

DOCUMENT RESUME

ED 108 291

EA 007 204

AUTHOR White, Anthony G.  
TITLE Towards a Scientific Study of Information and  
Communication Theory Relative to Groups and  
Organizations: A Bibliographic Essay.  
INSTITUTION Council of Planning Librarians, Monticello, Ill.  
PUB DATE Sep 74  
NOTE 19p.; Exchange Bibliography No. 638; Best copy  
available for reproduction  
AVAILABLE FROM Council of Planning Librarians, P.O. Box 229,  
Monticello, Illinois 61856 (\$1.50)  
EDRS PRICE MF-\$0.76 PLUS POSTAGE. HC Not Available from EDRS.  
DESCRIPTORS \*Bibliographies; \*Communications; Communication  
Skills; \*Information Science; Interaction Process  
Analysis; Mathematical Applications; \*Organizational  
Theories; \*Organizations (Groups); Publications;  
Reference Materials

ABSTRACT

This publication consists of a brief essay on the scientific analysis of organizational interaction and structures and a bibliography of relevant publications. The author discusses the application of mathematical ordering and analysis to the study of organizations and examines the relationship between organizational structure and interpersonal communication. Bibliographic citations are listed alphabetically by author's name. (JG)

\*\*\*\*\*  
\* Documents acquired by ERIC include many informal unpublished \*  
\* materials not available from other sources. ERIC makes every effort \*  
\* to obtain the best copy available. nevertheless, items of marginal \*  
\* reproducibility are often encountered and this affects the quality \*  
\* of the microfiche and hardcopy reproductions ERIC makes available \*  
\* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
\* responsible for the quality of the original document. Reproductions \*  
\* supplied by EDRS are the best that can be made from the original. \*  
\*\*\*\*\*

September 1974

Anthony G. White

**TOWARDS A SCIENTIFIC STUDY OF INFORMATION AND  
COMMUNICATION THEORY RELATIVE TO GROUPS AND  
ORGANIZATIONS: A Bibliographic Essay**

Anthony G. White

/BEST COPY AVAILABLE/

EA 007 204

Mrs. Mary Vance, Editor  
Post Office Box 229  
Monticello, Illinois 61856

TOWARDS A SCIENTIFIC STUDY OF INFORMATION AND  
COMMUNICATION THEORY RELATIVE TO GROUPS AND  
ORGANIZATIONS: A BIBLIOGRAPHIC ESSAY

by

Anthony G. White

Copyright © 1974 Anthony G. White

Central to the thesis of this bibliographic collection is that there exists a growing body of literature leading toward the orderly, scientific analysis of group and organizational interactions and structures. The purpose should be self-evident: if a field of study is sufficiently surveyed and understood, it should be possible to define parameters within which, given certain initial and boundary conditions, actions and reactions can be predicted.

The study of interpersonal actions - i.e., the rules, roles and relationships within groups - lies within the area of sociology. With the exception of statistical tests, however, sociology and its subfields have long resisted mathematical ordering and analysis. While mathematical sociology (sociometry) is a growing field, there is a reluctance on the part of social scientists (and perhaps a lack of training) to view the social group as a mathematical entity.

Organizations, as special subcategories of groups, have within the last four decades come under more intense study as a key to human interactions (and in part as a reaction to communication and organization difficulties encountered during World War II). Organizations can be intuitively thought of as structured groups created usually to perform a task or given set of tasks, and knowing how they operate can lead to development of the tools for dealing with the larger category of "groups."

For an area of study to be considered "scientific," two basic elements are required. First, there must exist or be capable of existing a data base generated in an orderly, replicable manner. Second, there must exist analytic tools for working with the data base - tools which could be wielded in the same manner by different investigators to yield the same results.

Organizations have thus come under close scrutiny because they are so plentiful, at least in American life. Every aspect of social, political, economic and cultural facets of our lives are tied to organizations of one kind or another. Through them, we can come to a better understanding of ourselves and the way in which we deal with other people.

In each organization there is at least one structure, defined by the genetic document of the organization (constitution, charter, contract, articles of incorporation)

or by evolution over time. This structure sets limits on who gives orders to whom, the role of certain individuals (comptroller, foreman, board director), and so on. Other structures within the formal one are possible, either formal (cells, task forces, project teams) or informal (cliques, discussion groups).

