

At Liberty in the Liberty
of Congress

A practitioner's look into communications literature

K. Robert Kern, Chairman
ACE Communication Process Task Force

Who can keep up with the literature of communications? Hardly anyone, who also has a full time working communicator's job. When the ACE Communication Process Task Force tried to tie down ideas for a training program, our knowledge gap became obvious. Few of us felt that we knew what had happened in the literature since our last concentrated exposure. (For old-timers that might go back as far as the original National Program in Agricultural Communication and the demise of *Search* in the early 1960s. For the younger crowd, that might go back to a graduate thesis.)

One of the jobs of the task force chairman--when the Of-

The author should acknowledge by name some dozens of persons who had hand in this. But he singles out the three who made it possible by providing the opportunity to work on the project: James Webster, Assistant Secretary for Governmental and Public Affairs in the U.S. Department of Agriculture and his administrative associates, Ed Goodpaster and Hal Taylor. He thanks them—and a host of others for contributions—but accepts responsibility for what is offered here.

fice of Governmental and Public Affairs made full time task force service possible--was to take a look at the knowledge gap. And lots of hours were spent reveling in the marvelous print resources of the Library of Congress and the National Agricultural Library.

It was a highly selective search. There were far too many topics to permit studying any in depth. It was not a review in the sense that all the principal works in a given field were sought and studied. It was more a series of forays to get a feeling for what's happening in these literatures -- a look at scholars' output through the eyes of a practitioner.

To bring the influence of these searches into the planning process of the Task Force, we made brief descriptive summaries of what we had seen. In large measure they are personal observations, the features that caught the eye and intrigued the mind of one practitioner.

Perhaps they can do the same for the harried communicator whose job will not shrink to permit his or her own investment of 10 percent for research and development.

These summaries are offered here to be used however a professional communicator wishes. In addition to these broad and simplified strokes we have suggested some stepping-in points for anyone who wants to get into the literature.

In addition to the references, we want to encourage the widest acquaintance with some exceptionally good resources that are not cited in the individual lists. The reason is that they are studded with relevant material across all our areas of interest.

One is the annual volume of the International Communications Association, *Communication Yearbook* (New Brunswick, NJ: Transaction Books). The three volumes currently available and their respective editors are: I, 1977, Brent D. Ruben editor; II, 1978, Brent D. Ruben, editor; III, 1979, Dan Nimmo, editor.

Another is the annual review volume on communication research published by Sage Publication, Beverly Hills, CA. These go under a specific title for the year, and we do not have a list of them all. Gerald F. Kline, University of Minnesota, has been the series editor, with others serving as editors for a given year. For instance, in 1974 Jay Blumler and Elihu Katz edited *The Uses of Mass Communication*, a sage volume that concentrated on uses and gratification theory research.

In the summaries we barely touch the periodical literature.

That is not where you find the broad-stroke work—but you occasionally find the most fascinating ideas. Unfortunately we do not offer guides to the periodical literatures—individuals can use their links to the Technical Information Services of Science and Education Administration, or their nearest friendly communications professor, for entry.

We would have liked to have carried on similar efforts in many other topics, especially for research on communication behaviors and effects with some special audiences. There are some literatures, but our brief samplings indicated that it would be a fairly tedious task to find and report much of immediate interest.

We disliked shorting the international communication literature on such topics as development and agricultural improvement. However there was a limit to what one could do. But you can find this literature mentioned in several of the books we have cited. Should you read only one thing on the agricultural part of the topic get Bry Kears's elegant treatment of "Communication for Agricultural Development." It's in Schramm, Wilbur and Daniel Lerner (eds.), *Communication and Change: The Last Ten Years and the Next*, (Honolulu, HA: East-West Center, 1977).

Instructional Communication

Summary

A number of factors, especially cost of transportation, lead to an assumption that personal-contact instruction may carry a diminishing share of service to land-grant system clients. Some of that service can be provided through effective use of instructional communication. A growing literature of instructional communication emphasizes formal or classroom applications—including many propositions that may be useful in the land-grant tasks. Some "distance learning" concepts may be applied from that sector of the literature. A relatively new field of insight "self-directed learning," promises other potentially powerful ideas for the educator-communicator. We cannot expect each subject specialist or researcher to master principles of instructional communication along with his or her subject field. The communication specialist may be the logical one to develop this essential expertise.

"There is no shortage of research on instructional media, only a shortage of the kind of research that would be most helpful to us." So wrote Wilbur Schramm in his monumental

synthesis of instructional media research. *Big Media Little Media*.

A number of other rich sources offer syntheses of some areas of knowledge on instructional media. Review articles in the annual *Communication Yearbook* are evidence of the acceptance of this as a field of communication. The main preoccupation of these works is teaching-learning in the classroom or course-like mode. Some of the literature promises to be instructive to producers of sequenced formalized learning programs. Interesting taxonomies of learning cognitive domain, communication media and instructional methods are to be found. They can guide, or at least contribute to, producer strategies.

A host of nuggets can be panned from this fairly extensive literature. These are unitary or modular entities; they may not answer a specific burning question, but they can stimulate a gestalt for someone or serve as an organizing thread for the experience of another. For example, a communicator may be helped to find his or her way in an ill-charted field by a set of obvious and not widely verbalized characterizations of alternative communication systems. Three communication models, as described by Parks and Wilmot are these: *Action* model; a linear model in which A communicates to affect the behavior of B; *Interaction* model in which A communicates to B with some effect and B communicates to A with some effect—they are communication participants; *Transaction* model in which the participants deal simultaneously in verbal and nonverbal messages probably producing effects greater than the simple sum of communication content.

Another example is a characterization of the "cognitive styles" (CS) of students: CS-1, who needs highly structured unambiguous information; CS-2, who has the same kind of need but responds negatively to an authoritarian teacher; CS-3 who can learn without a great deal of structure but who requires much interpersonal feedback from a teacher; CS-4, who works best in an unstructured creative environment. Those concept packages should help a communication planner approach the task more creatively. And there are many like them in the literature.

