CS 504 845

ED 253 906

AUTHOR TITLE

PUB DATE

PUB TYPE

EDRS PRICE DESCRIPTORS

Gordon, Ronald D.
Ethics of Communications Research: (I) Treatment of Research Participants (Including the Role of Deception); (II) Responsibility to Society.
Feb 85

Teb 85 35p.; Paper presented at the Annual Meeting of the Western Speech Communication Association (Fresno, CA, February 16-19, 1985). Viewpoints (120) -- Speeches/Conference Papers (150)

MF01/PC02 Plus Postage.
Codes of Ethics; *Communication Research; *Ethics;
Experimenter Characteristics; Researchers; Research
Methodology; *Research Needs; *Research Problems;
"Speech Communication

ABSTRACT

In exploring the role and status of the ethics that govern communication research, the two parts of this paper examine the practices of researchers and the role of deception in their methodology and conclusions, and the role of communication research as whole to the society that it is supposed to benefit. At the end derboth discussions are summary lists of recommendations for the profession. The 22. recommendations include the following: (1) there should be more research on the ethical practices of communication researchers; (2) researchers who decry the deception in the practice of research should develop and express these views in some publiq forum; (3) a course in the ethics of social science research should be required of all aspiring researchers; (4) a panel should meet N annually to discuss ethical problems encountered during the previous year in communication research; (5) the term "subjects" should be replaced with the term "participants"; (6) research methodologies should be developed that embody sound communication principles; (7) there should be efforts to summarize and synthesize the existing knowledge in the field, and to articulate explicitly the practical implications of that knowledge; (8) there should be an additional section in research reports that identifies the practical implications of the findings; (9) standards of relevance should be developed by which to assess research efforts; (10) career advancement within a university should be based not on quantity of publications but on quality and relevance; and (11) there should be training for young researchers in multimethod approaches within single studies. (HTH)

U.S. DEPARTMENT OF EDUCATION NATIONAL INSTITUTE OF EDUCATION EDUCATIONAL RESOURCES INFORMATION

CENTER (ERIC)

This, document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality;
- Points of view or opinions stated in this accument do not necessarily represent ufficial (VIE position or policy

ETHICS OF COMMUNICATION RESEARCH:

- I. Treatment of Research Participants (Including the Role of Deception)
- II. Responsibility to Society

Ronald D. Gordon, Ph.D.
The College of Arts and Sciences
Speech Discipline
The University of Hawaii, Hilo
HI. 96720

Prepared for the Annual Convention of the Western Speech Communication Association

February 16-19, 1985

Fresno, California

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Ronald D. Gordon

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC):

2

ETHICS OF COMMUNICATION RESEARCH:

TREATMENT OF RESEARCH PARTICIPANTS,
AND RESPONSIBILITY TO SOCIETY.

Abstract

Twenty-two recommendations are advanced, three of the more major as follows: (1) We need to more fully research the ethical practices of communication researchers (2) We need to develop research methodologies that embody sound two-way communication principles and that could be introduced to the social sciences in general (3) We need to develop criteria for assessing the relevance of our research to human needs.

Reese and Fremouw (1984) have classified ethics in the behavioral sciences into three main categories: (1) ethics of the collection and analysis of data, (2) ethics of the treatment of research participants, and (3) ethics of responsibility to society. The first of these categories deals with such matters as a researcher eliminating troublesome data from a research report; or inventing data that do not in fact exist. While it has been suggested that unethical behaviors of this variety are perhaps more common in science than we would like to believe (Gould, 1978), this category will not be our concern here. Thoughts will be offered on the second and third categories, the ethics of the treatment of research participants and the ethics of responsibility to society, within the context of human communication research.

I. Treatment of Research Participants

Under this category I have been invited by Professor Todd-Mancillas to especially address my thoughts to the role of "deception" in communication research.

This I will do, along with sharing thoughts on our relationship with research participants in general.

Deception. The term "deception" is usually used to mean either the deliberate withholding of significant information, or the providing of misinformation to one's research participants, or both (Reese and Fremouw, 1984). Interestingly, little is known about the role of deception in speech communication research. In a recent search of DIALOG (PSYCINFO and ERIC) databases combining the descriptors "Deception," "Research Ethics," "Moral Responsibility," "Experimental Ethics," "Social Responsibility" with "Speech" and "Communication," only two references were located that clearly attended to deception and broader ethical issues in communication research

(Gordon, 1983; Hochheimer, 1983). Only a few additional relevant references were located through other sources, essentially within the intercultural research context (e.g., Asuncion-Lande, 1979). Many studies were located that have examined, on the other hand, deception in human communication in general. Data have been gathered, for instance, identifying the cues that receivers use to detect message sources' deceptions, including pitch changes, word choices, speech errors, talk time, rate of speech, response lateacy, leg and foot and hand movements, postural lean and shifts, eye contact, and smiling (Hopper and Bell, 1984). When it comes to examining our own use of deception within the research context itself, however, it would not be an overstatement to say that we have for the most part ignored such inquiry.

Why have we avoided discussion and examination of the role of deception in the relationship between communication researchers and the participants in this research?

It may be that we have so taken for granted the seeming necessity of deception in our research that we have nothing to say on the matter. Indeed, nearly 70 percent of the communication researchers in one small (N=80) survey believed that misleading or misinforming subjects is acceptable behavior in an experimental context, when debriefing occurs afterwards. Only 14 percent of the respondents believed that such deceptive practices are not acceptable. Further, 55 percent of these respondents said that communication research does not depend too heavily on deception, while 31 percent expressed neutrality, and only 14 percent believed that our research overuses deceptive practices (Gordon, 1983).

Let's face it, we live in a world of deception, a world of "white lies."

In one study, 45 percent of U.S. TV viewers said they think most or all TV advertising is deceptive (Boddewyn & Martin, 1978). In a study of deception in natural conversation, respondents considered about 60 percent of their own statements to

be deceptive (Turner, Edgely, and Olmstead, 1975). It is not surprising that in a "white lie world" our researchers, and our research participants (Gerdes, 1979), might come to accept deception as a necessary part of life, especially when perceived as being in the service of a greater good.

Additionally, our research topics are perhaps less volatile than many of those in sister disciplines, and this might have minimized our perception of the need for self-scrutiny from the perspective of ethics.

Further, the lack of focus upon ethical considerations within our field might be owing to the probability that few communication researchers themselves have had extensive coursework in ethical issues in social science research. Detecting potential ethical issues is in part an acquired skill that graduate training has perhaps not attempted to develop in any systematic fashion.

