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Ethnography and Experiment in Social Psychological Theory Building: Tactics for Integrating Qualitative Field Data with Quantitative Lab Data

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While both sociologists and organizational theorists have incorporated qualitative data into theory building, contemporary social psychologists have resisted this trend. This resistance may be the product of long-standing perceptions of the discipline of social psychology that equate it with controlled experimentation. Yet, this was not always the case. Many respected social psychologists, including Muzafer Sherif, Edgar Schein, and Leon Festinger, relied on qualitative data from real-world contexts to ground theory building. Following their example, we discuss the possibilities of reviving social psychological approaches to theory building that integrate qualitative field data with quantitative data collected in laboratory experiments. We first justify why qualitative data are important to social psychological theory building by examining some of the strengths and weaknesses that have been demonstrated in other research domains. We then use several "classic" social psychological studies to illustrate specific tactics for integrating qualitative data with traditional experimental data in social psychological research. These examples demonstrate the flexibility and synergies of combining qualitative and quantitative data. They also suggest that social psychological theory building may benefit from a "return to our roots" and an embrace of qualitative data. © 2000 Academic Press

INTRODUCTION

"Psychological" social psychologists have embraced experimentation and experimental data with a passion that often appears to brook no compromise. The

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discipline as a whole has become identified with this single methodology. No fair observer can deny that the development and growth of the field has depended on creative manipulation of experimental situations coupled with statistical techniques of comparison and contrast (i.e., the general linear model). Experimentation is predicated on the control of situations by the experimenter, comparison of groups that are exposed to different stimuli, and measurement of responses in statistically comparable ways. Psychological literatures on attitudes, social cognition, and person perception could not have flourished without this ability to vary the stimuli to which individuals and groups are exposed and without the ability to compare responses systematically.

Data that work well to answer such types of questions may not, however, be equally effective for all areas of inquiry. Most social psychological research domains assume that the interpretation of research contexts by participants is relatively unproblematic and that these contexts are fixed, varying only along the dimensions that experimenters have manipulated. Yet, some research arenas, such as small-group research, raise issues that depend on more unpredictable and dynamic behavior within an interaction domain (i.e., an arena of action in which group cultures are formulated and specified through the creation of shared meanings; Fine, 1981). In contrast to the conditions of the experimental model, interaction domains are conceived of as collective realities whose meanings develop from the contexts in which they are embedded. They cannot exist without shared understandings and collective meanings, and they cannot be evaluated without data that reflect their dynamic and interactive nature. Indeed, it is ironic that the experimental social psychologist is often the only one in such situations who refuses to be attuned to the creation of shared realities (Hardin & Higgins, 1995).

Yet, cracks have appeared in the traditional experimental model of social psychology that suggest a recognition of and emphasis on the importance of meaning and context in experimental situations. For example, some scholars have challenged the perceived wisdom of controlled experimentation in contemporary social psychology. In his influential article ''Social Psychology as History,'' Kenneth Gergen (1973) emphasizes that experimental results are socially and historically grounded. How could it be otherwise? Yet, in making this claim, he profoundly challenges standing orthodoxy and undercuts the comforting claim that social psychologists are examining universal or generic principles of social life. His argument is that meaning is tied to local conditions as well as to universal processes, a view that fits into the epistemology of qualitative research. It is through understanding particulars that more general principles of interaction can emerge. Culture mediates the effects of social psychological forces.

Gergen's stance is consistent with theory-building traditions of earlier researchers in social psychology—traditions that include introspection, observation, and in-depth interviews. Such qualitative traditions, even if not currently well represented in the pages of social psychology journals and peripheral to graduate and undergraduate training, are reminders of roads not taken. These roads may be

particularly significant in an age in which other once-highly quantitative social sciences (e.g., organizational behavior and sociology) have embraced and incorporated qualitative data and in which interaction with colleagues in the humanities have become the norm, not the exception. These trends suggest that social psychologists may benefit from examining the meanings of experimental situations, in addition to examining the acts and attitudes of individuals who occupy those domains. In this vein, our goal is to explore why and how qualitative data can be integrated with traditional, quantitative experimental data in social psychological theory building.

In the following sections, we first define the primary forms of qualitative data used by social scientists. We then discuss the theory-building strengths and weaknesses of these data forms. Next, we describe six specific tactics that social psychologists might use to integrate qualitative field data with quantitative laboratory data in theory building and illustrate the use of each tactic in a ''classic'' social psychology study. Finally, we discuss the value of qualitative data for the future of social psychological research.

Forms of Qualitative Field Data

The two most prevalent forms of qualitative data are observations and in-depth interviews. The former is often referred to as ''ethnographic data,'' but as ethnography typically involves both observation and interviews (Denzin & Lincoln, 1994; Lofland & Lofland, 1995; McCall & Simmons, 1969; Spradley, 1979, 1980; Taylor & Bogdan, 1997), we differentiate the two methodologies in this analysis and use the term ethnography to refer to those methodological strategies that involve both observations and interviews.

Observational data. Qualitative data obtained from observations are favored by many sociological social psychologists, particularly those aligned with the symbolic interactionist perspective (Blumer, 1969). To obtain these data, the researcher observes a group, community, or social scene, compiling field notes (Lofland & Lofland, 1995). The observer may take one of several stances toward the group (Adler & Adler, 1987; Gold, 1958)—peripheral membership (being an interested outsider), active membership (participating in the group as a researcher), and complete membership. In the latter case, the researcher may explain his or her research interests to the members of the group or may collect data without explanation, establishing a covert role (Fine, 1980). The goal is to capture the richness and meaningful character of the behavior and talk in a setting, i.e., to understand what it means to be a participant in the social situation.

A risk in relying on observational data lies in the possibility of observer bias. What one ''observes'' is filtered through one's experience (bias in interpretative stance), and one's presence in a situation inevitably affects—to a greater or lesser extent—how participants respond (observer bias). Paradoxically, this risk may also be the observer's greatest strength, allowing him or her to interpret the cultural meaning of events, thereby providing data that are enriched in ways that

quantitative data, including that collected through observational techniques, cannot be. As Adler and Adler (1994, p. 40) suggest,

> Quantitative observations, conducted in situations deliberately designed to ensure standardization and control, differ markedly from observations framed by the qualitative paradigm. Qualitative observation is fundamentally naturalistic in essence; it occurs in the natural context of occurrence, among the actors who would naturally be participating in the interaction, and follows the natural stream of everyday life. As such, it enjoys the advantage of drawing the observer into the phenomenological complexity of the world, where connections, correlations, and causes can be witnessed as and how they unfold. Qualitative observers are not bound, thus, by predetermined categories of measurement or response, but are free to search for concepts or categories that appear meaningful to subjects.