For the organization to function within its environment, it must be capable of receiving external or internal stimuli, of processing that stimuli into understandable patterns (information), choosing the correct response pattern ("correct" usually in the context of survival), reacting, receiving feedback from the reaction, and modifying the organizational response or structure to meet existing needs.

Involved herein is the process of communication, which can be loosely thought of as the sending, processing, comprehension and reaction to information. Not only must this process be looked at in the sense of the organization, but in the sense of individual members of that organization as well.

Additional concepts which are wrapped up in, and necessary to, this communication process are: leadership, status, role, task, power, cliques, authority, environment, filtering, feedback, morale, noise (interference with information transmission or reception), boundary conditions, redundancy, centrality of structure, group

size, individual attitudes, information distribution patterns, risk, expectations, adaptability, duration, adgonde, stress, commitment, individual satisfaction, and confidence. The consideration of all these factors is obviously no easy task.

The study of these concepts in the organizational and communication context can analytically be handled by game theory, computer simulations, Markov chain analysis, probability theory, graph theory, matrix algebra, set theory, and the higher mathematics of information theory - including advanced calculus. The number of social scientists capable of using these tools is not large, but is growing with each new graduating class.

The study of organization can help answer some questions that are important both in the decision-making process and interpersonal actions which affect us all, such as: What is leadership? How can leadership be cultivated, and best utilized? Why do some messages flowing through organizations get "scrambled," while others pass through crystal-clear? What makes people satisfied (or dissatisfied) in their organizational niches? How can the individual best manipulate an organization to achieve maximum results? What stresses can an organization take before it ceases to function properly? What do some organizations grow and prosper and some decay when placed in the same environment? What can individuals do better than an

organization, and vice versa, and why? These questions and others can best be answered when the state of the art of mathematical applications reaches that point when, if a social scientist desires to study a group reaction to a given situation, he could derive the answer from his desk-top computer.

Aircraft Armaments, Inc. Organizational Models for Command Post Information Systems. Aircraft Armaments, Inc., 1964.

Anzieu, Didier. "Les Communications intra-groupe," in F. A. Geldard, ed., Communications Processes. New York: Macmillan, 1965, pp. 109-100.

Appel, G. H. "The Structure of District Administration, Anti-administration Activity and Political Instability," Human Organization, Vol. 25, No. 4, Winter 1966, pp. 312-320.

Arrow, K. J., S. Karlin and P. Suppes, eds. Mathematical Models in the Social Sciences. Stanford: Stanford University Press, 1960.

Bales, R. F. Interaction Analysis: A Method for the Study of Small Groups. Reading, Massachusetts: Addison-Wesley, 1950.

\_\_\_\_\_, et al. "Channels of Communication in Small Group," American Sociological Review, Vol. 16, 1951, pp. 461-468.

Barnlund, Dean C. and Carroll Harland. "Proximity and Prestige as Determinants of Communications Networks," Sociometry, Vol. 26, 1963, pp. 407-479.

Bevelas, L. "An Experimental Approach to Organizational Communication," Personnel, Vol. 27, 1951, pp. 366-371.

\_\_\_\_\_. "A Mathematical Model for Group Structures," Applied Anthropology, Summer 1948.

\_\_\_\_\_. "Communication Patterns in Problem-Solving Groups," in H. van Pooester, ed., Cybernetics; Transactions of the 8th Conference, 1951. New York: Josiah Macy, Jr. Foundation, 1951.

\_\_\_\_\_. "Communication Patterns in Task-Oriented Groups," Journal of the Acoustical Society of America, Vol. 22, November 1950, pp. 725-730.

Berge, C. Theorie des Graphes et ses applications. Paris: Dunod, 1950.

Bratton, D. "Efficient Communication Networks," Corles Communications Discussion Paper, 1955, p. 2119+.

Drewer, John. "Flow of Communications, Expert Qualifications and Organizational Authority Structures," American Sociological Review, Vol. 36, 1971, pp. 475-481.

Brillouin, L. Science and Information Theory. New York: Academic Press, 1956.

Droadbent, D. B. Preception and Communication. London and New York: Pergamon Press, 1950.

Burgess, R. L. "Communication Networks: An Experimental Revolution," Journal of Experimental Social Psychology, Vol. 4, 1968, pp. 324-337.

Burns, Tom. "The Directions of Activity and Communication in a Departmental Executive Group," Human Relations, Vol. 7, 1954, pp. 73-97.