In sum, there are two major schools of thought in the ethics of research: the utilitarian and the deontological (May, 1980). Those in the former view scientific knowledge as a "good," worthy of justifying a variety of means. The deontologist, by contrast, stresses imperative principles of "right" and "wrong" as applied to means. For whatever reasons, it would seem that communication researchers are more allied with the utilitarian position than any other.

Nevertheless, knowledge being something that we value, it would be strange if we forever ignored both gathering information about, and reflecting upon, our research practices as viewed from an ethical perspective. There are many empirical questions, that could be asked: To what extent are deceptive practices employed in our research, in all senses of the word "deception"? To what extent is research participation voluntary or compulsory? What percentage of our research efforts have first been submitted to review boards for their consideration? What types of proposed studies have not been granted approval by such review boards? To what extent do we use methods that could entail physical or psychological "harm"? Do we always debrief

our research participants? To what extent do we express/concern for minimizing potential negative consequences of research participation? To what degree do we preserve confidentiality of information? To what extent do we, in our journals, include explicit information pertinent to an assessment of the ethical conduct of our research? To what degree are our graduate students educated in ethics in the research context? These and other questions we do not currently have empirical answers to, and this oversight is in need of remedy if we are to be a self-informed, self-reflecting discipline.

In advance of the empirical work required to answer such questions, I will go ahead and offer my own tentatively-held view that we are probably relatively healthy among the social sciences in the ethical treatment of human beings in our research enterprises.

For example, in an investigation of four prominent psychology journals, Journal of Personality and Social Psychology, Journal of Educational Psychology, Journal of Applied Behavior Analysis, and Behavior Therapy, McNamara and Woods (1977) found that an average of less than 5 percent of the over 1400 experiments surveyed mentioned informed consent procedures; and less than 5 percent of the articles in each of three of these journals mentioned any sort of effort to debrief. In all of the studies employing methods "that involved physical or mental discomfort, harm, or danger," including faradic shock, serious failure experiences, and threat to self. and others, less than 5 percent of even these studies mentioned informed consent, and 98.9 percent contained no statement by the researchers of intention to detect and minimize potential undesirable short- or long-term consequences. This figure becomes significant especially in the JPSP sample, where approximately 20 percent of all articles entailed procedures that could conceivably precipitate "discomfort, harm, or danger" to mind and/or body. The authors add that while it might be commonly believed that when ethical, safeguards are not mentioned in a published report they are in fact carried out, there are little or no data upon which to base this

conclusion. They then conjecture that inadequate graduate training for researchers in the ethical aspects of research with humans might have resulted in their placing a low priority upon ethical considerations both in print and practice.

Do 20 percent of the experiments in any of our communication journals use methods that could be said, even by someone embracing a deontological outlook, to involve physical or mental "discomfort, harm or danger"? I think not. We have nothing comparable to the series of bystander intervention studies that seek to find out, for instance, whether a simulated rape will evoke greater intervention depending upon whether the yell of "Fire!" or the cry "Help, Rape!" or the blowing of a whistle is used (Beamon, 1980).

I am also reminded of another intervention study, this one intended to clarify the effects of previous participation in a bystander intervention experiment and subsequent helping behavior (Schwartz and Gottlieb, 1980). Nearly 100 persons who had been in bystander intervention studies from 6 to 21 months earlier were again subjected to an intervention situation. In the original studies "participants had watched a violent attack on a male subject over closed-circuit TV while presumably engaged in a study of extrasensory perception." In the follow-up investigation, each participant upon leaving an interview encountered a male confederate directly in their path. Schwartz and Gottlieb (p. 166) write that "He wore a neck brace and crouched motionless on the flobr clutching a bannister with one hand. He appeared to have collapsed in pain and to be unable to rise, though the precise nature of his distress was unclear." One of the findings of the study was that 64 percent of the participants initiated confact with the victim. It was also found that subjects who remembered having participated in an intervention experiment within the previous 6-10 months were less helpful than controls, though this effect was not found for those in the 11-21 month period. What is more interesting than these findings, however, is this statement by the experimenters (p. 166): "We did not brief subjects

immediately because we were concerned lest we cause them to feel that they were caught up in a web of experimental deceptions in their everyday lives. We regret this decision now, wiewing it as less ethically acceptable than a full debriefing. We succeeded in locating 15 subjects by phone 12 or more months later." In other words, over 80 percent of the participants were never debriefed. One could clearly charge that "involuntary self-knowledge" (Holden, 1979) might have been inflicted upon some of the 36 percent of the persons who did not initiate contact with the victim. One can also not help but be taken aback by the experimenter, rationale for not initially debriefing their subjects. The fact is that these persons were "caught up in a web of experimental deceptions." The most ironic element of all is that this study was designed to help provide "good answers for critical colleagues and inquiring ethics committees" as to the behavioral effects of involvement in bystander intervention experimentation, and includes the word "ethical" in its title

By contrast, let us look at the experiment that apparently resulted (according to Greene and Sparks, 1984) in the editors of Communication Quarterly deciding to adopt a formal policy statement that is now printed on the inside front cover of each edition of CQ (and which reads, "Articles reporting on use of human subjects must give evidence that experiments were in compliance with all regulations of the Department of Health and Human Services regarding voluntary participation, informed consent, deception and debriefing. The editor reserves the right to request certification of compliance from authors"). This study (Greene and Sparks, 1983) was intended to test the main hypothesis that degree of expected success/failure in a communication situation will be a predictor of communicator anxiety. The participants in this study had a finger-clip attached to the middle finger of one hand for a total of about six minutes, while expecting to engage in either a debate or a conversation with another participant who would supposedly join them in a matter of, minutes. In actuality, no other participant would be conversing or debating with these persons. The experimenters were instead interested in creating the anticipation of such an

event, to determine the impact of positive/negative outcome expectations on heart rate, and on a state measure of anxiety. It was found, as one might predict, that expected success was a predictor of state anxiety (though heart rate data were not affected by expectation of success, and did not support an expectation-based hypothesis).

The deception in this study seems to have been primarily the misinformation given to respondents as to what would happen next in the study. An increase in anxiety was deliberately anticipated by the experimenters through the use of this misinformation. I think it speaks well for the discipline that one of our major journals would strongly react to such a minor and relatively innocuous deception. That this study was found to be questionable on ethical grounds, and stimulative of a journal policy statement, says much about our relatively high standards in the treatment of research participants.