In-depth interview data. A second source of information about what people do and think is stories. In-depth interviewing presumes that one can understand how the world is known by asking informants to answer open-ended questions about their experiences.[1] Interviews differ in the degree to which informants set the agenda, but in all instances informants describe their own experiences at length, including personal narratives or life histories. In-depth interviews are frequently used to collect differing perspectives on a topic. If a researcher wishes to understand the experience of rape, for example, she or he can interview victims of rape (Davis, Brickman, & Baker 1991), those who run rape crisis centers (Matthews, 1994), court officials (Martin & Powell, 1994), the relatives of victims or perpetrators (Smith & Trepper, 1992), or the rapists themselves (Scully & Marolla, 1985).

The risk in relying on such data is that it constitutes talk (i.e., rhetoric) generated for a particular purpose in a specific context. This talk may differ significantly from what the informant ''felt,'' how the situation was seen by an observer, or how an informant might report this event on other occasions. Further, some topics may be more appropriate for interviews than others. Issues involving strong norms of social desirability or taboo topics may produce misleading interview responses and often are better examined through observation.

Strengths of Qualitative Data for Theory Building: Accuracy

Although contemporary experimental social psychologists have sparingly used qualitative data in their theory building, social scientists in the related areas of sociology and organizational theory have widely employed these data in recent years (Morrill & Fine, 1997). Examining sociologists' and organizational theorists' use of qualitative data, as well as that of earlier social psychologists, suggests that social psychology may benefit from reacquaintance with qualitative

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[1] Ethnographers refer to those observed as ''informants'' rather than the psychologists' label of ''participants.'' The former seems to impart more dignity and agency to the observed.

inquiry as a means of improving the practical relevance of their theories.[2] As Denzin and Lincoln (1994, p. 4) summarize,

> The word qualitative implies an emphasis on processes and meanings that are not rigorously examined, or measured (if measured at all), in terms of quantity, amount, intensity, or frequency. Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry. Such researchers emphasize the value-laden nature of inquiry. They seek answers to questions that stress how social experience is created and given meaning.

A qualitative perspective leads to theories that have important strengths relative to those based on traditional experimental methods. In particular, qualitative data produce theories that *more accurately describe real-world issues and processes* than do quantitative data. We suggest that this is accomplished by allowing for theories that are relevant, rich, and dynamic in their explanations of social processes.

   Relevance and richness in theory building. Qualitative research is based on the assumption that informants are excellent judges of which issues are worth examining. By permitting one's informants to set the agenda, underlining their perspectives, we generate theory based upon data that are linked to the immediate experiences of participants rather than to the removed experiences of researchers, who are constrained by their methodological choices. Instead of being limited to a set of narrow topics, often highly cognitive and individualistic, social psychologists who use qualitative data in their theory building can explain naturalistic behavior. As Glaser and Strauss (1967, p. 238) assert,

> A grounded theory that is faithful to the everyday realities of a substantive area is one that has been carefully induced from diverse data. . . . Only in this way will the theory be closely related to the daily realities (what is actually going on) of substantive areas, and so be highly applicable to dealing with them.

In addition, qualitative data allow researchers to study social domains that may not be easily accessible to laboratory researchers. For example, while social psychologists may fret about having experimental participants provide pretend-shocks to confederates, such actions are insignificant compared to the brutal attacks sometimes found outside laboratory walls. Not only do experimental participants not yell, they do not seduce, slap, kiss, gossip, or cry. Other behavior that can be produced in the laboratory (e.g., lying, betrayal, anxiety) is found much more dramatically in situations connected to self-interests and long-term

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[2] Given that few social psychologists have conducted research using qualitative data we begin by describing the two dominant ethnographic methodologies of observation and in-depth interviewing (see Denzin & Lincoln, 1994). We emphasize the consensually accepted styles of these methodologies, recognizing that each methodology is driven by disputes and debates. Our discussion excludes content analysis, archival analysis, participatory research, and other methodological strains not because these approaches are unimportant, but to achieve focus.

relationships. Qualitative research provides the opportunity to examine social processes in social domains such as gang initiations, police interrogations, and plant closings (Sutton & Schurman, 1985; Sutton, 1991).

Finally, qualitative data provide a *context for understanding social processes* that cannot be duplicated in the laboratory. As a result, qualitative data are often described as "rich." Their complexity gives a picture of informants' meaning of the social world and behavioral processes that might not otherwise be available. Those interested in developing concepts see the richness of data as essential (Sutton & Staw, 1995). These scholars propose that quantitative data themselves do not constitute theory, but that theories require the additional richness provided by qualitative insight. Mintzberg (1979, p. 113) argues,

> Theory building seems to require rich description, the richness that comes from anecdote. We uncover all kinds of relationships in our "hard" data, but it is only through the use of this "soft" data that we are able to "explain" them, and explanation is, of course, the purpose of research. I believe that the researcher who never goes near the water, who collects quantitative data from a distance without anecdote to support them, will always have difficulty explaining interesting relationships. . . .

Capturing the dynamics of behavior in theory building. Another widely cited benefit of qualitative data, notably from field observations, is that one can capture the dynamics and evolution of social processes over time (Eisenhardt, 1989). Just as narration depicts sequences of behavior, so does field observation. The standard social psychological experiment is a brief "one-shot" affair, examining fleeting, relatively inconsequential interactions among strangers. After an hour or less, the participant has been processed and the information gathered. This has led social psychological theory to be profoundly atemporal, ignoring dimensions of long-term social change. Data from participant observation, with its demand that researchers share experiences with informants, allow researchers to witness alterations in the attitudes and behavior of those they observe. Such data have been employed by organizational theorists in developing process models of human behavior (e.g., decision processes (Eisenhardt, 1989), identification processes (Elsbach & Kramer, 1996), and brainstorming processes (Sutton & Hargadon, 1996)).

In a related manner, qualitative data allow researchers to capture the position of narratives in social life. While social psychologists have been interested in scripts and schemas (e.g., Abelson, 1981), their interest in narrative derives from a different concern. At issue is the dynamic "story-making" capacity of social actors. Narrative thinking and subsequent presentation of these narratives to audiences in social situations constitute a significant component of behavior. We live in a world of meaningful stories (Bruner, 1986). Relating stories is a primary means by which external effects are made real and consequential for individuals and groups. Baumeister and Newman (1994, p. 676) argue,

> First, people interpret experiences relative to purposes, which may be either objective goals or subjective fulfillment states. Second, people seek value and justification by constructing stories that depict their actions and intentions as right and good. Third, people seek a sense

of efficacy by making stories that contain information about how to exert control. Fourth, people seek a sense of self-worth by making stories that portray themselves as attractive and competent.

It is through rebuilding the world in dynamic, sequential (and, implicitly, causal) fashion and then presenting that world to others that meaning is generated. Such sequential organization is best understood by examining it naturalistically, without reference to artificially constructed categories. Through qualitative data, the process as a whole is preserved. We lose something critical by ignoring the totality in examining the parts.