There have been many research cases exploring the effects of different communication media in classes. However, they do not, provide the base for a linear program that will yield an optimum cost-benefit solution, in choosing to guide a method. Schramm's tentative conclusion is that

most any subject can be taught by most any medium; students can learn from most any method. Yet neither he nor researchers in the field have concluded that analytical studies can stop. Current literature includes many contributions from speech communications professionals, from education professionals and a few general communicators.

One finds much less literature related to instruction in less formalized settings. An expanding area deals with non-classroom settings but still formalized instruction. The Open University of Great Britain and the University of Mid-America are examples. "Distance Learning" may be the appropriate label to distinguish this type of instruction. The literature deals with a wide variety of factors, including audience interests as well as varied "delivery systems"; and it provides data on participation variables and educational results.

Britons pioneered in the open learning field, providing useful literature for open (or distance) learning planners. Several offer systematic approaches to developing instruction—from original idea through evaluated outcomes.

A relatively recent area of interest has been called self-directed learning. It may be especially applicable to some of the learning-teaching relations of the land-grant system and some of its clients. A Canadian, Allen Tough stimulated a lot of professional interest with his finding that: 90 percent of adults conduct at least one major learning effort a year—the average conducts five. Three-fourths of the learning projects are planned by the learner himself/herself. The average learning effort involves 100 hours. Motivations for learning projects are—anticipated use of knowledge or skill, 75 percent; curiosity, 20 percent; credit toward certificate, degree etc., 5 percent.

Instructional communication in relatively informal modes may become a significant role of the land-grant system communicator. Potential effects of high-cost transportation (for learners as well as teachers) together with a long-term, down trend in group meeting attendance, may force unit contact costs beyond limits that can be served on a personal basis. An expertise in methods, especially in designing productive interaction of subject and medium, will be needed. It surely defies a standard of efficiency to expect each subject specialist to become adept in both choosing appropriate media and preparing content for effective delivery. It is a communication specialization within the potential growth of the communication specialist.

Hancock, Alan, *Planning for Educational Mass Media*, (London and New York: Longmans, 1977).

Hurt, H. Thomas, M.D. Scott and J.C. McCroskey *Communication and Education*, (Reading MA: Addison-Wesley 1978).

Schramm, Wilbur, *Big Media Little Media*, (Beverly Hills, CA: Sage Publications, 1977).

Romiszowski, A.J. (ed), *A Systems Approach to Education and Training*, (London: Kogan Page, 1970).

Tough, Allen, *The Adult's Learning Projects*, (Toronto: The Ontario Institute for Studies in Education, 1971).

Organizational Communication Summary

Communication scholars are devoting efforts to the field of communication within organizations. They are interested in the structure of organizations and related patterns of intramember communication. Network analysis is being applied in this area. Research has brought out knowledge of the effect of communication on morale, job satisfaction and a number of other individual qualities. The relationship of communication to change and innovation processes also has been explored. Various pressures on parts of the land-grant system—especially in levels of funding and changes in responsibility—put stress on some organizations. Communication professionals may be the ones who can most efficiently bring this expanding field of knowledge to application. Both mediated and interpersonal channels are involved.

A limited exposure to organizational communication literature indicates at least two orientations. One is study of the communication form of an organization—with much current attention based on network analysis. Another deals with how an organization changes, embracing change as an organizational phenomenon and as it relates to individuals.

Diffusion theory provides a departure for one major work on innovation in organizations. It devotes more attention to the importance of attributes of an innovation than one finds in the parent literature—at least in that dealing with agricultural diffusion. As such, this treatment offers an analytical

Some British writers have offered an insightful seven-phase "general model of transition," describing the individual reactions when a change is imminent. They relate these stages to a roller-coaster line graph, charting self-esteem from the first sense of being immobilized by pending change to the final internalization of meaning and the incorporation of the new into the individual's behavioral repertoire. Family communication therapist Virginia Satir has several books that deal with interpersonal communication in the face of change.

The pattern and content of organizational communication interests numerous researchers. Some relate communication flows. Wider literatures on interpersonal communication, especially networks, have applications for organizational communication. Networks in diffusion cases provide an example. Network analysis, specifically within an organization, indicates the predicted small groups of interactors with the liaisons and bridges that comprise the larger system. Diagrams offered by Schwartz and Jacobson show how fragmented an organization could be without the liaisons. One reviewer for *Communication Yearbook* offered this generalization from studies of organizational communication: Only good news travels *up* the organization; bad news travels *down*. The ubiquitous Everett Rogers also writes on organizational communication. He has described five structural variables associated with an innovative organization. First, they are open in communication structure, with negative feedback able to move upwards. In addition, the innovative organization is characterized by: low centralization; high complexity (that is, its members have high levels of knowledge and expertise); low formalization (few codified rules); high communication integration; high organizational slack (with resources that can be shifted to alternate commitments).

Professional communicators in the land-grant system vary in their role vis-a-vis organizational communication. When the system itself is faced with pressures that call for adaptation (for example to relatively declining resources but continuing responsibilities), communication stress is likely to occur. An expertise in organizational communication may be nearer the specialization of the land-grant communicator

primer for a communication strategist who wishes to influence change in an organization.

than to other existing specialties. That should be sufficient cause for the communicator to have some familiarity with this expanding body of literature.

Adams, John, John Hayes and Bernie Hobson (editors), *Transition: Understanding and Managing Personal Change*, (Montclair, NJ: Alanheld Osumn Co., 1977).

Allen, Thomas J., *Managing the Flow of Technology: Technology Transfer and the Dissemination of Technological Information Within the R and D Organization*, (Cambridge, MA: The MIT Press, 1977).

Friedman, Paul G., *Interpersonal Communication: Innovation in Instruction*, (Washington, DC: National Education Association, 1978).

Rogers, Everett M. and A. Roers, "Organizational Communication," in Hanneman, Gerhard J. and W.J. McEwen, *Communication and Behavior*, (Reading, MA: Addison-Wesley, 1975).

Satir, Virginia, *Your Many Faces*, (Millbrae, CA: Celestial Arts, 1978).

Schwartz, Donald F. and Eugene Jacobson, "Organizational Communication Network Analysis: The Liaison Communication Role," *Organizational Behavior and Human Performance*, Vol. 18, 1977, 158-174.