In social psychological experiments, participants are routinely subjected to such conditions as false GSR feedback to manipulate self-perception, false information that one is losing in a competitive gaming situation, false information about another's negative attitude toward oneself, false information as to an emergency crisis, and so on (Gerdes, 1979). In fact, a sizable portion of the studies that are considered classics in our sister social sciences are the very studies that could be most questioned from the standpoint of deceptive practices (Hessler and Galliher, 1983). This seems not to be the case in speech communication research.

If "deception" is defined as "the presence of misinformation," the occurrence of deception in our studies is undoubtedly lower in percentage than if "deception" is defined as "the withholding of information." Defined in this latter way, most of our quantitative research involves "deception," since few researchers divulge their primary research questions or hypotheses to their research participants.

Using either meaning of the term "deception," my own preliminary view is that we

in speech communication do not appear to be perpetrating fraud upon the public in the name of knowledge-building, recurringly spinning complicated and potentially dangerous fabrications: Most of our research, instead, seems reasonably straightforward, involving the statistical manipulation of participants' responses to paper-and-pencil measures rather than the manipulation of participants themselves. I hasten to add that this is of course one observer's informally-derived overall impression, and is not based upon a solid body of research. While questions of morals are not amenable to direct empirical inquiry, questions of research practice are, and investigation in this area is glaringly absent, and overdue.

Researcher-Participant Relationship. Our "sin" in communication research is not one of commission as much as one of omission. The problem is not one of abusing subjects, but of not using them enough: It might be that although we are not deceiving our research participants in major ways, we are too often deceiving ourselves by assuming we have obtained maximally meaningful data. Nearly two decades ago Sidney Jourard (1968) spoke of the need for "mutual disclosure" and "reciprocal dialogue" within the research environment, if the most meaningful, valid information is to be obtained. Although the concept of "dialogue" (Johannesen, 1971) talls solidly within our purview, it does not appear that we have extended this, or related concepts, into the relationship between researcher and researchee. We have not yet begun to explore the possibility of a higher quality communication relationship with our research participants.

Ruth Anne Clark (1979) has suggested that we not only collect easily codable responses from our research participants, but that we also gather supplementary data that might not always be systematically coded, but that clarifies reasons for, and meanings of, obtained responses. In the research on empathy development in children, for instance, the literature is confused in part "because researchers have failed to ask children why they respond as they do." Could it not be said of the vast

majority of our research excursions that we have failed to ask our respondents why they respond as they do? Even though in our undergraduate classrooms we teach the notion that "meanings are in people, not in words," we neglect to implement our understanding of this basic communication principle in most of our research. Do we ask our participants how they perceived our attempts at inquiry, how they interpreted and defined the situation? Do we ask them how they perceived us, the researchers, and our intentions and manner? Do we ask them to comment on their perceptions of our measuring instruments? Do we, in short, foster two-way communication during/our data collection, and during debriefing? My image is that even though we are clearly aware of the superiority of two-way vs. one-way communication in the creation of understanding, we behave in our research as if we had no appreciation of this fact. Perhaps we need to practice that which we know to be true and important. Without this application in the research setting, we violate communication theory in our attempt to build communication theory.

Julia Wood (1982) has recently noted that in order to best study communication in human relationships, not only will we need to go beyond our reliance on college sophomores and laboratory experiments, but we will also have to more frequently draw upon free-response data, data that cannot be fit into imposed researcher-defined categories. Also, a series of interviews over an extended time-frame should play a larger part in our data acquisition methods, according to Wood. No longer can we be content to snatch a mass of data at a single point-in-time. The securing of written descriptions or narratives will also become more common as our research methodology evolves. In sum, Wood (p. 82) concludes, "Thus, the sine qua non for study of human relationships must be methods that respect the symbolic, cognitive structures imposed by actors to define and direct experience."

Goodall (1984) has claimed in his recent review of organizational communication that our studies have generally been deficient in understanding "the

personal feelings of our subjects." He says that "... in the end we sacrifice the meaning of the forest for the verifiable, quantifiable presence of the trees," and that "Examining 'the thing itself' should be the guiding principle of a new generation of organizational communication research and theory building." Goodall distinguishes that communication research might soon move away from the desire to communication data and toward the desire to understand it, and sees the evolution of organizational research as moving toward studies focused on participants' meanings.

Casmir (1984) has charged that "a generation of scholars in human communication has been taught to be more concerned with handling correctly its instruments and methods than with experiencing the world we live in and the human beings living in it." He calls for a new paradigm in which we enter the study of communication as discoverers standing within the events studied, rather than pretending to stand osite" the event, "objectively" observing it from the outside. No one that I have read, however, has expressed this general position more compellingly than william McGuire (1973): "All too often the scientific psychologist is observing not mind or behavior but summed data and computer printout. He is thus a self-incarcerated prisoner in a platonic cave, where he has placed himself with his back to the outside world, watching its shadows on the walls. There may be a time to watch shadows, but not to the exclusion of the real thing." Communication research, too, has its idols of the cave.

It may be that we have been too strongly influenced by the "machismo factor" (Barnard, 1973) in our communication research, and have become what Sampson (1978) has called a "hard" science, marked by the traditional positivist paradigm and a male-dominated cognitive style. The natural expansion, from this contraction, would be to a "softer" science, based upon more relational research methodologies.

Diana Baumrind (1980) laments that many complex concepts have been treated as though they have been thoroughly explored by the trivial operations with which they

have been measured. Baumrind (p/ 646) has observed that if the physical sciences remain as the prototype for the social sciences, "the methods can simply be adopted and humans treated like other physical objects." She notes how infrequently we ask respondents to examine their own experience, since their verbal reports are thought to be irrelevant or unreliable, or both. Baumrind contends that as females. begin to assume positions of leadership as researchers, theoreticians, and journal editors, we can expect Paradigm 2, or "soft" science, to ascend in importance. This paradigm recognizes that when respondents' perceptions and intentions are understood, their responses to our research tasks can be better understood. While this line of thinking is no doubt oversimplified, it just might be that there is truth to it, and that we will develop higher quality communication relationships with the people in our studies in, increasing degree as our communication science becomes more developed in its "softer" aspect. - It may be women who bring this about, it may be men, it " doesn't much matter. The important thing is that we do have a contribution to make to the social sciences in general in ways of creating higher quality communication relationships between researchers and their research participants.

white (1979) has said that "If the health of our western science is to be maintained into the deeper future, we need new kinds of communication between scientists and the rest of us, and communication in a new mood." It may be that if we are to gain maximally clear and valid data, and at the same time contribute to the future security and recognition of our communication research, we will need to communicate in a "new mood" with our participants. As Jick (1979) notes, graduate schooling most often trains us to use one method or another, as appropriate, but not to "triangulate" effectively, to combine a number of methods within the same investigation. The term "triangulation" comes from navigation, which uses multiple reference points to locate the exact position of something. It may be that we could know the "exact positions" of our research participants even more fully than is currently the case.