Weaknesses of Qualitative Data for Theory Building: Complexity and Specificity

While the above discussion suggests that qualitative data may allow social psychologists to produce theories that are more valid (i.e., more relevant, rich, and dynamic) than those grounded in experimental data alone, qualitative data also limits theory building. Researchers who rely on qualitative data as a sole basis for their theories may produce frameworks that are *highly complex and limited in breadth.* While Janesick (1994, p. 217) argues that, ''the value of the [qualitative] case study is its uniqueness,'' that uniqueness may be the product of a theory that is too specific and difficult to generalize.

First, theory solely based on qualitative data can be daunting in its complexity. Especially in a single-case study, it may be difficult for audiences to recognize when, where, and how such a theory can be applied and how the process described might unfold in other contexts. Second, even if relatively simple theories are developed from qualitative data, such theories are often specific to a setting and challenging to apply elsewhere (Strauss & Corbin, 1994). While multiple case studies are a remedy for the problem of scope (Eisenhardt, 1989; Noblit & Hare, 1988; Stake, 1994), the resulting theories may become complex as they become generalizable. As a result, one must integrate findings across cases rather than simply attending to the variables that explain the most variance (as might be done if quantitative data were used) (Mintzberg, 1979). The richness of qualitative data that leads to theories that are descriptive of the real world also produces theories that are notable for their complexity. Strauss and Corbin (1994, p. 279) note,

> Grounded theories are very ''fluid''. . . . Because they embrace the interaction of multiple actors, and because they emphasize temporality and process, they indeed have a striking fluidity. They call for exploration of each new situation to see *if* they fit, *how* they might fit, and how they *might not* fit. They demand an openness of the researcher, based on the ''forever'' provisional character of every theory.

INTEGRATING QUALITATIVE FIELD DATA WITH QUANTITATIVE LABORATORY DATA: THE BEST OF BOTH WORLDS?

Theory-building with qualitative data involves trade-offs. In particular, qualitative data provide some important trade-offs between the *accuracy* (i.e., conformity to truth), *simplicity* (i.e., ease of understanding or application), and *generalizability* (i.e., extension to new domains) of resulting theories (Weick, 1979).
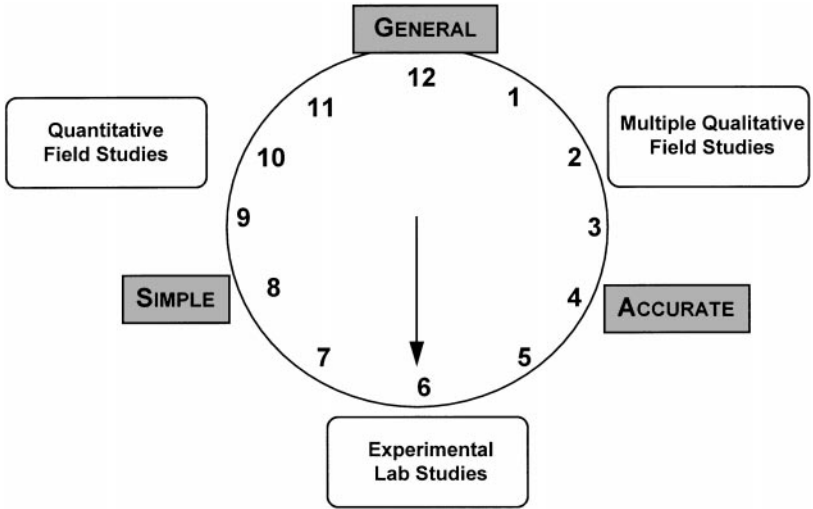
FIG. 1. Methodological trade-offs in theory building.

According to Thorngate's (1976) postulate of commensurate complexity, it is impossible for a theory in the behavioral sciences to be simultaneously general, accurate, and simple. The more simple and accurate a theory is, for example, the less generalizable it is likely to be in a variety of contexts. Weick (1979, p. 35) explains,

> To grasp the implications of this postulate, imagine the face of a clock. At twelve o'clock is inscribed the word general, at four o'clock is inscribed the word accurate, and at eight o'clock is inscribed the word simple. The mnemonic device to store away these observations is simply the word GAS. If we array this postulate across the face, we can see the dilemma inherent in any research. If you try to secure any two of the virtues of generality, accuracy, and simplicity, you automatically sacrifice the third one.

Experimental laboratory research might be categorized as 6 o'clock research, i.e., simple and accurate, but questionable in its generalizability. As Cialdini (1980, p. 23) notes, the most commonly used experimental data in social psychological research "allow us to capture phenomena without regard for their importance in the course of naturally occurring human behavior." By contrast, many quantitative field studies involving large data sets that use proxies to measure real-life phenomena (e.g., surveys to measure consumer confidence) might be categorized as 10 o'clock research, i.e., simple and generalizable but lacking in accuracy. Finally, as noted above, multiple qualitative case studies, involving in-depth interviews and observation of actors across several research sites [what Glaser and Strauss (1967) define as "grounded theory"], may provide theory that falls at 2 o'clock, accurate and potentially generalizable but excessively complex (single qualitative case studies fall at 4 o'clock—accurate but complex and specific). Following Thorngate, it appears that *any single method* of data collection (e.g.,

laboratory experiments, qualitative case studies, quantitative field studies) results in trade-offs in the resulting theory's simplicity, generalizability, and accuracy.

Weick (1979) suggests that the solution is not to search for a method that combines all three elements (accuracy, simplicity, and generalizability) but to build theory by alternating among sets of data that provide one or more of these elements or by incorporating the research of others who have data that complement one's own. As he puts it,

> If, for example, my style of scholarship falls at ten o'clock, then I should try especially hard to locate people at the four o'clock position, and I should be certain that I understand their work and maintain some contact with that work. Better still might be the solution in which I alternate my research style and systematically try to move among the various positions over the duration of a year or a career. (Weick, 1979, p. 41)

Cialdini (1980, p. 44) suggests that social psychologists should approach theory building by starting with hypothesis building through multiple, real-world observations (i.e., general and accurate data), proceeding to specific laboratory tests of those hypotheses (i.e., simple and accurate data), and, finally, cycling back to further real-world observations for refinement. He proposes that a ''full-cycle'' approach to theory building may ''reduce the extent to which current social psychological research can be criticized as artificial and epiphenomenal.''

Building on these suggestions, we propose that qualitative data may best serve social psychologists as part of a multimethod research design that integrates qualitative and quantitative data. Ethnographic data complement experimental data. By presenting compelling data, qualitative researchers can generate what Herbert Blumer (1969) speaks of as ''sensitizing concepts.'' These concepts, closer to lived experience, recursively provide insight that permits the generation of hypotheses that can be tested through experimental data. While the ability to generate constructs central to the development of testable hypotheses is not the only justification for qualitative data, it is one means by which qualitative and quantitative data can be integrated, incorporating data for purposes of triangulation (Fielding & Fielding, 1986).