Zaltman, Gerald, Robert Duncan and Johnny Holbeck, *Innovations and Organizations*, (New York: John Wiley and Sons, 1973).

Advertising Summary

Professionals in advertising deal with a synthesis of principles (or gut feelings) about communication that influences the behavior of a target audience. No encompassing theory guides the professional in advertising. However, numerous fragmentary empirical or theoretical threads can be pulled out for consideration and application. The Audience research emphasis suggests that advertisers know more about response to their communications than do most other professional communicators. Though they only occasionally disclose their findings on the open market, the data

are often provocative. At the other extreme, several professional business communicators are stressing work of a most fundamental nature, such as the learning and behavior effects of individual involvement. Advertising literature and concepts are a useful resource to the educational communicator.

At the start of the 1950s, Gerhard Weibe dealt in a scholarly way with the question, "Can you sell citizenship like soap on the mass media?" Near the end of the 1950s, Joseph Klapper summarized the state of the art on effects of the mass media. Neither contribution encouraged communicators to rely heavily on mass media for immediate behavior change. And the subsequent years have brought relatively little serious literature on the use of advertising methods to change knowledge, attitudes or practices. (Firms, institutions and agencies continued to use the methods, but not much serious evaluative or theoretical literature has accumulated for the thoughtful communicator.)

Some interesting materials on advertising have appeared in the last few years. A Norwegian, Johan Arndt, publishing in England, has reviewed several hundred reports of advertising research. His summary concludes that the research offers no full-blown theory of advertising effects. He suggests that *when* a theory of advertising emerges, advertising effects will be: *conceptualized as a process occurring over time and a process in which direct advertising effects interact with effects of other elements in the marketing mix and also with the impact of less controllable factors such as actions of other members of the channel of distribution and activities of competitors.* (It is not difficult to see that suggestion as applicable to the "advertising" work of the non-product, idea communicator.)

While there has been a relative dearth of a theoretical and research-based literature of advertising, many textbook treatments are available for practitioners. (One gets the feeling that the main audiences are probably college students in advertising classes, who will have to get their *useful* knowledge and skills on the job later.)

One outstanding exception to this drab knowledge base is a recent little book from the Association of National Advertisers. The organization commissioned Charles Ramond to undertake work that he reports in *Advertising Research: The State of the Art*. His screen of selectivity was "only studies which showed how advertising works *and* which led (or could have led) to improved performance of the various

crafts..." He treats: How advertising communicates ("No general theory has emerged"); theory of buyer behavior (recipient as problem-solver); controversies over theory and model (more on that later); areas of advertising research (theme, copy--with 25 principles, frequency, media, budget); and more. He says a computer program is now available, but does not elaborate. (It was developed by a former advertising executive as part of a doctorate earned at age 63!)

Ramond, who edits *Journal of Advertising Research*, offers a most stimulating (and potentially unsettling) discussion of models relating knowledge, attitude and practice. He suggests three possible sequences in which these attributes are linked.

One--dear to the hearts of delayed-reward, middle class educators: *Learn-feel-do*. Cognitive-affective-motor response. *Learn-do-feel*: With television, he says, that is the typical sequence. Learn that a product exists; try it; like it. *Do-feel-learn*: This sequence may be used when the choice involves our ego or is expensive. You can't buy a Mercedes on a trial basis; you buy, respond affectively to its performance and base your knowledge on that data--which may bring into play some of the principles dealt with in the *theory of cognitive dissonance*.

Ramond's work makes a prudent assessment of the power of advertising in influencing behavior. He sums that in a quote:

Advertising's role is mainly to reinforce feelings of satisfaction for brands already being used. At times it can also create new sales by reawakening consumers' awareness and interest in another brand, stimulating them to trial purchase and then sometimes through subsequent reinforcement, helping to facilitate the development of a repeat-buying habit. (Andrew Ehrenberg). Advertising is only one of several market forces that lead to the ultimate objective of a sale (Russell Colley).

Occasional articles appear that deal with the advertising approach for non-commercial purposes. Mendelsohn has told the story of advertising-marketing techniques used in the national safe-driving tests and some similar efforts. Manoff Associates has used advertising techniques to "change nutrition-related behavior" in developing countries, but hard data on results are lacking.

In addition to the state-of-the-art treatments noted here and *Journal of Advertising Research*, there are other sources of literature about advertising. Some articles ap-

pear in marketing journals, and *Public Opinion Quarterly* has reports that relate advertising to public affairs.

In a sense, advertising models (theory if there were one or more) represent a synthesis of knowledge of communication effects on human behavior. Thus they relate to the intellectual base for the effective communicator of ideas. Many of the propositions summarized by Ramond, Arndt and others beg for thoughtful consideration by the serious land-grant system communicator.

Arndt, Johan, *Research Into Advertising*, (West Yorkshire, England: MCH Monographs, 1976).

Ramond, Charles, *Advertising Research: The State of the Art*, (New York, NY: Association of National Advertisers, 1976).

Rothschild, Michael L., "Marketing Communications in Non-business Situations or Why It's So Hard to Sell Brotherhood Like Soap," *Journal of Marketing*, 43:2, Spring 1979, 11-20.

Runyon, Kenneth E., *Advertising and the Practice of Marketing*, (Columbus, OH: Charles E. Merrill Publishing Company, 1979).

Weilbacher, W. M., "What Happens to Advertisements When They Grow Up?" *Public Opinion Quarterly*, XXXIV:2, Spring 1970, 216-223.

Marketing

At least among the intellectual leaders in marketing, the field has endorsed a customer-oriented approach to relating business and consumer. The task of the company, as stated by a thoughtful Briton, is to seek out needs, wants and values of a particular market segment and to set out to satisfy them more effectively and lastingly than its competitors. The contrasting orientation, which does not get much literature support, is an assumption that maximum sales can only be obtained through an aggressive selling campaign, because left to themselves consumers will not buy enough to be worth while.