What if we begin to reconstrue the role of the persons in our experiments, more often finding out what the implications are of elevating our "subjects" to the status of "participating co-researchers"? What if we begin to examine such potential concepts as "research climate," and "researcher communication effectiveness"? In our field "research climate" has not received sufficient attention as a variable in the knowledge-gathering process, yet this climate is possibly a key element in what communication researchers are allowed to learn. One area we have not developed in our studies of communication competence and effectiveness is the concept of "researcher communication effectiveness," in both source and receiver capacities. But vastly more important than just studying such variables, what if we could learn how to create high-quality two-way communication condition's within the research context? What if we became methodological trailblazers, constructing useful models and methods for the establishment of a researcherparticipant relationship that would lead to a positive yield not only for communication theory, but for the social sciences in general? I believe that as a discipline we could make substantial contributions in this way, and secure some of the recognition and respect from other disciplines that we have so long sought. Our expertise is human communication, and human communication is the foundation un which social science knowledge is based. We have not yet lived up to our capacity to contribute to the development of social science research methodology. The opportunity to do exactly that is upon us. The invention of new approaches to the social science researcher/"subject" interface is needed, and our understanding of, and sensitivity to, human communication processes could serve us well in this direction.



Summary Recommendations. To draw together some of what has been said so far, and to go a bit beyond, the following recommendations are offered:

- 1. First, more research is needed on the ethical practices of communication researchers. Becker (1983) has asked that as a discipline "we affirm our commitment to prevention of an Orwellian '1984' in this or any other year." Even though at initial glance we appear to be ethically respectable as a research discipline, it seems unwise to assume this in too uncritical a manner.
- 2. We tend to y der-report information in the "Procedures" section of our reports that would allow for an assessment of our ethical encerns.

 More explicitness is in order.
- 3. Those dissenting researchers who believe that we over-rely upon deception should be encouraged to express and develop these views through some public forum.
- 4. A course in the ethics of social science research should perhaps be required of all aspiring researchers. One chapter in a 'text will not suffice.'
- 5. Hochheimer (1983) has suggested an annual panel on ethical problems encountered during the previous year in communication research.
- 6. Use of the term "subjects" should be used with decreasing frequency, and replaced by a term such as "participants." This semantic change should be accompanied by reconstruing in new ways the role of the participants in our research.
- 7. As a discipline it should become one of our priorities to develop research methodologies that embody sound communication principles (e.g., two-way communication), and that we can introduce to the social sciences in general.



II. Ethical Responsibility to Society

Usually appeals from within our discipline to apply our communication theory and research to real-life problems are based upon the argument that theory benefits from being tested in applied settings, while practice in turn benefits from sound theory (e.g., Miller and Sunnafrank, 1984; Eadie, 1982). It is possible, however, to make such an appeal from ethical grounds of "rightness" and "wrongness."

Skolimowski (1973) has observed that volume of scientific information does not mean an increase in value to the human species. He charges that "All knowledge must serve the human species and is only justified insofar as it aids the species in significant ways. Knowledge which does not aid the species in the process of everall survival and which does not contribute to the betterment of man is defective knowledge." Employing these criteria, to what extent is our knowledge of communication "defective"? Bevan (1980) says that after preaching the gospel of science . . . for thirty years" he has come to the conclusion that a social , science which avoids its responsibility to provide practical benefits to society "is neither humane nor realistic." To what degree is our communication research "humane"? Years ago Morton Deutsch (1951) espoused the view that "The social scientist has a responsibility, not merely to further his own esthetic and intellectual pleasure in the course of research but also to contribute to the solution of important social problems." Are we in communication research fulfilling such a responsibility? Do we evidence "wisdom" (Eubanks, 1980) in our utilization of communication research, meaning "the good (or proper) use of knowledge"? Are we accepting 100 percent of the responsibility (Andersen, 1984) that is ours in the communication of our knowledge to promote human welfare? Have we yet realized how our roles as researchers relate to our larger responsibilities as citizens (Bevan, 1976)?



A decade ago a national survey of graduate students and professors in academic psychology indicated that while over 90 percent of the graduate students and 80 percent of the faculty believed that academic psychology should be concerned with contemporary social problems, there was nearly unanimous agreement that academic psychology was in fact not making a contribution to the solution of such problems (Lipsey, 1974). It was concluded that "There was a rather striking gap between the 'ought' and the 'is' . . ." If our communication research reports were rated for "usefulness" on seven-point scales by people facing communication-related challenges, what percentage of our efforts would receive an evaluative rating above the midpoint?

Lee Thayer (1983), in a recent scathing indictment of communication researchers, portrays us as being obsessed by concerns of career self-interest and socialization into the "academic-research establishment." Meanwhile, our research is "trivial," "irrelevant," and, at best, "excessively equivocal." Thayer (p. 83) asks: "Is there a theory of something or other that stands in spite of repeated challenges? Are those in the establishment any closer to their 'scientific' goals than they were thirty years ago? Is there a clearer picture of exactly when and how we are going to 'arrive'? Why is the path so seemingly endless? How did it happen that the means came to displace the ends as the basis for judgment of value? Would an 'Inventory' of findings today be more definitive, or merely larger in size? What is the end of this ceaseless inquiry . . . for whom is this research relevant?"

In 1982 it was said that there were "stirrings of unrest . . . within our. discipline as to the proper relation between theoria and praxis" (Gordon, 1982). These stirrings have greatly increased since that time, and I believe we can anticipate an escalation of discontent and further attempts at re-direction. Dunn (1982) observes that the social sciences are a direct outgrowth of efforts to understand and alleviate practical problems and that the social sciences were initially more practice-driven than knowledge-driven. Dunn laments that "We are therefore

rarely produce knowledge which enlarges our capacity to improve that practice."

It has been charged that this is indeed the case in our own field (Bochner, 1978;

Phillips, 1981).

Julia Wood (1984) has recently shared her impressions after surveying the previous five years' worth of research into small group communication processes. She bemoans the absence of answers to such important questions as these: "How can I get a group to move on to the next issue when people have become embroiled in the topic?" "How can I encourage widespread involvement so that a handful of members don't wind up running the whole show?" "How can I curtail discussion without seeming authoritarian?" Wood (pp. 4-5) concludes that "Questions of this type are probably more urgent to practicing group members than are queries about the relative merits of social decision schemes versus valence distributions." Is this neglect "right"?