Cartwright, D. "The Potential Contribution of Graph Theory to Organization Theory," in H. Haire, ed., Modern Organizational Theory. New York: Wiley, 1959, pp. 254-271.

Carzo, Rocco, Jr. "Some Effects of Organizational Structure on Group Effectiveness," Administrative Science Quarterly, Vol. 7, 1962-1963, pp. 393-424.

\_\_\_\_\_, and J. H. Manenzas. Formal Organizations: A Systems Approach. Homewood, Illinois: Dorsey Press, 1967.



- Cherry, Colin, ed. Information Theory: Proceedings of the 3rd London Symposium. London: Butterworths, 1955.
- \_\_\_\_\_, ed. Information Theory: Proceedings of the 4th London Symposium. London: Butterworths, 1961.
- \_\_\_\_\_. On Human Communication. Cambridge: M.I.T. Press, 1960, second edition.
- \_\_\_\_\_. "The Cocktail Party Problem," Discovery, March 1962, p. 32.
- Christie, L. S., A. D. Luce and J. Macy, Jr. Communication and Learning in Task-Oriented Groups. Cambridge: M.I.T. Research Laboratory of Electronics, May 1952. Technical Report 231.
- Cohen, A. H. "A Model of Group Adaptation to Organizational Change in Communications Networks," in Lee Thayer, ed. Communication Theory and Research. Springfield, Illinois: Charles C. Thomas, 1965.
- \_\_\_\_\_. "Changing Small-Group Communication Networks," Administrative Science Quarterly, Vol. 6, March 1962, pp. 443-462.
- \_\_\_\_\_ and W. G. Bennis. "Continuity of Leadership in Communication Networks," Human Relations, Vol. 14, 1961, pp. 351-367.
- \_\_\_\_\_, \_\_\_\_\_ and G. H. Wolkon. "The Effects of Changes in Communication Networks on the Behaviors of Problem-Solving Groups," Sociometry, Vol. 25, 1962, pp. 177-196.
- Committee on Telecommunications, National Academy of Engineering. Communications Technology for Urban Improvement. Washington, D.C.: U.S. Department of Housing and Urban Development, 1971.
- Conrath, David W. "Communications Environment and Its Relation to Organizational Structure," Management Science, Vol. 20, No. 4, Part II, December 1973, pp. 588-603.
- Criswell, Joan, Herbert Solomon and Patrick Suppes, eds. Mathematical Methods in Small Group Processes. Stanford: Stanford University Press, 1962.
- Deutsch, K. "On Communication Models in the Social Sciences," Public Opinion Quarterly, Vol. 16, 1952, pp. 356-380.

- Doreian, P. "A Note on the Detection of Cliques in Valued Graphs," Sociometry, Vol. 32, No. 2, June 1969, pp. 237-242.
- Dorsey, John T., Jr. "A Communications Model for Administration," in P. Sexton, Organizational Theories. Columbus, Ohio: C. E. Merrill, 1970, pp. 253-260.
- Feirthorne, A. L. "Information Theory and Clerical Systems," Journal of Documentation (London), Vol. 9, No. 2, June 1953, pp. 101-110.
- Perence, T. P. "Organizational Communications Systems and the Decision Process," Management Science, Vol. 17, No. 2, Part I, October 1970, B-83 to B-90.
- Westinger, L. "The Analysis of Sociograms Using Matrix Algebra," Human Relations, Vol. 2, 1949, pp. 153-158.
- Miedler, F. E., et al. Group and Organizational Factors Influencing Creativity Amended to Include Communications, Cooperation and Negotiation in Culturally Heterogeneous Groups. Chicago: University of Illinois Department of Psychology, 1964.
- Mienberg, S. E. and P. K. Lorntz, Jr. "Some Models for Individual-Group Comparisons and Group Behavior," Psychometrika, Vol. 36, No. 4, 1971, pp. 349-367.
- Planert, Claude. Applications of Graph Theory to Group Structure. Englewood Cliffs, New Jersey: Prentice-Hall, 1953.
- \_\_\_\_\_. "Changements de Roles et Adaption a la Tache dans des Groupes de Travail Utilisant Divers Reseaux de Communication," Année Psychologie, Vol. 56, 1956, pp. 411-432.
- \_\_\_\_\_. "Performance et Reseaux de Communication," Bulletin du Centre d'Etudes et de Recherches Psychotechniques, Vol. 7, 1958, pp. 97-106.
- \_\_\_\_\_. "Nombre de cycles complets dans un reseau de communication; fonction caracteristique d'un graphe et ligne de Hamilton," Bulletin du Centre d'Etudes et de Recherches Psychotechniques, Vol. 8, 1959, pp. 105-110.
- \_\_\_\_\_. "Les Processus de Communication," in Fraisse et Piaget, Traite de Psychologie Experimentale. Paris: Presses Universitaires de France, 1962.