A literature of sophisticated mathematical and computer models has developed. The focus of these models may be

on means of predicting share of a market, on lower-cost or more effective pre-testing of products, and other topics of apparent esoteric interest. Contributions to the literature typically come from the country's leading business colleges, frequently with academic and business practitioners as coauthors.

Marketers appear to be prompt in their application of current behavioral theories. The continuing debate of power of measured attitude as a predictor of behavior shows up in the marketing literature. So, too, is a growing interest in the propositions on information processing. A new book appeared last year, relating information processing to consumer choice.

The marketing literature would seem to have much to offer the persuasive communicator, whether he is in the business of selling products or diffusing ideas. Both deal with attempts to influence behavior of individuals—intellectual behavior as well as overt actions. Both have potential means to marshal personal and impersonal means of communication; both may deal with their target audiences over time; and both have to live with the results of prior communication.

Some of the market researchers have carried out careful theoretical studies of information behavior by potential customers. They are offering some behavioral propositions that merit attention of communicators in other modes.

Marketing literature is accessible. A number of collections are available, and there are current syntheses or state-of-the-art treatments. The 1976 *Annual Review of Psychology* included a chapter on consumer psychology, with a bibliography of more than 500 entries for the years 1968 through 1975. (That chapter was written by Jacob Jacoby, of Purdue University, who is represented significantly in current marketing literature.) *Journal of Marketing Research* appears quarterly, as does *Journal of Marketing*. Each adds between 400 and 600 pages of research literature annually; the latter carries 10 or more pages of marketing abstracts in each issue.

Bettman, James R., *An Information Processing Theory of Consumer Choice*, (Reading, MA: Addison-Wesley, 1979).

Blattberg, Robert and John Golanty, "Tracker: An Early Test Market Forecasting and Diagnostic Model for New Product Planning," *Journal of Marketing Research*, XV, May 1978, 192-202.

Greenburg, Barnett and D.A. Bellenger, *Contemporary Marketing Thought*, (Chicago, IL: American Marketing Association, 1977).

Leavitt, Clark, "Advertising, Marketing Communication and Consumer Choice," in Hanneman, Gerhard J. and W. J. McEwen, *Communication and Behavior*, (Reading, MA: Addison-Wesley, 1975), 286-303.

Jacoby, Jacob, "Consumer Psychology: An Octennium," in *Annual Review of Psychology*, (Palo Alto, CA: Annual Reviews Inc., 1976).

R. W. Chestnut and W. A. Fisher, "A Behavioral Process Approach to Information Acquisition in Nondurable Purchasing," *Journal of Marketing Research*, XV, November 1978, 532-544.

Westbrook, Robert A. and Claes Fornell, "Patterns of Information Source Usage Among Durable Goods Buyers," *Journal of Marketing Research*, XVI, August 1979, 302-312.

Public Relations Summary

Several streams of thought show through the literature of public relations. There is an unresolved problem of identity: Is identity a function closely related to management or a function mainly of planning and doing specific communications or campaigns? Intellectual leaders call for a more people-oriented approach to a two-way communication concern. But periodical literature continues to deal much with techniques and with how company-oriented problems were solved. Concern for organization communication appears in some sectors. In many ways the public relations professional parallels the professional educational communicator. Therefore, the latter should have something to learn from the knowledge base that sustains the changing public relations profession.

Abraham Lincoln is quoted as once saying that what makes life tough for the skunk is the bad publicity he gives himself. Whether public relations professionals gave themselves bad publicity, a bad press still seems to linger with them. The *Public Relations Journal* and some of the spokes-

men for the field devote continuing attention to the matter of image. A highly critical scientific article (critical of a totally unrelated topic) concluded with a reference to *public relations-style treatment of the matter, that is, to manipulate people's attitudes and ignore the problems*. Can a field that appears to have earned that kind of "synonym" be useful to the educational communicator?

The answer seems to be yes. But one says it with some tentativeness. The literature of public relations suggests a profession caught in an identity crisis. An apparent schism exists between what most do and what some think all ought to do. A definition of public relations was approved by representatives of 34 national public relations associations about two years ago:

Public relations practice is the art and social science of analyzing trends, predicting their consequences, counseling organization leaders and implementing planned programs of action which will serve both the organization and the public interest.

The literature, however, continues to give its major space to topics related to implementing (with frequent sighs for the lack of planning) programs of action. One seldom finds a behaviorally related professional literature that reports so little experimental or statistical research. Unlike the similar fields of marketing and advertising, here one finds only a handful of literature contributors from academic bases—most journal article writers are agency practitioners.

A scanning of the literature shows considerable current rhetoric on the centrality of the public *vis-a-vis* public relations. But there is no evidence to indicate the extent to which this orientation exists in the minds of the average practitioner or to what extent it pervades his work. This orientation was voiced at least as early as the Edward L. Bernays' writings in the late 1940s on the *engineering of consent*. Philip Lesly, perhaps the most prolific current writer in the field (himself a practitioner), has two recent books and other articles that pursue this theme.

Many educational communications professionals may resent the suggestion that their roles bear more similarity to those of the public relations worker than to any other communications professional. But considerable evidence supports the suggestion. Many, but certainly not all, planning and production activities are comparable in concept. The intent of their communications may often be more nearly parallel than perpendicular in thrust. An apparent bimodal dis-

tribution of professionals on self-image can be found in both groups. Their professional literatures emerge more from thoughtful reporting of practice than from experimental or scientific procedures. Both regard themselves as related to the management function, and both are uncertain how they are viewed by their individual management superordinates.

A basis for much common dialogue should exist between the literature of public relations and interests of the educational communicator.

Lesly, Philip. *The People Factor: Managing the Human Climate*. (New York: Dow-Jones, Inc., 1974).

_____. (ed.). *Lesly's Public Relations Handbook* (Second Edition). (Englewood Cliffs, NJ: Prentice-Hall, 1978).

Millman, Ronald B. and J. L. Horton. "Is Anyone Listening?" *Public Relations Journal*, April 1979, 10-12.

Rabin, Kenneth. "The Government PIO in the '80s," *Public Relations Journal*, December 1979, 21-23.

Strasser, Joel A., "How To Communicate Your Scientific Identity." *Public Relations Journal*, October 1978, 15 and 16.