What a commentary it is that from the time systematic desensitization was brought from psychology into our field as a means for reducing communication apprehension (McCroskey, 1972), a half dozen years passed before the first study was done that measured the behavioral effects resulting from the use of this technique in a university setting (Goss, Thompson, and Olds, 1978). Even to the present day we know little about this or other methods of apprehension reduction (Glasser, 1981). Yet we do know (through others' research, not through our own) that public communication anxiety is the number one fear of the general public, more highly feared than illness or even death. Is this neglect "right"?

Is it not rather amazing that until 1981 (Clevinger & Todd-Mancillas, 1981) we neglected to research something as basic as a measure for the evaluation of our communication coursework? Or is it not hard to believe that we have almost completely ignored the systematic study of "understanding," a concept central to our



entire discipline (Cahn, 1984; Gordon, 1983 b; Sillars, 1984)? The best treatment of that topic is still left to Mehrabian and Reed (1968) in psychology, nearly two decades ago. Over a half dozen years ago Hecht (1978) noted that we had neglected the study of the measurement of "communication satisfaction," and that "research of the most basic nature is necessary." Little has been done in this key area. since that time. "Empathy" has been identified in some studies as the most crucial aspect of communication competence (e.g., Wiemann, 1977), yet what do we know about how to increase communicators' empathic abilities and tendencies? Employment interviewing is a major communication event for most people, of extreme importance, yet very little has been done in this area by speech communication researchers (Goodall and Goodall, Jr., 1982). There has been but a single investigation of the effects of an intercultural communication workshop's effects on participants' communication behavior (Hammer, 1984). The entire field of communication education has been under-studied, a situation, that is almost difficult to believe (Galvin and Cooper, 1981). One could go on, but suffice it to say that we in communication research too often appear to have an aversion to studying anything that might have immediate practical implication. As Warren (1982) has put it, we may be "too busy making a science rather than discoveries."

Since its earliest days in America, academic science has been ruled by the Cartesian model of science as set forth by Rene Descartes in his Discourse on ... Method. The search for truth, in this model, is the thing (Bevan, 1980). The dissemination of this knowledge outside of the academy is not a primary objective. In fact, the public is most often an intrusion, better serving as a patron than anything else. In the Baconian model of science, on the other hand, science is bound by an altruistic commitment to human welfare. Beneficial application is what gives science its value, in this model. Science for science's sake is not enough.

Kidd & Saks (1980) note that in an attempt to become "scientifically respectable," social psychology, in the 1940's, 50's, and 60's, adopted the small-scale,

highly contrived laboratory experiment: "Few, if any, of the findings produced during this era were generalizable beyond the walls of the lab, and only a few were directly relevant to the solution of pressing social issues." In the late 60's, in response to the tenor of the times, there was a split within social psychology, with some researchers moving into the field, and others retreating even further into the laboratory. In modern dress, still the Cartesian/Bacomian polarity. Speech, to itself become "scientifically respectable," identified with the Cartesian wing of social psychology, and also moved further into the lab and toward theory-focused rather than problem-focused research. We went on to borrow from this wing of social psychology nearly every concept and theory we have since researched, and every method we have used.

There has been a major oversight on our part, however. We have failed to also borrow from the grand masters within social psychology who for the past fifteen or so years have been critiquing the increasingly obvious limitations of the concerns and methods there. Some of the same social psychologists whose lines of research have most infused our own discipline are among those who have more recently spoken the loudest. The cast of characters that generated "the crisis in social psychology" reads like a Who's Who of social science research: George Miller, Irving Janis, Alan Elms, Paul Secord, Kenneth Gergen, Charles Kiesler, Harry Triandis, Morton Deutsch, Ralph Rosnow, Daniel Katz, Joseph Matarazzo, these are just a few of those who attempted to re-orient social psychology into research that will allow science's responsibility to society to be met with greater regularity.

Most recently, William Bevan, in his 1982 APA presidential address (Bevan, 1982), suggests that psychology must make "a sincere moral commitment to issues of transcendent national importance that fall within its sphere of competence."

Bevan specifically mentions treatment of the aged, public education, crime, violence, child health, and world peace. He dalls for activation of the APA's newly created

National Institute of Psychological Policy Studies, and the development of an agenda for action in the public policy arena. Bevan uses the metaphor of psychology as a house of many mansions, and says ". . . our survival as a social institution depends upon our occupying not only the room called basic science but the other rooms as well. Most emphatically I amainsisting that we must establish for ourselves an effective circulation pattern among the rooms and a collective life within them." Bevan (p. 1313) goes on to say that "Those of us who have been Cartesian in our view of psychology have hurt its progress not because we have been indifferent to questions of application but because we have actively discouraged consideration of such questions on the ground that we would compromise the purity of our science. The Cartesian attitude in this day and age is a romantic self-indulgence that can doom us." I must also quote Bevan's concluding words (p. 1320-21): "I have now come full circle. The critical unresolved question of the world in which we live is still whether its inhabitants can control their own destiny - prevent a nuclear war; preserve peace on a significant scale; master the economy; achieve economic and social justice; conserve scarce natural resources; cope with global overpopulation; conquer famine and disease; in short, preserve and improve the quality of our lives together. No one can answer such a question with confidence, but of one thing we can be certain. It is too important, a matter to the politicians, to the business community and to the generals."

It is my belief that in our own discipline, the study of human communication, as many of us as possible need to vigorously dedicate ourselves to the discovery of effective ethical communication principles that will encourage and allow the human family to communicate within itself in a productive fashion. To distance ourselves from being of more direct service to humankind is to abuse the power that lies at the heart of our central subject matter. Each of us is fascinated by a complex and compelling subject matter to which we are drawn with force. Yet the human mind is endlessly inquisitive, and will always find new aspects with which

to become absorbed, regardless of the extrinsic importance of this involvement. What if, in the same way that we have been critical of action without theory, we became increasingly critical of theory that lacks direct action potential? What if we began to more stridently challenge self-perpetuating knowledge-building that leads nowhere outside, itself? What if the satisfaction of employment needs (retention, tenure, promotion) and personal recognition needs were viewed as scant justification for research undertakings?

The suggestion here is not that every piece of research should have dramatic practical implications (Weick, 1984). We do need, however, to encourage and reinforce ourselves and others who seize research topics that bear directly upon practical problems and needs. We need fresh, creative vision (Gordon, 1985).