- Morsyth, E. and L. Katz. "A Matrix Approach to the Analysis of Sociometric Data," Sociometry, Vol. 9, 1946, p. 340.
- Foundation of Research in Human Behavior. Communications in Organizations: Some New Research Findings. Ann Arbor: The Foundation, 1959.
- Gabor, D. "Communication Theory and Cybernetics," in Transactions of the International Research in Electronics Professional Group on Non-Linear Circuits, December 1954.
- \_\_\_\_\_. "Investigations in Communications Theory," Union of Radio Sciences International, Vol. 6, 1950.
- \_\_\_\_\_. Lectures in Communication Theory. Cambridge: M.I.T. Press, 1951.
- \_\_\_\_\_. "Theory of Communications," Journal of the Institute of Electrical Engineers, Vol. 93, Part III, 1946, p. 429.
- Gerbner, George. "Communication and Social Environment," Scientific American, Vol. 227, No. 3, September 1972, pp. 142-151.
- Gilchrist, J. C., H. P. Shaw and L. C. Walker. "Some Effects of Unequal Distribution of Information in a School Group Structure," Journal of Abnormal and Social Psychology, Vol. 49, 1954, pp. 554-556.
- Glanzer, H. and R. Glaser. "Techniques for the Study of Group Structure and Behavior," Psychological Bulletin, Vol. 58, 1961, pp. 1-27.
- Goldmark, Peter C. "Communication and the Community," Scientific American, Vol. 227, No. 3, September 1972, pp. 142-151.
- Goodman, Leo A. "Mathematical Methods for the Study of Groups," American Journal of Sociology, Vol. 70, 1964, pp. 170-192.
- Guetzkow, J. "Communication in Organizations," Management Science, Vol. 11, March 1965, pp. 534-573.
- \_\_\_\_\_. and H. A. Simon. "The Impact of Certain Communication Nets upon Organization and Performance in Task-Oriented Groups," Management Science, Vol. 1, 1955, pp. 233-250.

- Herbertson, C. . "Organizational Design and Systems Analysis," in L. G. March, ed., Handbook of Organizations. Chicago: Rand McNally, 1965, pp. 1171-1217.
- Hage, Jerald, J. Eiken and C. J. Barrett. "Organizational Structure and Communications," in K. Azumi and J. Hage, Organizational Systems. Lexington, Massachusetts: D. C. Heath and Co., 1972, pp. 371-381.
- Hall, L. A. "Communication within Organizations," in L. A. Hall and D. L. Ogden, eds., Readings in Organization Theory: A Behavioral Approach. Boston: Allyn and Bacon, 1967, pp. 403-415.
- Harary, F. and J. Z. Norman. Graph Theory as a Mathematical Model in Social Science. San Harbor: Institute for Social Research, 1953.
- \_\_\_\_\_ and I. C. Ross. "The Number of Complete Cycles in a Communication Network," Journal of Social Psychology, Vol. 40, 1954, pp. 325-332.
- \_\_\_\_\_. "A Procedure for Clique Detection Using the Group Matrix," Sociometry, Vol. 20, 1957, pp. 205-215.
- \_\_\_\_\_, et al. Structural Models: An Introduction to the Theory of Directed Graphs. New York: Wiley and Sons, 1965.
- Heise, W. A. and G. A. Miller. "Problem Solving by Small Groups Using Various Communication Nets," Journal of Abnormal and Social Psychology, Vol. 46, July 1951, pp. 327-335.
- Hesseling, Pjotr. "Communication and Organization in a Large Multi-National Company," in Gerald Heald, ed., Approaches to the Study of Organizational Behavior. London: Tavistock Publications, 1970, pp. 40-70.
- Hirota, K. "Group Problem Solving and Communication," Japanese Journal of Psychology, Vol. 24, 1953, pp. 105-113.
- Holland, P. . and S. Leinhardt. "A Method for Detecting Structure in Sociometric Data," American Journal of Sociology, Vol. 76, November 1970, pp. 492-513.
- Jackson, Jay H. "The Organization and Its Communication Problems," Journal of Communication, Vol. 9, 1959, pp. 158+.