To illustrate, we outline two approaches for integrating ethnographic data with experimental data. First, we discuss three recipes for theory building that sequentially combine qualitative field data and experimental laboratory data. These combined data approaches extend the full-cycle approach suggested by Cialdini and Weick. Second, we discuss three situations in which qualitative data may be merged with experimental data in the same research project. In these situations, one may be able to gather different kinds of data that simultaneously produce simple, accurate, and generalizable theory. These tactics for integrating ethnographic and experimental data are summarized in Table 1.

Sequencing Ethnographic Data and Experimental Data in Theory-Building

A vast body of existing literature describes how to design empirical research for theory testing, and a substantial (although smaller) literature describes how to

TABLE 1
Tactics for Combining Qualitative Field Data and Quantitative Lab Data in Social Psychological
Theory Building

Tactic	Illustrative example from classic social psychology	Strengths/weaknesses
Sequential tactics		

1. Fully involved participant observation followed by experimental test by same authors	Cialdini & Schroeder (1976)	Strength
		  Real world defines variables
		Weakness
		  Lab is poor proxy for real world

2. In-depth interviews followed by experimental test by separate author(s)	Schein (1956), Freedman & Fraser (1966)	Strength
		  Provides data about process
		Weakness
		  Separate authors not as close to data

3. Experimental test followed by systematic nonparticipant observation by same author(s)	Zimbardo (1969)	Strength
		  Provides process analysis of variables defined by lab
		Weakness
		  Lab results may bias observation

Merged tactics		

1. Combine quantitative and qualitative data from participants in contrived experimental settings	Milgram (1963)	Strength
		  Provides direct information about participant emotions & cognitions
		Weakness
		  May not generalize to nonlab settings

2. Combine quantitative and qualitative data from participants in loosely defined, field experiments	Sherif et al. (1953, 1961)	Strength
		  Allows analysis of group process
		Weakness
		  Experimental setting constrains and limits behavior of participants

3. Combine quantitative and qualitative data from "naturally" occurring field experiments	Festinger et al. (1956)	Strength
		  Naturally occurring data allows observation "in context"
		Weakness
		  Experimenter cannot control many variables, and important effects may not "happen" by chance

build empirically grounded theory. In social psychological research, this literature has emphasized qualitative field studies for theory building (Glaser & Strauss, 1967) and laboratory experiments for theory testing (Campbell & Stanley, 1963). Advancing conceptual understanding requires more than selecting either induction or deduction. As noted, Weick (1979) and Cialdini (1980) suggest that cycles of induction and deduction help develop theory that is reliable, valid, and clear.

Cycling between induction and deduction is important to social psychological theory building in at least two ways. First, cycling encourages both expansion and refinement of theory. Much as a still-life artist alternates between ''painting out'' (expanding the boundaries of an object) and ''painting in'' (reestablishing the edge of an object), inductive/deductive cycles in theory building allow us to refine or redefine the core of a working framework (e.g., the idea that public commitments may affect one's self-perceptions and future actions) while extending its perimeter (e.g., examining how public commitments that are symbolic vs substantive affect self-perceptions). Further, inductive/deductive cycles help determine which peripheral ideas strengthen the core and which constitute new branches of inquiry.

Second, cycling emphasizes the dynamic character of social systems. Organizational theorists, for example, increasingly take the perspective that social groups are dynamic, open systems, constantly in flux and affecting and affected by the external environment (Scott, 1981). As a consequence, using static ''snapshots'' of such a group increases the chance that scholars will ''tinker with the wrong things, destroy natural controls that are in place, and basically meddle the organization into a mess . . . insensitivity to process promotes the destruction of deviation—counteracting causal relationships'' (Weick, 1979, p. 43). Using cycles of induction and deduction to examine systems in flux is more likely to capture the changing nature of social groups than research that uses only one of these tactics.

Despite the apparent benefits of cyclical theory building in the social sciences, few published studies have made explicit how phases of induction and deduction have been linked and even fewer present prescriptions for those who wish to link these phases. One exception is Cialdini's (1980) insightful essay on full-cycle social psychology, rarely cited in social science journals. In the following section, we develop a set of tactics, or ''recipes,'' for combining phases of inductive qualitative ethnography and deductive quantitative experiments. In doing so, we provide guidance and encouragement for ''full cycle'' research.

To provide the most well-rounded theory when cycling between inductive and deductive data, we propose that one should choose inductive data that provide general and accurate theory and deductive data that provide simple and accurate theory. Based on this logic, cycling between qualitative, inductive data (e.g., information about individuals' displayed behavior, sense-making, and emotions revealed in in-depth interviews or real-life activities) and quantitative, deductive, experimental data (e.g., quantifiable differences between individuals' stated preferences or opinions in response to a variety of fabricated situations or

role-playing exercises) will lead to theory that is simple, accurate, and generalizable.

Qualitative observation and in-depth interviews have gained popularity as reality checks on quantitative proxies for real-life phenomena (Locke & Golden-Biddle, 1996). Becker (1993) notes that qualitative research is distinct from such forms of quantitative inquiry because, among other things, qualitative strategies analyze phenomena from the individual's perspective and secure richer descriptions of the social world than do quantitative researchers relying on "remote, inferential empirical materials" (Denzin & Lincoln, 1994, p. 5).

In contrast, traditional laboratory research is a reliable method of testing hypotheses and settling disputes among competing theories. As Campbell and Stanley (1963, p. 3) note in their classic handbook on experimental design, "experimentation [is] the basic language of proof, as the only decision court for disagreement between rival theories." Because of their usefulness in controlling for extraneous influences and actively manipulating independent variables in social settings, experimental data are widely used for testing social psychological hypotheses (Brown & Melamed, 1990).

In the following sections, we discuss three tactics for sequentially combining ethnographic data with experimental data. Specifically we examine (1) personal involvement in a naturally occurring event followed by an experimental test, (2) in-depth interviewing of participants in a naturally occurring event followed by an experimental test, and (3) an experimental test followed by observation of natural contexts to validate findings. We illustrate each tactic with a "classic" social psychological study.

Qualitative hypothesis-building based on personal involvement followed by experimental test of hypothesis. Frequently, social psychologists are inspired by personal observations of social processes in everyday life to generate testable hypotheses. Lyn Lofland reports,

> For the past twenty years the "vantage point" when I'm doing direct observation has continued to be constant. Since I'm "passing" as someone who is simply hanging about in public, I get engaged by others in interaction, though I have rarely initiated it myself. . . . A lot of my data have come from situations in which I was out in public for non-research purposes. That is, I watch myself acting in public and note what I do and what others do vis-a-vis me, just as if I were someone else. So, I guess you could say that I move from being the largely uninvolved observer to the fully involved participant observer. . . . Obviously, I don't take myself as a stand-in for "everywoman," but neither do I think my reactions are likely to be that peculiar. (Adler & Adler, 1994, p. 379)

While the initial field "insight" that characterizes such studies should be differentiated from the more formal expectations of qualitative methodologies, as Lofland notes above, this insight often leads to more rigorous, "fully involved" participant observation. It would not be far from the mark to claim that much experimental research has its origin in the life-world of the researcher. In one sense, people live their lives as "participant observers"; how could they not? The

self-reflective social psychologist builds on these experiences, considering them as representative of the experiences of others.