In our graduate schooling we are not taught how to be problem-finders and problemsolvers. Instead, we are taught how to be hypothesis testers. Solving problems has been derogated as less dignified, less scholarly than a pursuit of "purer" knowledge. Yet the "external truths" that the "purer" social scientist seeks to discover are being increasingly seen as not so eternal after all (Koch, 1981; Cronbach, 1975). The half-life of empirical propositions shortens in proportion to the openness of the systems studied.

When I was an undergraduate I was introduced, to two questions that I was told are the mark of an educated person: the first is "What do you mean?" and the second is "How do you know?" There is a third question I have since discovered that is also important: "So What?" What if this latter question, "So What?" became the guiding question behind our research efforts? Aside from the worth of the research to its producer, and to other researchers interested in the same line of research, "So What?" There is a difference between knowledge and useful knowledge. An applicable communication theory is needed. Knowledge-building that moves without application is moving eff-course. We can no longer afford to only search for "The



Truth." What we need is a "useful truth," a truth that makes a difference, a truth that helps us solve a problem.

My own belief is that we in speech communication have tremedous potential to be of value in today's world. Our amassed brainpower, if directed toward real-life concerns, could make substantial impact. We need only recognize our potential greatness, and then extend it through our actions: The world is in troubled times. I am not going to cite examples that would dramatize this point -- a look at the daily newspaper or the evening news is enough to do that. I believe that we can be of service to our fellow humanity in needed, significant, and beneficial ways. We do not have to fiddle as the world continually engages in conflictual relations with itself. We can bring our intellects, our visions, our hope, our theories, our methods to the task of making this world a place in which we and our children and their children can evolve into more harmonious relations. We can help bring this about. We need settle for nothing less. We have greatness at our core. We have taken as part of our "stated mission of the SCA . . . the application of the artistic, humanistic, and scientific principles of communication." Let us carry out this mission as never before. We are needed as never before. Let us get on with the work that will bring us into our finest selves. Let us inspire ourselves and one another to make a difference to humanity. This is how our discipline can achieve maturity, honor, wisdom. It is within our capacity to master the art of turning theory into practice. The time is right--it is in the air--let's go for it.

But first, if we are not to be rushing forth blindly, we need to look back and reflect. We need to bring order out of the chaos that is our field. This sprawling realm of activity needs to be brought into greater coherence. We have to understand where we have been, and where we are. Only then can we be sure that where we are going is an important place to be going. We have not done enough of this. Meta-analyses (Rosenthal, 1983) and integrative research reviews (Cooper, 1982)



and state-of-the-art summaries are lacking in our field to a greater extent than should be the case (Becker, 1980). We need to be reminded of what we already know, and, equally important, what the implications are for practice. As Rosenthal (1983) has said, we are better at calling for further research than knowing what we already know, and as Varella (1977) has said, we already know more than we have used intelligently.

Secondly, while much attention has been paid to developing standards for evaluating rigor in quantitative research, little attention has been paid to devising standards for assessing relevance. Thomas and Tymon (1982) have articulated five criteria for judging the usefulness of research within the area of organizational behavior: descriptive relevance, goal relevance, operational validity, nonobviousness and timeliness. Within our own discipline we will soon need to develop criteria for the assessment of research relevance (e.g., Cusella, 1984). Then, we will need to conduct research that meets these criteria a reasonable amount of the time.

As Jean Houston (1979) has observed, the human species might not survive if humans continue to retain their lethal habits of consumption, aggrandizement and manipulation: "It is time to educate ourselves to the web of kinship and fellow feeling necessary on this endangered planet — to awaken all those dormant potentials that were not necessary to man in his role as conqueror of nature and other people. We are challenged, as never before, to achieve a new humanity and a new way of nurturing the species in harmony with nature and each other." Equally eloquent is Stagner's (1956) comment that is exponentially truer today than when it was uttered thirty years ago: "The physical sciences have now achieved such success that it is now possible for all men to die together. Relatively little is being done to make it possible for them to live together."

Thousands of research inquiries that bear directly on the human communication process have now been completed, so it would seem fair to ask: What do we know now



that we did not know earlier that will allow us to help solve some of the local, national, and international problems all around us that are crying out for solutions? What does our communication theory and research have to offer in response to the challenges facing us as the inhabitants of late twentieth-century earth? What do we know, and need to yet learn, that will be of use for the sustainment and wellbeing of humanity? This is a question that the conscientious within our field must soon ask themselves if our finite supply of human energy is to be most deficaciously and ethically expended. Our potential is great, should we choose to fully use it.

Recommendations. Here are a few thoughts as to what we in communication could do to more directly move toward carrying out our responsibility to society:

- 1. We need to encourage and reinforce efforts to summarize and synthesize the existing knowledge in our field, and articulate explicitly the practical implications of that knowledge.
- 2. We need to overview our various approaches to our research within the various specializations within the discipline, so we possess a more ordered view of what we do, and where we might go from here in terms of topics and methodologies (e.g., Ayres, 1984).
- 3. We need to encourage our researchers to add one more section to their reports in addition to the traditional "Results" and "Discussion" sections. This section would identify the "Practical Implications" of the findings obtained (e.g., Richmond, Wagner, and McCroskey, 1983).
- 4. We need to author introductory speech communication textbooks that directly draw upon the research of our field, and that transform findings into insights



petentially leading to behavior change. This has been done in social psychology (e.g., Hamachek, 1982; Aronson, 1984; Rubin, 1973; Wheeler, 1978), and we should be able to achieve this also.

- 5. We need to develop standards of relevance by which to assess our research efforts (e.g., Cusella, 1984).
- 6. What if we focused on specific existing real-life problems and did literature searches to find out what we already know that might bear on these specific given problems? Yates and Aronson (1983), for example, recently surveyed the social psychology literature to identify those findings that have implication for decreasing our national consumption of energy resources.
- 7. What if a certain portion of a journal's article space were to be reserved for studies that had clear implication for practice, for application (e.g., the Americanger-Psychologist section "Psychology in Action")?
- So what if instead of an article summarizing a single study, it overviewed asseries of studies done by the author and colleagues, each study designed to exceed the limitations of (and to respond to the questions raised by) the previous studies? If this were to be encouraged, quantity of publication would need to become less important than judging a researcher's longer-term programmatic commitment to useful discovery.
- 9. Related to #7, what if each researcher's career advancement within a university were dependent not on absolute number of publications, but on the quality and relevance of a certain fixed number of that researcher's output (Wachtel, 1980)?