Communication Process Summary

It's been a heady two decades since source-message-channel-receiver made its impact on communications professionals. Much has changed with expanding knowledge of communication processes. Apparent simplicity has been superseded by complexity. Much more is known about human communication than was; the task of monitoring, evaluating and using the knowledge is more demanding. Communication theory stresses transactions among senders and receivers rather than one-way influence. Several views of motivation continue to have advocates and critics. Arguments proliferate about the theoretical bases of attitude and behavior--some deprecate the role of attitudes in influencing behavior, others simply criticize inadequate conceptual and research methodology. A field called information processing has appeared; its workers try to un-

lock secrets of human processes for receiving, storing and retrieving information. Communication scholarship grows in complexity and in volume; its literature is scattered in many journals and books, also in many other disciplines. The quantity is clearly beyond the reading time of the practicing communicator. In many instances the content stretches "processing capacity." Yet currency in this area is vital to the land-grant system as it must find ways of serving the information-education needs of its clientele by methods that rely less on personal contact.

The last two decades have been a yeasty time for the behavioral scientists who study communication and related human processes. At least one new field of inquiry has appeared—information processing—and the theoretical arguments have flourished in some other areas—attitude and communication theory, as examples. New journals, with the word "communication" in the title, have appeared. Established academic disciplines have been broadened to encompass a serious and productive interest in human communication—marketing, consumer psychology, speech and (on some campuses) journalism, for examples.

The professional communicator works from a knowledge base that must synthesize his or her understanding of communication. Perhaps one should deal only with synthesized models or constructs. But it is too tempting to follow some of the branches of the tree of knowledge that sustains a model or philosophy of communication. Here we will look at some current views from communication theory, motivation, attitudes, and information processing.

Communication Theory

Nearly a quarter of a century ago, at least partially under stimulus of the National Project in Agricultural Communication, Berlo popularized his source-message-channel-receiver model of communication. Berlo himself wrote 25 years later: "*I did not recognize that the assumptions underlying linear causal determinism may account for the major proportion of communication events, but not account for the portion that makes a significant difference in our lives.*" And he has gone on to see the process as one *without beginning or end or boundaries*, dealing with relationships as well as content, with change over time. And he commends us for beginning to internalize some of the catch phrases we have used for years, such as *meanings are in people and everything is relative*.

With the recognition of the crucial control function by the receiver, communication theory must relate less to biological and more to humanistic factors. At the same time, aggressive research into physiological functions in communication characterizes a base point for processes in *information processing*.

Information Processing

At a Center for Human Information Processing, University of California at San Diego, and at a number of other points, behaviorists and computer specialists are studying information processing. They focus on attention, memory and retrieval. They are looking for physiological or biochemical entities that may be involved as humans receive and process information. As a simple abstraction of one group's current thoughts on information processing, consider this: Molecular vibrations in air (sound) or photon fluctuations (sight) strike appropriate body receptors; the pattern of those stimuli is registered and stored briefly in a sensory memory; as processing proceeds, critical features of the pattern are extracted and fed into a pattern synthesizer. If a person chooses to pay attention to the processing of inputs, then with other inputs—such as context, memory and other constraints on perception—the pattern synthesizer abstracts the information to provide a representation that can be put into a memory bank (one of the memories, since there are thought to be short-term and long-term memories). Researchers have hypotheses on such aspects as the speed of processing and on how much can be held in sensory memory. Attempts have been made to use the computer to model the processes—including organization for storage and retrieval.

This may seem esoteric to the practical communicator. But some of the insights—whether proven may still be debated—are used in applied fields: A new book relates information processing theory to consumer choice decisions; marketing research utilizes some of the propositions; and the terms are appearing throughout the communication literature. Information processing theory seeks to deal with propositions without invoking the psychological constructs that are so prominent in discussions of communication behavior.

Motivation

Psychology texts continue to make updates of the state of

the art on motivation. Differences continue to be attacked and defended. Some still hang with the general stimulus-response theories; approach-avoidance precepts are still with us; and the concepts of Maslow's hierarchy seem to stand the test of time. A writer on motivation theories looked to the future. He suggested that the field would become more cognitive; more biological; with increasing interest in interactions that are cognitive, social and physiological. Approach-avoidance will remain at the core of theory; and theoreticians will continue to debate the issue of physiological drives versus cognitive associations as the base. In other words, look for no simple prescriptions, no one-factor answers to the complexity of human motivation.

Persuasion

Reviewing persuasion research for *Communication Yearbook*, one writer noted a decline in research activity in the area, possibly related to a decline in acceptability of manipulative approaches. He pointed out the movement away from linear (A gives a message to B that gets B to do what A wants) approach to a transactional view of communication. In this view, the parties exert reciprocal influence on each other. Most of the communication action occurs in the small group, in the give-and-take of dialogue. And he thinks researchers should attend more to messages that tend to improve attitudes toward the communicators themselves; communications that heighten interpersonal attractiveness or credibility may be persuasive under the transactional situation.

Attitude

Communication literature has not established a strong case for prediction of behavior from attitude—despite the elegance of the knowledge-attitude-practice paradigm. That fact has generated hundreds of scholarly pages in the last decade or more. Some argue that attitudes are not crucial to behavior—behavior may influence attitudes more than vice versa. Others say that what have been called attitudes are not truly the “*enduring tendency to respond in a given way to an object.*”

One line of thought has simply been critical of methods of measuring attitudes, when in reality—the argument goes—we have merely measured verbal statements about objects. One thus assumes that there is nothing wrong with the conception.

Another line of thought removes some of the causal ties between attitudes and behavior. Some suggest that intentions (based on attitude plus consideration of norms related to the target behavior) provides an effective predictor of behavior. Some suggest that belief is more fundamentally associated with behavior—in a further refinement, beliefs are expressed in values which then influence attitudes and subsequently behavior.

It gets complicated. The discussion is far from over. Perhaps there is at least one justifiable conclusion: One needs more than simply to attach the label *attitude* as a variable as he or she describes communication by Berlo's S-M-C-R model.