- Jackson, Willis, ed. Proceedings of a Symposium on Applications of Communication Theory. London: Butterworths, 1953.
- \_\_\_\_\_. Proceedings of a Symposium on Information Theory. London: Ministry of Supply, 1953.
- Johannsen, J. A. and Carolyn E. Saunders. Annotated Bibliography on Communication in Organizations. La Jolla, California: Western Behavioral Studies Institute, 1962.
- Julian, Joseph. "Compliance Patterns and Communication Blocks in Complex Organizations," in K. Azumi and J. Sage, eds., Organizational Systems. Lexington, Massachusetts: D. C. Heath and Co., 1972, pp. 382-387.
- Kemeny, J. G. and J. L. Snell. "A Markov Chain Model in Sociology," in P. F. Lazearfeld and H. W. Henry. Readings in Mathematical Social Science. Cambridge: M.I.T. Press, 1966, pp. 146-158.
- Lenson, E. D. "Change in Communication Nets, Performance, and Morale," Human Relations, Vol. 18, 1965, pp. 139-147.
- Lazearfeld, P. F. "Communication Research and the Social Psychologist," in W. Dennis, ed., Current Trends in Social Psychology. Pittsburgh, Pennsylvania: University of Pittsburgh Press, 1946.
- Leavitt, Harold J. "Some Effects of Certain Communication Patterns on Group Performance," Journal of Abnormal and Social Psychology, Vol. 46, 1951, pp. 38-50.
- Lobstein, J. "Structure - reseau de communication," Travail et Methodes, 1958, pp. 67-73.
- Lorge, I. and N. Solomon. "Group and Individual Behavior in Free-recall Verbal Learning," in Mathematical Methods in Small Group Processes. Stanford: Stanford University Press, 1962.

- Luce, D. D. "A Survey of the Theory of Selective Information and Some of its Behavioral Applications," Bureau of Applied Social Research Technical Bulletin, Report No. 8, Columbia University, p. 146+.
- \_\_\_\_\_. "Connectivity and Generalized Cliques in Sociometric Group Structures," Psychometrika, Vol. 15, No. 1, June 1950.
- \_\_\_\_\_. The Theory of Networks. Cambridge, M.I.T. Research Laboratory of Electronics, 1951, mimeograph.
- \_\_\_\_\_, et al. Information Flow in Task-Oriented Groups. Cambridge: M.I.T. Research Laboratory of Electronics, 1953. Technical Bulletin No. 264.
- \_\_\_\_\_ and A. D. Perry. "A Method of Matrix Analysis of Group Structure," Psychometrika, Vol. 14, No. 1, March 1949, pp. 95-110.
- Macdonald, D.K.C. "Information Theory and its Application to Taxonomy," Journal of Applied Psychology, Vol. 23, May 1952, p. 529.
- MacKenzie, K. D. "Decomposition of Communication Networks," Journal of Mathematical Psychology, Vol. 4, 1967, pp. 162-174.
- \_\_\_\_\_. "A Set Theoretic Analysis of Group Interactions," Psychometrika, Vol. 35, No. 1, 1970, pp. 23-42.
- \_\_\_\_\_. "Structural Centrality in Communication Networks," Psychometrika, Vol. 31, No. 1, 1966, pp. 17-25.
- Macy, J., Jr., L. S. Christie and R. D. Luce. "Coding Noise in a Task-Oriented Group," Journal of Abnormal and Social Psychology, Vol. 48, 1953, pp. 401-409.
- Markley, O. W. "Simulation of the CIVIA Model of Organizational Behavior," American Journal of Sociology, Vol. 73, No. 3, November 1967, pp. 339-347.
- Marschak, Jacob. "Efficient and Viable Organizational Forms," in P. F. Lazarsfeld and M. W. Henry. Readings in Mathematical Social Science. Cambridge: M.I.T. Press, 1966, pp. 206-219.
- Marshall, Wayne S. "Simulating Communication Network Experiments," Management Science, Vol. 13, No. 10, June 1967, pp. 656-676.