 What if each researcher were to submit only two or three papers every two years to the committees evaluating his or her contribution, and what if the quality and relevance of these few papers became one advancement criterion? It has been



said that judgments on the basis of frequency of publication is like trying to judge a parent on the basis of how many children the parent has.

- what if greater training in graduate school were given in problem discovery, problem-finding (Dillon, 1982)? What if instead of searching for a nock or cranny between pieces of existing research, creativity in discovering interesting real-life problems was fostered?
- 11. What if our aspiring young researchers were also trained in multi-method approaches within single studies (Jick, 1979)?
- 12. What if our graduate students were encouraged to take coursework in public policy, or what if we at least held workshops in how communication professionals can affect policy decisions in various public arenas?
- 13. What if we held seminars for science writers, and let them know what we in communication study, and how, and some of what we have found, and where we are going (McCall and Stocking, 1982)?
- 14. What if we sought and distributed useful information on how to prepare press releases and give interviews to members of the media, and how to interface with the public in useful ways (McCall and Stocking, 1982)?
- 15. What if we developed "Action Plans" for dealing with national and world-relevant issues within the SCA, in the way that psychology is increasingly doing (Fishman and Neigher, 1982; Helmreich, 1983)? Our support, for instance, of the National Peace Academy is possibly one of our most constructive actions as a discipline.

 What else can we do to direct our focus to constructive target areas?

There is much to be done. There is no doubt that we can do it, if we choose to.



References

- Anderson, K. E. Communication ethics: The non-participant's role. Southern Speech Communication Journal, 49, 1984, 219-28.
- Aronson, E. The social animal. San Francisco: W. H. Freeman, 1984.
- Asuncion-Lande, N.C. (Ed.) Ethical perspectives and critical issues in intercultural communication. Falls Church, VA.: Speech Communication Association, 1979.

 Especially Hamnett, pp. 44-61, and Tafoya, pp. 62-68.
- Ayres, J. Four approaches to interpersonal communication: Review, observation, prognosis. Western Journal of Speech Communication, 48, 1984, 408-440.
- Baumrind, D. New directions in socialization research. American Psychologist, 35, 1980, 639-652.
- Beaman, A. L. Bystander response to rape: Can a victim attract help? Journal of Applied Social Psychology, 1980, 510-527.
- Becker, S. L. The interesting question: A prescription for vitality. Central States

 Speech Journal, 35, 1984, 1-7.
- Bernard, J. My four revolutions: An autobiographical history of the ASA. American

 Journal of Sociology, 78, 1973, 773-791.
- Bevan, W. The sound of the wind that's blowing. American Psychologist, 31, 1976, 481-491.
- Bevan, W. On getting in bed with a lion, American Psychologist, 35, 1980, 779-789.
- Bevan, W. A sermon of sorts in three plus parts. American Psychologist, 37, 1982, 1303-T322.
- Bochner, A. On taking ourselves seriously: An analysis of some persistent problems and promising directions in interpersonal research. Human Communication Research, 4, 1978, 179-191.
- Boddewyn, J. J. and Marton, K. Comparison advertising: A worldwide study. New York:
 Hastings House, 1978.

- Cahn, D. Relative importance of perceived understanding in students' evaluations of teachers. Perceptual and Motor Skills, 59, 1984, 610.
- Casmir, F. L. The theoretical integration of levels of human communication.

 Communication Quarterly, 32, 1984, 62-70
- Clark, R. A. Suggestion for the design of empirical communication studies. Central

 States Speech Journal, 30, 1979, 51-66.
- Clevenger, Jr., T. and Todd-Mancillas, W. R. Student evaluations of communication courses. Communication Quarterly, 30, 1981, 48-55.
- Cooper, H. M. Scientific guidelines for conducting integrative research reviews.

 Review of Educational Research, 52, 1982, 291-302.
- Cronbach, L. J. Beyond the two disciplines of scientific psychology. American Psychologist, 30, 1975, 116-126.
- of a model of conceptual authenticity. Communication Quarterly, 32, 1984, 293-300.
- Deutsch, M. Socially relevant research: Comments on 'applied' versus 'basic' research.

 In R. Kidd and M. Saks(Eds.) Advances in applied social psychology: Volume 1.

 Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.
- Dillon, J. T. Problem Finding and Jolving. Journal of Creative Behavior, 16, 1982, 97-111.
- Dunn, W. N. Reforms as arguments. In E.R. House (Ed.) Evaluation studies review annual: Volume, 7. Beverly Hills: Sage, 1982.
- Eadie, W. F. The case for applied communication research. Spectra, 18 November 1982,
- Eubanks, R. T. Reflections on the moral dimension of communication. Southern Speach
 Communication Journal, 45, 1980, 297-312.
- Fishman, D. B. and Neigher, W. D. American psychology in the eighties: Who will buy?

 American Psychologist, 30, 1982, 533-546.

- Galvin, K. M. and Cooper, P. Research in communication education: Directional needs.

 Central States Speech Journal, 32, 1981, 219-226.
- Gerdes, E. P. College students' reactions to social psychological experiments involving deception. Journal of Social Psychology, 107, 1979, 99-110.
- Glaser, S. R. Oral communication apprehension and avoidance: The current status of treatment research. Communication Education, 30, 1981, 321-341.
- Goodall, D. B. and Goodall, Jr., H. L. The employment interview: A selective review of the literature with implications for communications research. Communication Quarterly, 30, 1982, 116-123.
- Goodall, Jr., H. L. The status of communication studies in organizational contexts:

 One rhetorician's lament after a year-long odyssey. Communication Quarterly,

 32, 1984; 133-147.
- Gordon, R. D. Practical theory. Spectra, 18, October 1982, 1-2.
- Gordon, R. D. The effects of perceived mutual understanding in interpersonal communication. Communication, 12, 1983, 99-103.
- Gordon, R. D. Attitudes of researchers toward deception in communication research.

 Communication Quarterly, 31, 1983, 220-223.
- Gordon, R. D. Creativity and the behavioral sciences. Paper presented at the National Conference on Science and Creativity, Honolulu, Hawaii, March 1985.

 Available as ERIC research document, 1985.
- Goss, B., Thompson, M., and Olds, S. Behavioral support for systematic desensitization for communication apprehension. Human Communication Research, 4, 1978, 158-163.
- Gould, S. J. Morton's ranking of races by cranial capacity: Unconscious manipulation of data may be a scientific norm. Science, 200, 503-509.
- Greene, J. O. and Sparks, G. G. Source of outcome expectations in the experience of a state of communication apprehension. Communication Quarterly, 31, 1983, 212-219.
- Greene, J. O. and Sparks, G. G. Brief statement of explanation. Communication

 Quarterly, 32, 1984, 250.