The rapidly growing literature of communication process presents a severe challenge to the practicing communicator. It is greater in volume and more widely scattered in carriers than a working communicator can monitor. The dynamic thinking by scholars presents a sobering challenge. The social psychology of communication effectiveness is at least a shadowy presence whenever the communication professional counsels others or produces land-grant system material. It is, at minimum unprofessional, to work from superseded concepts; at maximum it can be wasteful of resources and ineffective in accomplishment.

Communication professionals need periodic updating in this significant body of literature. It would be better, but perhaps unattainable, to have a goal of a system that would provide a continuing flow of advisory information from the researchers and theorists who have so strongly embraced the field of human communication.

Beck, Robert C., *Motivation: Theories and Principles*, (Englewood Cliffs, NJ: Prentice-Hall, 1978).

Engler, Barbara, *Personality Theories: An Introduction*, (Boston, MA: Houghton-Mifflin, 1979).

Fishbein, Martin and Icek Ajzen, *Belief, Attitude, Intention and Behavior*, (Reading, MA: Addison-Wesley, 1975).

Hanneman, Gerhard J. and W. J. McEwen, *Communication Behavior*, (Reading, MA: Addison-Wesley, 1975).

Havelock, Ronald G., *Planning for Innovation*, (Ann Arbor, MI: Institute for Social Research, University of Michigan, 1969).

- Krugman, Herbert E., "Memory Without Recall, Exposure Without Perception," *Journal of Advertising Research*, 17:4, August 1977, 7-14.
- Larson, Charles U., *Persuasion: Reception and Responsibility* (Second Edition), (Belmont, CA: Wadsworth Publishing Co., 1979).
- Rumelhart, David E., *Introduction to Human Information Processing*. (New York: John Wiley and Sons, 1977).
- Sears, David O. and J. L. Freedman, "Selective Exposure to Information: A Critical Review," in Carlson, Robert O., *Communication and Public Opinion*, New York: Praeger Publishers, 1975), 443-462.
- Siebold, David R., "Communication Research and the Attitude-Verbal Report-Overt Behavior Relationship: A Critique and Theoretic Reformulation," *Human Communication Research*, 2:1, Fall 1975, 2-32.

Mass Communication Summary

This topic deals with "communication simultaneously delivered to a large and heterogeneous audience" (by media of newspaper, magazines, radio, television, recordings and film). Search continues for a theory of mass communication; none has yet won adoption. Recent emphasis has represented audience needs and interests as an integral part, broadening the orientation from an earlier view of source as dominant. Time and societal system are also discussed as elements that need to be accommodated. Current writers are not comfortable with the negligible-effects view of media influence that has dominated thinking since the early 1960s. But they do not have data that will guide accurate prediction of behavioral effects. Excellent texts now offer research and empirically based syntheses of the mass media literature. Current periodical literature continues to be found in widely scattered journals. Apparently some important works get circulated to seminars and among friends but may never reach the journals. Collection and abstracting of mass communications research and scholarly tracts need attention so more users may have wider access to the considerable knowledge that has been developed.

Whether reading or writing on the subject, mass communication/mass media is a difficult term to corral. It keeps getting through the fence into other fields, or mavericks drift in from other places. As a base point, one tries to say what mass communication/mass media is: Communication simultaneously delivered to a large and heterogeneous audience. That means the media are newspaper, radio, television, recordings, magazines, and film.

Efforts continue to find an acceptable theory of the mass media. It began with Lasswell's, *Who says what to whom with what effect?* A German, Pracke, has strung some more adverbs in the chain, asking: *Who says what—how and using which means—to whom with what effect?* Besides these "hypodermic theories," there are those that give the receiver a role in the process, consistency theories: *cognitive dissonance, congruity, use and gratification* (including *risk theory* and *play theory*), and *coorientation* or *situational theory*. In some current vogue is *agenda-setting*, which puts the medium back in a prominent role. Another recent view, which lacks a punchy label, relates the audience and the medium and the societal systems in which both exist and function.

The words continue to flow about the power or the lack of power of the media to influence behavior. Klapper's *Effects of the Mass Media* (1960) still gets more references. The negligible-effects position coming out of that review is both used and abused—often by the same author! The view that now seems to gain support is that there are limited immediate behavioral (or attitudinal, which is another argument) effects measurably related to mass media content. BUT there are unquestionable longer run effects—but what these are and how they come about are not understood. (Everett Rogers, in writing on diffusion, argues that communication effects are frequently not found because the typical study seeks cause-effect relationships at a single frozen moment. But the diffusion process continues over time!)

A revealing recent study of newspaper audiences suggests a glaring gap between readers' expectations of the newspaper and the editors' perceptions of what readers want. A small factor to be watched carefully is the tendency of younger readers (25 to 35 or so) to rate higher than older readers the newspaper as a source of information they can use to solve problems. Many apparently want it to be that kind of carrier. Relations between functions of the media remain cloudy—or at least they are not explained satisfactorily. Considering the potential changes in the media that become

feasible with new technology, one is surprised that these search headings do not yield insightful prognostications of the shape of the future.

New (to this reader at least) is a mass media content area with the label, guidance-extension. (The progenitor teaches communication in a Belgian university and has in mind the model of agricultural extension although he does not limit the concept to that alone.) He describes this form as *consciously initiated by a communicator in which he attempts, directly or indirectly, to influence the behavior of the receiver by transmitting facts and/or opinions*. He locates this between a point where the receiver is given only the facts and the opposite point where the one course of action is given. He discriminates it from advertising or propaganda.

Pervasiveness of mass media in lives of Americans is shown in a study of time use of a national sample. Nearly 10 percent of America's time is used in communication—8 percent with mass media. That ranks behind "personal activity," which includes sleep, at 44 percent, and work at 17 percent. By media, the figures were television—7 percent; newspaper—1.2; books—1.2; radio, records and magazines—.1 percent each.

The scholarly base for study—and perhaps practice—of the use of mass communication and mass media has deepened and broadened in recent years. Many texts are available. They draw widely from the behavioral sciences and empirical research for their propositions. A significant intellectual maturity seems to have occurred over the last two decades.