- McLachlan, D. "Communication Networks and Monitoring," Public Opinion Quarterly, Vol. 25, 1961, pp. 194-209.
- Moore, J. C., Jr., D. B. Johnson and H.S.C. Arnold. "Status Congruence and Equity in Restricted Communication Networks," Sociometry, Vol. 35, No. 4, December 1972, pp. 519-537.
- Mulder, H. "Communication Structure, Decision Structure and Group Performance," Sociometry, Vol. 23, 1960, pp. 1-14.
- \_\_\_\_\_. "Group Structure and Group Performance," Acta Psychologica, Vol. 16, 1959, pp. 356-402.
- Pask, G., et al. A Study of Group Decision-Making and Communication Patterns under Conditions of Stress. Systems Research, Ltd., 1963.
- Phillips, D. P. and R. H. Conviser. "Measuring the Structure and Boundary Properties of Groups: Some Uses of Information Theory," Sociometry, Vol. 35, No. 2, June 1972, pp. 235-254.
- Pugh, D. S., et al. "The Context of Organizational Structures," Administrative Science Quarterly, Vol. 14, No. 1, March 1969, pp. 91-114.
- Quastler, H. Information Theory in Psychology. Glencoe, Illinois: The Free Press, 1955.
- Radner, R. The Evaluation of Information in Groups. Berkeley: University of California Management Science Research Group, 1961.
- Read, R. H. "Communication in Organizations: Some Problems and Misconceptions," Personnel Administration, Vol. 23, No. 2, 1963, pp. 4-10.
- Roby, T. D. "Subtask Phasing in Small Groups," in Criswell, Solomon, and Suppes, Mathematical Methods in Small Group Processes. Stanford: Stanford University Press, 1962.
- Rome, Beatrice and Sydney Rome. Communication and Large Organizations. System Development Corporation, 1964.
- Rosengren, H. R. "Communication, Organization and Conduct in the 'Therapeutic Milieu'," Administrative Science Quarterly, Vol. 9, June 1964, pp. 70-90.

Ross, I. C. and P. Herary. "On the Determination of Redundancies in Sociometric Chains," Psychometrika, Vol. 17, 1952, pp. 195-206.

Rougnat, H. "Les chaines de Markov en psychologie: introduction aux modeles stochastiques d'apprentissage," Bulletin du Centre d'Etudes et de Recherches Psychotechniques, Vol. 9, 1960, pp. 399-432.

Roy, D. Cheminement et Connexite dans les Graphes; Application aux Problemes d'Ordonnement. Paris: Societe d'Economie et de Mathematique Appliquee, 1961.

Schiffman, H. A Mathematical Analysis of the Impact of the Source and Content on the Evaluation of a Message. Educational Testing Service, 1963.

Schram, Wilbur. "Information Theory and Mass Communication," Journalism Quarterly, Vol. 32, 1955, pp. 131-146.

\_\_\_\_\_ and Donald F. Roberts. The Process and Effects of Mass Communication. Chicago: University of Illinois Press, 1971.

Scott, H. G. "Communication and Centralization of Organization," Journal of Communication, Vol. XIII, No. 1, March 1963, pp. 3-11.

Shannon, C. E. "A Mathematical Theory of Communication," Bell System Technical Journal, Vol. 27, 1948, pp. 380-423, 623-655.

\_\_\_\_\_. "Communication Theory of Secrecy Systems," Bell System Technical Journal, Vol. 28, 1949, pp. 656+.

\_\_\_\_\_. "Recent Developments in Communication Theory," Electronics, Vol. 23, April 1950, pp. 80-84.



Shaw, H. E. "Communication Networks," in L. Berkowitz, ed., Advances in Experimental Social Psychology. New York: Academic Press, 1964.

\_\_\_\_\_. "A Comparison of Two Types of Leadership in Various Communication Nets," Journal of Abnormal and Social Psychology, Vol. 50, 1955, pp. 127-134.

\_\_\_\_\_. "Group Structure and the Behavior of Individuals in Small Groups," Journal of Psychology, Vol. 38, 1954, pp. 139-149.

\_\_\_\_\_. "Random versus Systematic Distribution of Information Communication Nets," Journal of Personality, Vol. 25, 1956, pp. 59-69.