The effectiveness of this tactic is illustrated by a series of papers by Robert Cialdini and his colleagues (see Cialdini, 1980, for a review). Like Lofland, Cialdini and his coauthors analyzed their own experiences of social influence and power in their inductive theory building. In one study, Cialdini was struck by the efficacy of requests for paltry contributions in acquiring large donations. His experience in giving a large donation to a United Way solicitor only after hearing the plea ''even a penny will help'' was the qualitative ''event'' that led to his theory that small requests legitimated larger requests. Based on this event, he and his colleagues developed a theory describing the self-presentation pressures put on target individuals by paltry requests.

The qualitative analysis that led to this theory was notable in two ways. First, it relied on observation and interaction in public spaces as well as on participation in social life. This information allowed the researchers to note what actually happened in contrast to what reasonable people might expect to happen. From a single event, they systematically noted similar events. Although a deeper appreciation of social influence could have been learned through more intensive participant observation as a solicitor or through in-depth interviews, this case demonstrates the potential of using thoughtfully observed events to generate testable hypotheses. Second, the theory relied relatively little on previous examinations of social behavior. Instead, the authors built their framework upon common experiences rather than on laboratory findings. This inductive process increased the likelihood that the theory was an accurate description of the social experience (Glaser & Strauss, 1967).

After they generated hypotheses, the authors explored their qualitatively induced claims through controlled experiments. Cialdini and Schroeder (1976) carried out a set of field experiments to test their observations about the effectiveness of paltry requests and to test the validity of two competing explanations (i.e., people gave money because they were image conscious or because they perceived a greater need when they believed that ''only a penny will help''). Although these experiments were not exact replications of natural settings, they helped the researchers isolate the effects of different independent variables (e.g., the need to legitimate one's image vs the desire to behave rationally) that could not be examined in their qualitative inquiry. Results supported the legitimation hypothesis and not the social need hypothesis. In this way, Cialdini and Schroeder's hypothesis testing not only confirmed parts of the proposed theory, but also disconfirmed alternate explanations and simplified the theory that was ultimately presented.

Qualitative hypothesis-building based on in-depth interviews followed by experimental test of the hypotheses. This sequence is found in several classic social psychological studies. Yet, rather than treated by the same author in a single paper, this sequence of qualitative theory building and experimental theory testing has typically been carried out in a sequence of studies by different authors. The

qualitative theory building phase often is based on in-depth interviewing that focuses on a recent or ongoing social psychological "event" (e.g., a political decision, a leadership succession, an organizational scandal, or a human trauma). For example, Schein's (1956) study of the brainwashing of American prisoners of war relied on intensive interviewing and informal discussions, or "bull sessions," with soldiers immediately following their POW experience. The interviews were actually performed on the USNS "General Black" during the soldiers' transit back to the United States. Schein (1956, p. 149) asserts,

> . . . intensive interviewing was felt to be preferable [to other objective psychological tests] for gathering data . . . because the material to be obtained was highly novel, and because the men had been through a highly traumatic situation which might make the eliciting of any information very difficult. It was also recognized that the men might find it difficult to remember, might be reluctant to relate certain experiences, and might retrospectively falsify many events.

In-depth interviews led to a highly detailed process model (vs a variance model) describing a social psychological phenomenon (Mohr, 1982). Schien's study suggested that a process that involved a pacing of demands from small to great was important in changing prisoners' self-perceptions and stated beliefs. This process orientation is made possible by collecting data in "real time" or by having interviewees recreate the sequence of events after the fact. In the case of Schein's (1956) brainwashing study, a composite verification of process by many informants insured that the reported sequences were valid. This focus on social psychological process is a clear benefit of in-depth interviewing or observation.

In the second part of this sequence, the theory that arises from in-depth interviewing is tested by separate authors in later papers. Schein's research was directly tested in a set of experiments on the "foot-in-the-door technique" (i.e., if a person complies with a small request, he or she is likely to also comply with a subsequent larger request). Freedman and Fraser (1966) noted that Schein's study of Korean brainwashing tactics supported the notion of a "foot-in-the-door" concept but did not provide a rigorous test. Their work, by contrast, attempted to test the notion directly and in several different contexts. As they put it,

> One assumption about compliance that has often been made either explicitly or implicitly is that once a person has been induced to comply with a small request he is more likely to comply with a larger demand. This is the principle that is commonly referred to as the foot-in-the-door or gradation technique and is reflected in the saying that if you "give them an inch, they'll take a mile." It was, for example, supposed to be one of the basic techniques upon which the Korean brainwashing tactics were based. . . . The present research attempted to provide a rigorous, more direct test of this notion as it applies to compliance and to provide data relevant to several alternative ways of explaining the effect. (Freedman & Fraser, 1966, p. 196)

Although these authors lacked the first-hand contact with the data that grounded the theories, they isolated specific independent variables that were reported to

have significant impacts on the observed processes and examined their effects on a dependent variable. Freedman and Fraser (1966) found that the foot-in-the-door technique worked even if the second, larger request was made by someone other than the one who made the initial request and even if the second request was about a different issue. Although they did not test the entire theory of social process developed through qualitative analysis, they manipulated and tested the effects of a few crucial variables. In these sequences, a further cycling back to the field (that may include observations as well as interviews) can reexamine the process, focusing on the variables shown to be important as a result of experimental tests. As Cialdini (1980, p. 43) concludes,

> Natural observation should not be restricted to the beginnings of the research venture; it should be used as well to complete the final arc in the circle. That is, naturally occurring instances should be employed not only to identify effects suitable for experimental study but also to check on the validity of the findings from that experimentation.

Experimental test of hypotheses followed by systematic observation to validate hypotheses. This sequence is hard to find in a single paper and, in fact, constitutes the second and third parts of Cialdini's full-cycle social psychology. In cases where this sequence is found in a single paper, it usually follows some early theory building based on naturally occurring events. The full-cycle (i.e., qualitative event, experimental test, qualitative field study) is often completed by this strategy.

