theorizing approach are presumed to be at least somewhat orderly; the goal of theory and research is to identify, describe, and understand that order. However, it also seems likely that some domains will prove to be more orderly than others — or at least more amenable to the discovery of order — and that substantial amounts of indeterminacy will remain in all domains.

I believe that the phenomena of social science will prove to be more complex than most of us have assumed. Closer scrutiny of delimited substantive domains may allow us to make gains that have not been achieved in the search for general, context-free principles. Once we have developed grounded concepts and knowledge in a number of related domains, we may have a base from which to synthesize more general principles. Theoretical generality may be achievable, but I suspect it is more distant and more difficult than most social science researchers currently believe.

Substantive theorizing, along with a number of other challenges to current thinking about research (e.g., Fiske & Shweder, 1986; Lincoln & Guba, 1985; Polkinghorne, 1983), provides an opportunity for social science to exercise the scientific values of openness, tentativeness of findings, and reorientation based on critical self-examination. However, if these values are to be put into practice, the dominant views of the social scientific enterprise need to be actively and openly discussed, debated, and challenged.

We need to identify and evaluate the assumptions and implications of the logical positivism paradigm that undergirds much social science research. Issues of epistemology and philosophy of science should be more thoroughly examined in the scholarly literature of our field and in the courses we teach. Colleagues and students alike should be sensitized to the narrowness of those who claim to present or practice *the* scientific method. In some instances it may be possible to organize special seminars that examine alternatives to the dominant paradigm, perhaps in collaboration with colleagues from other disciplines such as sociology, anthropology, history, and philosophy.

We must also translate our deliberations into actions. The viability of alternative approaches must be demonstrated in our research programs. We should not expect the most vulnerable among us to lead this effort. Established scholars should be willing to assume risks and accept such costs as rejection of grant proposals and manuscripts that do not fit the establishment view of science, and perhaps subsequently, lower merit increases in salary. Journal editors and members of editorial boards who wish to nurture diversity can encourage authors to submit manuscripts that challenge traditional assumptions, employ unorthodox methods, and/or reflect an intimate familiarity with the events they analyze — and then reward them for their efforts.

Readers who are sympathetic with attempts to open up the social science enterprise can perhaps take comfort in the observation that, in the long run,

it will certainly change. As Benson (1977) observed in another context, "social arrangements which seem fixed and permanent are temporary, arbitrary patterns and any observed social pattern [is but] one among many possibilities" (p. 3). The current system has embedded in it numerous contradictions that represent opportunities for change, and it is situated in a larger social world whose influences it cannot escape. At issue is not whether changes will occur, but rather the direction and timing of changes, and what role we will play in them.

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