In addition to the apparent regular flow of new textual treatments, there are some other valuable literature resources. *Communication Yearbook*, by the International Communication Association, is an excellent annual resource. It is not fully comparable to the annual reviews in psychology, sociology and other subjects, but it represents an excellent contribution. Sage Publications, Beverly Hills, CA (not tied to the Sage Foundation) has a keen publishing interest in the field of mass communication. Annual volumes on communication research cover different topics, including enough depth to please the researcher and university teacher, while still offering useful content to the thoughtful practitioner. Some Britons and some continental Europeans are also adding to the literature. Periodical literature, however, continues to be widely scattered. Much excellent material is issued by individual institutions or departments in duplicat-

ed form, never going into journals. Some means of collecting, abstracting and accessing should be high on the agenda of persons in this field.

There is little question that literature in this field could be helpful to users of mass communication. There is more to be learned here than many have imagined.

Blumler, Jay G. and Elihu Katz, *The Uses of Mass Communication*, (Beverly Hills, CA: Sage Publications, 1974).

Chaffee, Steven H. and Michael Patrick, *Using the Mass Media*, (New York: McGraw-Hill Book Co., 1975).

Clark, Ruth, *Changing Needs of Changing Readers*, (Charlotte, NC: American Society of Newspaper Editors, May 1979).

Davison, W. Phillips, James Bolan and F. T. C. Yu, *Mass Media Systems and Effects*, (New York: Praeger Publishers, 1976).

DeFleur, Melvin L. and Sandra Ball-Rokeach, *Theories of Mass Communication* (Third Edition), (New York: David McKay Co., 1975).

Fauconnier, Guido, *Mass Media and Society*, (Leuven, Belgium: Leuven University Press, 1975). (Translation of 1973 publication).

Martin, L. John, "Recent Theory on Mass Media Potential in Political Campaigns," *Annals of the American Society of Political and Social Sciences*, Vol. 427, September 1976, 125-133.

Merrill, John C. and R. L. Lowenstein, *Media, Messages and Men*, (New York: David McKay Co., 1971).

Robinson, John, *How Americans Use Time*, (New York: Praeger Publishers, 1977).

Shaw, Donald L. and M. E. McCombs, *The Emergence of American Political Issues*, (St. Paul, MN: West Publishing Co., 1977).

Diffusion Summary

One can make a case that agricultural communications entered its "science" period when sociologists described the diffusion process. From its identification in agriculture, the concept moved widely into other disciplines. While fundamentals of the process are still held to be valid, important changes have appeared. More emphasis now is placed on social structure elements in addition to the socio-psychological factors of the individual decision maker. The process is seen as broader and more variable than indicated by its original linearity. The spread of innovation remains a central concern of the educational communicator.

In 1960 we spoke of *the* diffusion process. We meant primarily the adoption of new agricultural practices by farmers. We described the process as comprised of five stages: awareness, interest, evaluation, trial, adoption. We associated four principal sources of communication with the stages: mass media, neighbors and friends, agency personnel, salesmen. We counted on heavy influence of impersonal communications sources in the early thought processes, then on interpersonal sources as thinking moved toward action. We dealt with five personality types, based on behavior over time in regard to the new practice: innovators, early adopters, early majority, later majority, laggards. Personal and economic variables tended to correlate positively (except for age) with earlier adoption of the practice—better educated, larger operators, more cosmopolitan in mobility, more use of media, etc.

In 1980 diffusion is to be found widely generalized in other sectors: medical, health, organizations, business, education, marketing, and more. (Practically every one begins with the start of "our" process—Gross and Ryan and the acceptance of hybrid corn in two Iowa counties!) Most use a common set of stages—four as consolidated in 1971 by principal synthesizer, Everett Rogers: knowledge, persuasion, decision, confirmation. Both mediated and interpersonal communication sources are still identified, but the paradigm is not as neat as we learned it. When medical doctors adopt new drugs, for example, the initial knowledge may come from a personal source—drug salesman—with media sources—journals—used to help evaluate and confirm the decision.

Perhaps the most significant additions to the state of the art are these two: diffusion by non-institutional sources—

what Rogers now calls "horizontal diffusion"—and recent intensity in trying to understand the interpersonal communication aspects.

Diffusion seems to occur without the initiative and guidance of change agencies of the conventional type. Adopters (and adapters) of solar energy illustrate the process: on one hand, innovators encourage others to use their techniques, and on the other hand, persons seek out their own sources for new ideas and methods. (This area is not well defined at all. Rogers has a project that will look for this, and other diffusion patterns, in seven or eight different areas of organizational or practice innovation.)

Theory was available to study interpersonal influence before 1960, but current involvement seems to have grown with the development, within recent years, of computer methods of "network analysis." Sociologists have recently decried their maximum attention to individual psychological factors and their scarce notice of social structural factors in diffusion. They are hastening to mend their ways now. Network analysis is in vogue. Some new vocabulary comes with it. We read now of "bridges," "linkers," "weak ties," "strong ties," "isolates," etc. The approach is to study the movement of information about new ideas through existing social systems. Rogers is among the pioneers, having completed a manuscript (due out in spring 1980) on networks. It draws on his own studies of family planning information and adoption in Korean and Taiwanese communities plus work of many others. (Herbert Lionberger, who deserves more recognition for his diffusion research than one finds, has contributed some provocative studies of interpersonal communication in agricultural diffusion. Incidentally, Lionberger, with editor Paul Gwin, has a manuscript on what a change agent should know about diffusion-adoption.)

Interest in diffusion research on agriculturally related practices seems greatest now in developing countries. New studies surface more abundantly from those sources now than from the developed world. (It is to be hoped that some synthesis will deal with the special differences, if any, in diffusion among farmers in the less developed countries and those in traditional developed-world theory.)

Some research has been reported with emphasis on some variables beyond the typical social-psychological. Such factors as geographic location and attributes of the innovation, for example.

These and other bubbles in the cauldron have yet to be

dealt with by the communicator. to become the objects of communication strategies.