Zimbardo's (1969) experiments on deindividuation provide a compelling illustration of this sequence. He begins with a set of observations about violence, riots, and collective behavior from mass media reports. Based on these events, he develops a qualitative, working framework describing the processes of deindividuation in groups. He then tests parts of this framework in a set of experiments on anonymity and aggression with both college students and Belgian soldiers (Zimbardo, 1969). The outcomes of these experiments verified some of his general hypotheses about anonymity and aggression (e.g., they demonstrated how being unidentifiable in a situation in which aggressive acts appear normative may cause individuals to feel deindividuated and uninhibited in joining in aggressive acts). Yet, the controlled nature of the experimental data also left several questions unanswered and, in some cases, prompted him to consider other variables that could affect the process of deindividuation. Zimbardo (1969, p. 279) reflected,

> The situation and tasks were all very structured, intellectual, and cognitive. To obtain a precise dependent measure, we recorded [aggressive behavior] in a series of fixed duration trials. However, fixed, discrete trials impose constraints on the "release" of any behavior and make spontaneous, impulsive behavior impossible. . . . Because we wanted to study individual behavior in a social context rather than group behavior, no group interaction was allowed. Thus, we cut off all potential for "behavioral contagion" (the major concept linking individual processes of deindividuation to mass action, as occurs in riots and orgies) (cf. Wheeler, 1966). The omnipresence of a rational, responsible member of the establishment (the experimenter) also probably had an inhibiting effect upon impulsive aggression.

In response to these shortcomings, Zimbardo sought naturally occurring occasions "to demonstrate that the aggression observed under our contrived laboratory conditions of anonymity or unidentifiability is really a genuine phenomena of the human condition" (Zimbardo, 1969, p. 282). He engaged in a textual analysis of recent media reports examining aggressive acts in the real world. Zimbardo concluded that vandalism was the "prototype" of aggressive behavior committed under conditions of anonymity (Zimbardo, 1969, p. 282). He drew on his own experience in observing the vandalism of parked cars in New York City. Based on this experience and qualitative data, he began to refine his theory of anonymity and aggression to include a set of six distinct stages by examining vandalism, including its spontaneous and impulsive qualities. His return to qualitative inquiry helped verify his earlier experimental findings and refine his theory of deindividuation.

Because his initial laboratory findings may have biased his field observations, Zimbardo conducted a field experiment (observing reactions of passersby to an abandoned automobile) to test his six-stage theory of vandalism and to "observe in a more systematic fashion who are the vandals and what are the conditions associated with their acts of vandalism" (Zimbardo, 1969, p. 287). His exemplary cycling between qualitative theory building and experimental theory testing continued into a second full round.

The above tactics for sequentially combining qualitative theory building and experimental theory testing in social psychological research demonstrate how scholars may reintegrate such data into their inquiry. While it is surely true that social psychologists do not employ qualitative research as extensively as sociologists, these attempts indicate the potential use of such methodologies within a context of theory development. If more casual than what might be accepted in other research traditions, the fundamental premise that insight results from close observation of the natural world is present.

Merging Qualitative Field Data and Quantitative Experimental Data in Theory Building

Although quantitative and qualitative research often have been posed as antithetical, experimenters do, in fact, create or choose settings that can be examined qualitatively as well as quantitatively. In such research in experimental settings, one can simultaneously gather quantitative measures (such as responses on attitude scales, sociometric ratings, or observations of measurable behavior) while bolstering understanding of the quantitative variables with an analysis of the rich, detailed data that characterize qualitative research (such as extracts from interviews or narrative accounts of naturally occurring behavior). A situation can contain both qualitative and quantitative data, and both can be used to generate theory in the same project.

We argue that combining or merging qualitative and quantitative data collected from the same situation may lead to theory building that is enriched in its attention to accuracy, simplicity, and generalizability. In the following sections, we de-

scribe three tactics for theory building that merge qualitative and quantitative data from experimental situations. These tactics involve merging qualitative and quantitative data from (1) laboratory experiments, (2) field observations with independent variables arranged and manipulated by the experimenter, and (3) field observations with naturally occurring independent variables.[3] The tactics differ according to the power of the experimenter/observer to set the conditions of the situation.

Theory-building through "repeated ethnographies" in a laboratory experiment. Controlled, fabricated experiments are marked by a critical difference that separates them from many other situations: the existence of a fabricator (Goffman, 1974, p. 73). The experimental social psychologist must—as a *sine qua non* of the experimental method—create a meaningful situation, as a playwright might, with the scenery set, the actors employed, and the lines scripted, and, like the playwright, gets to see the scenes so created played over and over again.[4] The experimenter sets the terms of the encounter (Couch, 1984) and, because of the ability to replicate the encounter, is able to determine the effects of the setting on individual behavior. The strength of this methodology is that the constructed scene is repeated at will, creating both qualitative and quantitative knowledge.

Constructed experimental settings that often involve deceiving participants, a fleeting time period, and the use of artificial tasks have been treated as fundamentally distinct from "natural interaction."[5] Perhaps because these settings have been seen as so distinct from the "real world," the qualitative data produced by them have not been central in social psychological theory building. The worlds that experimental social psychologists create have been treated as so contrived

[3] In some degree social psychologists use these "merged methods" but typically casually and occasionally. Qualitative research is rarely incorporated in a systematic way in experimental research. Perhaps most common is the occasional use of "verbal protocols," but these techniques typically are used to support statistical points rather than to generate theory.

[4] Like any "play," social psychological experiments require tryouts or previews (labeled "pilot testing") to insure that the script is plausible. In some cases experiments do not produce the desired results, and, as a result, researchers must tinker with the scene. Although researchers often do not report these "failures," such reporting would permit readers to learn what revision in the participants' understanding of the situation generated the significant results.

[5] Experiments are often, although not always, set within the confines of university laboratories or classrooms. These places are physically real and, more than that, have norms and expectations associated with them. The "laboratory" has meaning for participants. Individuals entering a psychological laboratory attempt to make sense of it, just as they do anywhere else (Goffman, 1974). The behavior found in laboratories can be analyzed in light of situational meanings, as can all behavior "in the real world." Participants may have past experiences that they can draw upon, have read or heard dramatic accounts of laboratory life, or have been explained something about their rights and responsibilities. Group experiments have their own shared reality, including a recalled past, an immediate present, and a prospective future (Maines, Sugrue, & Katovich, 1983), producing a group culture or "idioculture" (Fine, 1987, p. 125). Further, because of the importance of the authority of the researcher, the experiment is not so different from occasions in which clients enter spaces controlled by those who process and control them (medical offices, police stations), and because laboratory experiments typically involve strangers in brief and constrained interactions, they can be likened to urban encounters and commercial transactions.

that the specifics of the behavior have little bearing on more routine social activity. This need not be the case. We argue that laboratory experiments do generate behavior that can be interpreted qualitatively. This behavior, like all behavior, results from inferred meanings, expectations, norms, and values. The rules of social interaction, described in detail by sociologists, are not repealed just because a participant enters a ''laboratory.'' While experimental social psychologists have typically used these descriptions only to add dramatic color to the statistical discussion, such a choice is not inevitable. Descriptions and analyses of social interaction in a laboratory can be effectively merged with numerical dependent variables to understand the situational meanings of participants and can aid in the development of theory. Specifically, social psychologists can use the virtue of the experiment in producing a set of identical situations to treat each instance as an ethnographic opportunity, thus employing the tactic of ''repeated ethnographies.''