\_\_\_\_\_. "Some Effects of Problem Complexity upon Problem Solution Efficiency in Different Communication Nets," Journal of Experimental Psychology, Vol. 46, 1954, pp. 211-217.

\_\_\_\_\_. "Some Effects of Unequal Distribution of Information upon Group Performance in Various Communication Nets," Journal of Abnormal and Social Psychology, Vol. 49, 1954, pp. 547-553.

\_\_\_\_\_ and J. C. Gilchrist. "Intra-Group Communication and Leader Choice," Journal of Social Psychology, Vol. 43, 1956, pp. 133-136.

\_\_\_\_\_ and G. H. Rothchild. "Some Effects of Prolonged Experience in Communication Nets," Journal of Applied Psychology, Vol. 44, 1956, pp. 281-286.

\_\_\_\_\_, \_\_\_\_\_ and J. F. Strickland. "Decision Processes in Communication Nets," Journal of Abnormal and Social Psychology, Vol. 54, 1957, pp. 323-330.

Shelly, H. W. and J. C. Gilchrist. "Some Effects of Communication Requirements in Group Structures," Journal of Social Psychology, Vol. 48, 1958, pp. 37-44.

Simon, H. A. Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization. New York: Macmillan, 1947.

Simpson, Richard L. "Vertical and Horizontal Communication in Formal Organizations," Administrative Science Quarterly, Vol. 4, 1959, pp. 188-196.

- Smith, S. L. "Communication Patterns and the Adaptability of Task-Oriented Groups: An Experimental Study," in D. Lerner and M. Casswell, eds., The Policy Sciences: Recent Developments in Scope and Method. Stanford: U.S.C. Press, 1951.
- Snydowsky, Alvin. "Member Satisfaction in Stable Communication Networks," Sociometry, Vol. 37, No. 1, March 1974, pp. 38-53.
- Stogdill, R. M. "Basic Concepts for a Theory of Organization," Management Science, Vol. 13, Part 2, No. 10, June 1967, pp. 366-373.
- \_\_\_\_\_. "Dimensions of Organization Theory," in J.D. Thompson, Approaches to Organizational Design. Pittsburgh: University of Pittsburgh, 1965.
- Streufert, S., P. Suedfeld and M. J. Driver. "Conceptual Structure, Information Search, and Information Utilization," Journal of Personality and Social Psychology, Vol. 2, 1965, pp. 736-740.
- Suppes, Patrick and Richard C. Atkinson. Markov Learning Models for Multiperson Interactions. Stanford: Stanford University Press, 1960.
- Thibaut, J., et al. "Communication, Task Demands, and Group Effectiveness," Journal of Personality, Vol. 28, 1960, pp. 156-166.
- Thrall, R. H., C. H. Coombs and R. L. Davis, eds. Decision Processes. New York: Wiley and Sons, 1954.
- Voos, Henry. Organizational Communication: A Bibliography. New Brunswick, New Jersey: Rutgers University, 1967.
- Walters, Eugene. "A Study of Organizational Communication Systems," Personnel Administration, Vol. 26, No. 5, 1963, pp. 45-49.
- Watson, David L. "Effects of Certain Social Power Structures on Communication in Task-Oriented Groups," Sociometry, Vol. 28, No. 3, September 1965, pp. 322-336.
- \_\_\_\_\_. and L. Rosenberg. "Power, Communication and Position Satisfaction in Task-Oriented Groups," Journal of Personality and Social Psychology, Vol. 2, 1965, pp. 859-864.
- Weaver, H. "The Mathematics of Communication," Scientific American, Vol. 161, 1949, pp. 11-15.

Vickesberg, A. H. "Communications Networks in the Business Organization Structure," Academy of Management Journal, Vol. 11, 1968, pp. 253-262.

Ziller, W. C. "Communication Restraints, Group Flexibility, and Group Confidence," Journal of Applied Psychology, Vol. 42, 1958, pp. 346-352.

---

COUNCIL OF PLANNING LIBRARIANS Exchange Bibliography #638

TOWARDS A SCIENTIFIC STUDY OF INFORMATION AND  
COMMUNICATION THEORY RELATIVE TO GROUPS AND  
ORGANIZATIONS: A BIBLIOGRAPHIC ESSAY

Additional copies available from:

Council of Planning Librarians  
Post Office Box 225  
Monticello, Illinois 61856