- Hamachek, D. E. Encounters with others. New York: Holt, Rinehart & Winston, 1982.
- Hammer, M. R. The effects of an intercultural communication workshop on participants' intercultural communication competence: An exploratory study. Communication

 Quarterly, 32, 1984, 252-262.
- Hecht, M. L. Measures of communication satisfaction. Human Communication Research, 4, 1978, 350-368.
- Helmrich, R. L. Applying psychology in outer space: Unfulfilled promises revisited.

 American Psychologist, 38, 1983, 445-450.
- Hessler, R. H. and Galliher, J. F. Institutional review boards and clandestine research: An experimental test. Human Organization, 42, 1983, 82-87.
- Hochheimer, J. L. An ethical perspective to communication research. Paper presented at the International Communication Association Annual Convention, Dallas, Texas, May 1983. ERIC research document #233 425, 1983.
- Holden, C. Ethics in social science research. Science, 206, 1979, 537-540.
- Hopper, R. and Bell, R. A. Broadening the deception construct. Quarterly Journal of Speech, 70, 1984, 288-302.
- Houston, J. The mind of Margaret Mead. Quest 77, 1, 1977, 22-25.
- Jick, T. D. Mixing qualitative and quantitative methods; Triangulation in action.

 Administrative Science Quarterly, 24, 1979, 602-611.
- Johannesen, R. L. The emerging concept of communication as dialogue. Quarterly
 Journal of Speech, 62, 1971, 373-382
- Jourard, S. Disclosing man to himself. Princeton: Van Nostrand, 1968.
- Koch, S. The nature and limits of psychological knowledge: Lessons of a century qua 'science.' American Psychologist, 36, 1981, 257-269.
- Kidd, R. F., and Saks, M. J. (Eds.) Advances in applied social psychology: Volume 1.
 Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.
- Lipsey, M. W. Research and relevance. American Psychologist, 29, 1974, 541-553.
- YMasters, J. C. Psychology, research, and social policy. American Psychologist, 39, 1984, 851-862.

- May, W. Doing ethics: The bearing of ethical theories on fieldwork. Social Problems, 27, 1980, 358-370.
- McCall, R. B. and Stocking, S. H. Between scientist and public: Communicating psychological research through the mass media. American Psychologist; 37, 1982, 985-995.
- McCroskey, J. The implementation of a large-scale program of systematic desensitization for communication apprehension. Speech Teacher, 21, 1972, 255-264.
- McGuire, W. J. The yin and yang of progress in social psychology: Seven koan.

 Journal of Personality & Social Psychology, 26, 1973, 446-456.
- McNamara, J. R. and Woods, K. Ethical considerations in psychological research:

 A comparative review. Behavior Therapy, 8, 1977, 703-708.
- Mehrabian, A. and Reed, H. Some determinants of communication accuracy. <u>Psychological</u>

 <u>Bulletin</u>, 70, 1968, 365-381.
- Miller, G. R. and Sunnafrank, M. J. Theoretical dimensions of applied communication research. Quarterly Journal of Speech, 70, 1984, 255-263.
- Phillips, G. M., Science and the study of human communication: An inquiry from the other side of the two cultures. Human Communication Research, 7, 1981, 361-370.
- Reese, H. W. and Fremouw, W. J. Normal and normative ethics in behavioral sciences.

 American Psychologist, 39, 1984, 863-876.
- Richmond, V., Wagner, J., and McCroskey, J. C. The impact of perceptions of leadership style, use of power, and conflict management style on organizational outcomes.

 Communication Quarterly, 31, 1983, 27-36.
- Rosenthal, R. Meta-analysis: Toward a more cumulative social science. In L. Bickman (Ed.) Applied social psychological annual, volume 4. Beverly Hills: Sage, 1983.
- Rubin, Z. Liking and loving: An invitation to social psychology. New York: Holt,
 Rinehart & Winston, 1973.
- Sampson, E. E. Scientific paradigms and social values: Wanted a scientific revolution. Journal of Personality and Social Psychology, 36, 1978, 1332-1343.

- Schwartz, S. H. and Gottlieb, A. Participants in a bystander intervention experiment and subsequent everyday helping: Ethical considerations. <u>Journal of Experimental</u>

 Social Psychology 16, 1980, 161-171.
- Sillars, A. L., Pike, G. R., Jones, T. S., and Murphy, M. A. Communication and understanding in marriage. Human Communication Research, 10, 1984, 317-350.
- Skolimowski, H. The twilight of physical descriptions. In I. Haszlo(Ed.) The world system: Models, norms, variations. New York: George Braziller, 1973.
- Stagner, R. The psychology of industrial conflict. New York: Wiley and Sons, 1956.
- Thayer, L. On 'doing' research and 'explaining' things. Journal of Communication, 33, 1983, 80-91.
- Thomas, K. W. and Tymon, Jr., W. G. Necessary properties of relevant research:

 Lessons from recent criticisms of the organizational sciences. Academy of

 Management Review, 7, 1982, 345-352.
- Thompson, W. N. Remarks. Southern Speech Communication Journal, 45, 1980, 313-315.
- Turner, R. E., Edgely, C., and Olmstead, G. Information control in conversation:

 Honesty is not always the best policy. Kansas Journal of Sociology, 11, 1975, 69-89

 Varella, J. A. Social technology. American: Psychologist, 32, 1977, 914-923.
- Wachtel, P. L. Investigation and its discontents: Some constraints on progress in psychological research. American Psychologist, 35, 1980, 399-408.
- Warren, C. The practice and products of communication inquiry and education.

 Communication Quarterly, 30, 1982, 316-319.
- Weick, K. Small wins. American Psychologist, 39, 1984, 40-49.
- Wheeler, L. Interpersonal influence. Boston: Allyn and Bacon, 1978.
- Wiemann, J. M. Explication and test of a model of communicative competence. Human

 Communication Research, 3, 1977, 195-213.
- White, Jr., L. The ecology of our science. Science 80, 1, 1979, 32-76.
- Wood, J. T. Communication and relational culture: Bases for the study of human relationships. Communication Quarterly, 30, 1982, 75-83.

Wood, J. T. Research and the social world: Honoring the connections. Communication Quarterly, 32, 1984, 3-8.

Yates, S. M., and Aronson; E. A social psychological perspective on energy conservation in residential buildings. American Psychologist, 38, 1983, 435-444.