While numerous studies might be used as examples, we select Stanley Milgram's (1974) Obedience Study: a methodologically sophisticated set of experiments in which Milgram continually altered the structural conditions of the setting to examine their effects (e.g., proximity of experimenters or victims on the behavior of participants). We are fortunate that, because of the fame (or infamy) of this study of the ''effects of punishment on learning,'' Milgram was inspired to write a full-length book. Perhaps as a consequence of its audience, the volume is filled with dramatic qualitative ''field'' data, taken from transcripts of laboratory interaction. For participants, the situation was ''gripping'' (Milgram, 1974, p. 4, see p. 33). In the experiment, a participant was required to give ''dangerous'' shocks to a confederate whenever the confederate gave an incorrect answer in a learning experiment, even after the confederate complained about a heart condition, screamed in pain, and no longer responded. The key dependent measure was whether the ''teacher'' continued to give shocks or at what shock level he or she rebelled. If this was not a natural event, the accounts reveal that participants believed that it was ''real.'' The power of Milgram's conclusions depended on the fact that participants responded.

Milgram (1974, p. xii) insists that his theory building stems from the similarity of his laboratory to other realms: ''The laboratory problem is vivid, intense, and real. It is not something apart from life, but carries to an extreme and very logical conclusion certain trends inherent in the ordinary functioning of the social world.'' As a result, examining the details of the behavior of participants is analytically significant. As Milgram (1974, pp. 44–45) asserts, justifying the inclusion of observations and extensive dialogues, ''the quality of each person's experience gives us clues to the nature of the process of deliberation.'' Milgram recognizes that the qualitative data are not merely dramatic evidence of statistical findings, but that the data help readers understand the process of obedience. If these participants are ''naive'' about the experimental design, they are sophisticated in wrestling with an ethically challenging setting in which they must simultaneously obey and separate themselves; the standard dependent variables

do not permit an examination of their deliberation. Milgram (1974, pp. 10, 47) notes that participants utilized accounts, appeals, and role distance to manage their self-presentations, alternately blaming the victim and the experimenter and striving to preserve an unblemished self-image, claiming, for instance, that the participant "was so stupid and stubborn he deserved to be shocked" or that "I was paid for doing this. I had to follow orders." The study is not only about whether and under what circumstances people obey authority (the statistical dependent measures); it is also about how one presents oneself as a moral social actor. From reading the transcripts that Milgram provides, it is evident that parties to the experiment adjusted their behavior to the claims of others, their rights and responsibilities, and their brief shared history, attempting to balance the demands of the experimenter and the participant, as when one comments plaintively, "I don't understand why the experiment is placed above this person's life" (Milgram, 1974, p. 48). These are individuals struggling to make sense of a particular situation—a situation that seems to have gone terribly awry.

As a tactic of theory building, Milgram organized a meaningful situation that he was able to replicate at will. In effect, Milgram's "experiment" consists of repeated "ethnographies." Although qualitative research has been criticized because the situations appear unique and idiosyncratic, analyzing experimental situations qualitatively permits comparative analysis of this behavior. With so many similar "situations," it becomes possible to understand the public performance of emotions (Shott, 1979), the display of accounts for malfeasance, and strategies of collusion and deception. These are processes that occur in numerous situations and, because of their broad applicability, constitute what sociologists term "generic processes" (Couch, 1987; Couch & Weiland, 1986).

We do not claim that Milgram defined himself as a ethnographer or even that he treated his transcripts as "part" of his experiment; still, in making his powerful argument, Milgram frequently relied on the detailed behavior of participants to build theory, providing plausible explanations for his "shocking" findings. Just as participants' quantitative responses are ordered and consistent, so too is other behavior. Even though these are fabricated situations, artificial in how they were established, the responses of participants make them meaningful, analyzable in their own terms. Milgram (1974, p. 13) notes that simplicity is key to scientific inquiry. His dependent measures strip situations to their cores; however, he recognizes that in order to make his case it is necessary to present qualitative accounts of the actions and responses of participants. Milgram (1974, p. xii) attempts to construct "a situation that constructs the essence of obedience"—a situation that must be known in its general dimensions and its specific behavior. These data give insight in the process of "real" obedience, demonstrating that the participants acted out of a desire to uphold a legitimate moral order and not from personal aggression.

Theory-building through triangulation of qualitative and quantitative data in a field experiment. A second tactic to combine qualitative and quantitative data involves using a naturalistic field experiment to generate theory. While experiment-

ers fabricate situations in natural situations (in the "field"), once the independent variables have been set, the researcher typically does not provide detailed scripts; rather he or she permits events to play out, observing individual and group behavior. In such situations, researchers can triangulate the data (Fielding & Fielding, 1986), using the findings from qualitative and quantitative measures to help specify the other.

Although a distinguished tradition of field experimentation exists in social psychology, many studies downplay the actions and remarks of participants, merely using the natural setting as a location in which dependent measures can be gathered and ignoring the meanings of participants. In contrast, we describe the profound examination of intergroup competition and cooperation conducted by Muzafer Sherif and his colleagues, a study known as the Robbers' Cave Experiment (Sherif et al., 1961; see also Sherif et al., 1953). Sherif and his colleagues (1961, p. ix) wished to transcend what they saw as an artificial boundary between unwieldy naturalistic observations of everyday groups and experimental rigor that lacked validity. In this study, the experimenters created summer camps for rival groups of preadolescent boys, providing an arena for experiment and ethnography. Using the technique qualitative researchers term "triangulation," they searched for parallels in data produced by multiple methodologies (Fielding & Fielding, 1986). While the structure of the camp was set by the researchers (e.g., the times when the two groups of campers would meet and the problems that they would encounter), the researchers were enjoined to engage in extensive participant observation (almost 500 h in total), influencing group behavior as little as possible and focusing on behavior that recurred (Sherif et al., 1961, pp. x, 57, 73).

The researchers were focused on the structure of group competition and cooperation. As a result, they carefully observed how the boys created group structure; how they responded to an external, competitive group; how the groups learned to work together after encountering a set of crises; and, eventually, how the boys formed an integrated group. By setting tasks for their preadolescent charges, Sherif and his colleagues examined how intergroup hostility—over resources and status—developed and how such hostility could be transcended—by establishing superordinate goals. The researchers created a set of hypotheses and in most instances collected both quantitative and qualitative data as part of the test of these hypotheses. The quantitative measures demonstrated the robustness of the findings, while the qualitative data, as in the Milgram experiment, provided explanations for the process. For instance, quantitative data demonstrated that in-group/out-group membership had a strong effect on estimations of success, while the qualitative data demonstrated that the effects operated through boundary maintenance, in-group sociometric structure, and establishment of collective meanings (Sherif et al., 1961, pp. 69–95).