Baker, Michael J. and F. Abu-Ismael, "Diffusion of Innovations in Industrial Markets," in Greenberg, Barnett and D. A. Bellenger, *Contemporary Marketing Thought*, (Chicago, IL: American Marketing Association, 1977), 498, 499.

Granovetter, Mark E., "The Strength of Weak Ties," *American Journal of Sociology*, 78:6, May 1973, 1360-1380.

Lionberger, Herbert F., Chii-jeng Yeh and G. D. Copus, "Social Change in Communication Structure: Comparative Study of Farmers in Two Communities," *Rural Sociological Society Monograph No. 3*, 1975.

Rogers, Everett M., "The Passing of the Dominant Paradigm--Reflections on Diffusion Research," in Schramm, Wilbur and Daniel Lerner, *Communication and Change: The Last Ten Years and the Next*, (Honolulu, HA: East-West Center, 1976), 49-52.

"Where Are We in Understanding the Diffusion of Innovations?" Schramm and Lerner, *Communication and Change*, 204-221.

"Network Analysis of the Diffusion of Innovations: Family Planning in Korean Villages," in Lerner, Daniel and L. M. Nelson, *Communication Research: A Half-Century Appraisal*, (Honolulu, HA: East-West Center, 1977), 118-137.

with F. F. Shoemaker, *Communication of Innovations*. (Glencoe, IL: The Free Press, 1971).

Zaltman, Gerald, Philip Kotler and Ira Kaufman, *Creating Social Change*, (New York: Holt, Rinehart and Winston Inc., 1972).

Public Policy Summary

Scholars have long been interested in political and public policy communication. Much research has been reported, and interpreted, concerning citizen opinions and voter be-

haviors. Contributors have come from many disciplines beyond political science. The recent critical consideration of the link between attitudes and behavior has been represented in this literature also. Agenda-setting theory gets considerable current attention. A few writers hold out more promise of influential use of the mass media than has generally been suggested by most: they suggest media-plus strategies keyed to specific targets with achievable goals. The political or public policy communicator must draw from a wide base of knowledge, sharing that orientation with the educational communicator and others.

Some motivation—perhaps the major—for intellectual consideration of mass communication in the United States came from persons who thought about the influence of mass media on political behavior. Lippmann, Lasswell, Lazarsfeld and others were speculating on the effect of the media, especially broadcast and national circulation press. Voter studies did much to frame an enduring viewpoint on the influence of the media: They tended mainly to canalize and reinforce existing attitudes, they would influence attitudes in the absence of existing strong attitudes, etc.

Perhaps that legacy is reason enough to look into the current state of thinking about mass communication and public policy. Regardless of the reason, there is interesting material to be contemplated.

The interesting paradox still lives. Empirical studies give mass media little credit for their ultimate influence on voters or citizens, yet candidates raise huge sums of money to wage media campaigns, (largely television, of course). Thoughtful researchers and writers comment on the paradox, but they do not advise the candidates to find an alternative use for their money. It appears that sophistication is growing on the strategy of using mass media, personal, impersonal and organizational channels. There are exceptions: A commercial electioneering firm in California gives the following criteria for a client (It is presumed any client with these criteria qualifies): to be elected to the federal Congress: Relatively normal appearance and middle-class background, better than average IQ, willingness to take a vacation while the firm conducts the campaign via billboards, radio and television; and \$100,000 or \$60,000 if you only want to be elected to the California legislature!

Two excellent sources carry a continuing scholarly interest in mass communication and public policy. *Public Opinion Quarterly* and the *Annals of the American Academy of Politi-*

cal and Social Science. (Volume 412, March 1974, and 427, September 1976, have special relevance.)

This literature has had some preoccupation with the debate regarding attitude and behavior and the questioned link between them. Great attention has been paid to public "opinion" polls, with the tacit assumption that opinion was the verbal form of an attitude; opinion was thus the best clue available to predict behavior. The agenda-setting point of view has gained recent prominence. It is perhaps premature to pull generalizations from the empirical base.

One statement worth considering is taken from a *Communication Yearbook* article on political communication: Two long-held assumptions about TV were tested—first, TV news informs and educates the viewer; second, political commercials lead to a perceived image of the candidate. The findings were opposite: "News is entertainment, and the broadcasting of it seems to focus more on hoopla and the drama of frontrunners, horse-race analogies and the like. Commercials, on the other hand, can inform the viewer and are remembered due to their simplicity, repetition and sound/sight coordination."

This literature contains some additional subjects of relevance to the communicator in education. Harold Mendelsohn, for example, disputes the traditional view that the mass media are weak carriers of material that influences public attitudes or behavior. (His credentials include the strategy for the impressive National Drivers Test and several other public affairs promotions.) His view is that too much has been expected of the usual public affairs educational effort—and the evaluation has been done without involving the producer of the communication. Thus the objectives evaluated may not be the ones that guided production. He argues that the research indicates success where (1) a program was guided by the assumption that the target public would be only mildly interested or not at all, (2) goals were in the middle-range that could reasonably be achieved as a consequence of exposure; (3) on the basis of mid-range objectives, specific targets were laid out in terms of demographic, psychographic attributes and mass media habits.

Public policy or political communication represents an area where the communicator must deal with a synthesis of the knowledge of human communication, media and production techniques. Since these same needs are common to educational communicators, the experience and insights

of political communicators should be instructive objects for study.

Carlson, Robert O.. *Communication and Public Opinion*. (New York: Praeger Publishers, 1975).

"The Information Revolution," *Annals of the American Academy of Political and Social Sciences*, Volume 412, March 1974.

Mendelsohn, Harold, "Some Reasons Why Information Campaigns Can Succeed," *Public Opinion Quarterly*, 37:1, Spring 1973, 50-61.

Molitor, Graham T. T., "Public Policy Forecasting." *Public Relations Journal*, 35:1, January 1979, 14-18.

"The Role of the Mass Media in American Politics," *Annals of the American Academy of Political and Social Sciences*, Volume 427, September 1976.

Wade, Serena and Wilbur Schramm, "Mass Media as Sources of Public Affairs, Science and Health Knowledge," *Public Opinion Quarterly*, 33:2, Summer 1969, 197-209.