The Robbers' Cave Experiment transcends the usual divisions between experimental and ethnographic research in that the collection and presentation of qualitative data equals the statistical measures in importance. Sherif and his colleagues (1961, p. 204) emphasize the importance of a "combination of

methods,'' using ''participant observers'' to take field notes, while emphasizing that the ''activities and the interaction in [the setting] were *experimental.*'' While they used no control groups as such, the conditions of interaction for the groups (isolation, pressure to compete, and the need to cooperate) serve, in effect, as independent variables. The responses of the boys (stereotype ratings, friendship choices, judgments of performances) are quantitative-dependent measures. At the same time, the outcome measures of the experiment also included details of the cultural life of the boys, such as nicknames the boys established to identify their groups and insults used to denigrate the others. The power of the analysis derives from the fact that one can simultaneously see the boys' reactions to the camp structure through objective measures and through cultural responses. The tactic of triangulating one's findings using quantitative and qualitative data provides confidence in the reliability of the conclusions and confidence in their validity.

In this experimental field setting, the behavior of participants is less constrained than in Milgram's laboratory. Sherif's preadolescents made the experimental setting their own by establishing expectations, norms, feeling rules, a status system, and a robust group culture. Participants became a ''natural'' group. Even though they did not create the setting and were somewhat constrained in their behavior, the meanings they created were central to understanding conflict and cooperation.

Theory-building through transforming qualitative data collected in ethnographic research into an experimental test. On occasion, experimenters participate actively in an ongoing social situation, taking whatever opportunities are available to test deductive hypotheses by categorizing qualitative data. Although psychological social psychologists have not often ventured into natural field situations as participant observers, a few studies indicate that participant observation is compatible with hypothesis testing. Perhaps the most remarkable study of this type is the classic field study of Leon Festinger, Henry Riecken, and Stanley Schachter (1956), detailed in the book *When Prophecy Fails.* While this book led to much experimental research on dissonance theory, and thus the research project involved sequential data, the study also involved merged data. This classic social psychological study may seem an odd choice to demonstrate the merging of quantitative and qualitative data in that no statistical information is presented.[6] The *quantitative* data seemingly have been overlooked. Yet, if one includes nominal variables as ''quantitative'' in which a response is present or absent, then this study, as we discuss below, designed to be deductive hypothesis testing can be considered as involving quantitative as well as qualitative data. In other words, the researchers, in effect, used the tactic of transforming qualitative observations

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[6] Some sociological ethnographies, such as William Foote Whyte's (1943) *Street Corner Society* and Howard Becker et al.'s (1961) *Boys in White,* use statistical measures to test hypotheses. In the former instance, the role of group status on performance, and in the latter, the effects of years of training on the fate of idealism of medical students. We select this social psychological study since it is so widely known to readers of this journal.

into "quantitative" measures that tested their theory, examining the proportion of those they observed who behaved in ways that the hypothesis predicted.

The goal of the research was to observe the unconstrained, unscripted character of the interaction of a group that believed in a millennial prophecy, testing the effects of belief disconfirmation on subsequent belief and group loyalty. Specifically Festinger et al. (1956, p. 216) argued that under specified conditions increased proselytizing should occur after belief disconfirmation. These conditions included (1) conviction, (2) commitment to the conviction, and (3) social support under conditions of disconfirmation.

Through participant observation, largely conducted by five collaborators, Festinger, Riecken, and Schachter explored the effects of a millennial prophecy concerning the end of the world and a visit by space aliens, held by a small group of Chicago-based believers called "The Seekers." The continued existence of the world after the date of the prophecy allowed the researchers to examine a set of behavioral dependent variables, notably the continued proselytizing by some members after the disconfirmation. They discovered that those members of the group that were clearly convinced of the prophecy, those that had made public commitments (and took action to put their lives in order in preparation for the world's end), and those who had social support through continued participation in the group did reveal increased commitment, and this was not the case with those who did not fall in these categories. One can think of these conditions as naturally occurring independent variables and the subsequent proselytizing behavior of participants as dependent variables, testing dissonance theory in a natural setting. Persons would either reveal the dependent variable or not and would, thus, in effect provide a quantitative measure of the hypothesis, as the researchers coded their notes into the presence or absence of the hypothesized behavior. The qualitative information, providing the rich details of decision making in the context of a deviant belief system, helps readers understand the process by which these conditions have their effects.

Festinger et al. (1956, p. 249) recognized that in this setting they were "unable to rely on the standard array of technical tools of social psychology" and so hoped "to collect enough information to tell a coherent story," noting that "fortunately, the effects of disconfirmation were striking enough to provide for firm conclusions." Though these research tactics are distinct methodologically from laboratory research, their innovative study indicates that it is possible to "test" hypotheses by observing natural interaction, particularly when the independent variables are powerful. Although the absence of experimental control challenges standard tactics of hypothesis testing, the behaviors of participants are predictable.

CONCLUSION

In this article, we present possibilities for incorporating qualitative data in social psychological theory building, deliberately addressing a skeptical audience. Scholars are understandably wedded to methodologies that have served

them well, those in which they have been trained and those with the imprimatur of disciplinary approval. Though the use of qualitative data has become accepted across much of the social sciences, this has not occurred in psychological social psychology. Yet, as social psychologists ourselves and as practitioners of qualitative research, we believe that such alternative approaches have had and will have benefits if used more widely. We are not making the radical charge that experimental methodologies lack value; rather, we claim that a broader array of tools permits problems to be approached from multiple perspectives.

Qualitative data can and should be integrated into social psychological theory building. We have shown how qualitative data can be used in sequence with experimental data as a method of cycling between inductive theory building and deductive theory testing. Further, we argue that one can transform how one views experimental situations so that qualitative data become relevant, defining the seeming artificiality of the psychological laboratory as a "real-world" setting: that of the psychological laboratory. This claim suggests that all human behavior has a naturalistic ethos. The preceding discussion of sequential and merged tactics for integrating ethnographic data with traditional experimental data provides a framework for theory building that answers the call for a "full-cycle" approach to social psychological research (Cialdini, 1980). Just as qualitative data have come of age in sociology, anthropology, organizational behavior, education, nursing, and political science, psychological social psychology can benefit from expanding its methodological arsenal. Through qualitative data, researchers can discover the multiple ways in which cognition (expressed, as it always is, in talk and action), emotion, and shared meaning can be integrated into a better understanding of human behavior.

Every methodological choice involves benefits and trade-offs. The trade-offs involved in qualitative research will surely be evident to most experimenters. Still, using the power of this approach to extend the validity of social psychological theory is no small benefit. It is true that the devil is in the details, but, then, so are the angels.

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