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PSYCHOLOGY OF LABOR-MANAGEMENT RELATIONS

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ISSUES

PROCEEDINGS OF MEETING  
DENVER, COLORADO  
SEPTEMBER 7, 1949



PSYCHOLOGY  
OF  
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RELATIONS

*Edited by*  
**ARTHUR KORNHAUSER**

1949

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TRIAL AND BUSINESS PSYCHOLOGY OF THE AMERICAN PSYCHO-  
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## PREFACE

With this volume, the Industrial Relations Research Association takes another important step toward achieving its primary objectives:

1. The encouragement of research in all aspects of the field of labor—social, political, legal, economic, and psychological relations, personnel administration, social security, and labor legislation;
2. The promotion of full discussion and exchange of ideas regarding the planning and conduct of research in this field;
3. The dissemination of the significant results of such research; and
4. The improvement of the materials and methods of instruction in the field of labor.

As is noted in the *Introduction*, the study of labor-management relations in recent years has become the province of all of the social sciences and not merely of the economists. The papers in this volume should provide many stimulating ideas to economists and other non-psychologist members of the Association who may be unfamiliar with current contributions of psychology to an understanding of labor-management relations. They may also result in a more critical examination by psychologists of certain basic value judgments, concepts, and techniques which are found in much of their scientific work.

The Association is privileged to publish these papers through the courtesy of its co-sponsors of the meeting, the Industrial and Business Division of the American Psychological Association and the Society for the Psychological Study of Social Issues, likewise a division within the American Psychological Association. The volume was edited by Professor Arthur Kornhauser of Wayne University, who has also contributed a highly provocative introductory statement. In accordance with customary practice, the contents of the papers are the sole responsibility of their respective authors and do not represent the official views of the sponsoring organizations.

MILTON DERBER, *I.R.R.A. Editor*

# CONTENTS

Preface Milton Derber	v
Introduction Arthur Kornhauser	1

## Part I

### THE ROLE OF PERSONNEL PSYCHOLOGY IN IMPROVING LABOR-MANAGEMENT RELATIONS

Selection and Placement of Employees Morris S. Viteles	9
The Joint Committee in Job Evaluation Joseph Tiffin	23
Improving Supervision Through Training Norman R. F. Maier	27
Discussion: Roger M. Bellows, Harold C. Taylor, William Gomborg and others	43

## Part II

### PSYCHOLOGICAL STUDIES OF LABOR-MANAGEMENT RELATIONS

The Attitude Survey Approach Daniel Katz	63
The Group Dynamics Approach John R. P. French, Jr., and Alvin Zander	71
The Clinical Psychology Approach Robert N. McMurry	81
Discussion: Ross Stagner, James C. Worthy, Clark Kerr	95

## Part III

### LABOR-MANAGEMENT RELATIONS: A CHALLENGE TO THE SOCIAL PSYCHOLOGIST

Toward a Theory of Organized Human Effort in Industry Douglas McGregor	111
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# INTRODUCTION

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THE PAPERS published in this volume were read as parts of a program sponsored jointly by the Industrial Relations Research Association and by two psychological organizations—the Industrial and Business Division of the American Psychological Association and the Society for the Psychological Study of Social Issues, also a division within the American Psychological Association. The three groups collaborated in the conviction that both psychologists and non-psychologists would profit from an examination of typical psychological efforts to understand and improve labor-management relations.

The significance of the joint sponsorship of the meeting and of these proceedings should not go unnoted. It reflects a clear recognition that the study of labor relations extends beyond economics into the territory of all the other social sciences as well. As emphasis has shifted to the “human relations” aspects of industry, approaches from the side of psychology, sociology and anthropology have become unmistakably pertinent. Moreover, it is now clear that the several sciences of man, rather than working independently, must combine their forces in helping to solve the knotty problems of society. Each professional group gains from its association with the others. The Industrial Relations Research Association is in a peculiarly strategic position to foster the type of inter-professional collaboration illustrated in these proceedings.

For psychologists the joint program marked a departure from tradition. Instead of talking solely to fellow psychologists within the usual psychological frames of reference, the speakers in these sessions exposed their thinking to the critical scrutiny of persons representing different academic backgrounds and different social interests and values. Many comments received since the close of the meetings indicate that the psychologists approved the “experiment.” In future sessions they wish to expand the opportunities for discussing divergent points of view on these problems.

The Denver papers and discussion serve two major purposes. In the first place, they sketch certain contributions by psychology to

thinking and practice in labor-management affairs. This includes current efforts to develop improved research methods for tackling the problems. In the second place, the reports call attention to deep-cutting questions concerning the objectives, the concepts, and the social orientation of psychological work on labor-management issues.

In the way of substantive contributions, what psychology has offered in the past is principally improved procedures for personnel management. To whatever extent enlightened and effective personnel administration makes for more satisfactory labor-management relations, its achievement rests in no small measure on the activities of personnel psychologists. This type of work is most directly reflected in the reports by Drs. Viteles, Tiffin and Maier, and in the comments by Drs. Bellows and Taylor, though the other papers likewise suggest significant personnel applications. The topics chosen in the personnel field are only illustrative, of course. The range of examples could readily be extended beyond those of employee selection and placement, job evaluation, and supervisor training to include fatigue and accident studies, job instruction, merit rating, communication practices and many other components of a total personnel program. Psychology continues to make important technical advances on this entire front.

In recent years psychologists have also been paying increasing attention to broader social-psychological aspects of labor-management affairs that lie outside the usual confines of personnel management. Research along these lines is still in its infancy. While it already offers challenging tentative conclusions, its greatest contribution probably arises from its persistent efforts to forge more satisfactory conceptual tools and investigational methods. Its ultimate goal is nothing less than a structure of established theory and principles of human organization that will prove relevant to society generally and to industry in particular. Typical results of current psychological thought and activity in this direction are well illustrated in the papers by Drs. Katz, French and Zander, McMurry, and Maier; in suggestions by Mr. Worthy; and in Dr. McGregor's address. They bring into view the significant growing tips of an emerging social psychology of labor-management relations.

The second purpose of the conference was to stimulate critical questioning about what psychologists are doing in the sphere of industrial relations. When investigators—in this instance psychologists—introduce new approaches to important and controversial practical problems, penetrating scrutiny of the activities becomes imperative. While technical criticism of particular studies has not been wanting, there has been decidedly less attempt to appraise

psychologists' points of view and frames of reference as these affect their research. Basic questions here ask whether psychologists are working on the "right" problems. Are they living up to the broad, challenging opportunities? Are they utilizing their scientific instruments within a social perspective and a set of assumptions that have been thoughtfully selected after systematic consideration of alternatives? Do the psychologists' interpretations and conclusions suffer from too limited views of the total relationships under study?

The comments by Dr. Gomberg and Dr. Kerr hit squarely at these problems. Important suggestions are also offered by other participants, notably the statements by Drs. Katz, French and Zander, and Tyson. Whether or not agreement can be reached on the troublesome issues, there can scarcely be doubt that they deserve open discussion in scientific meetings. Perhaps the most serious aspect of the problem has been its neglect. Psychologists have tended to ignore the social implications of their activities and have seldom stopped to make explicit the value assumptions underlying their pursuits.

The fact of the matter is that psychologists, along with many fellow social scientists, are in the process of emerging from a rather restricted and one-sided frame of reference in the study of industrial relations. By and large industrial psychologists have worked for management and have accepted management's point of view. The effect has been particularly pronounced in respect to the choice of problems and the formulation of research objectives. Hence the sharply critical observations of a specialist like Dr. Gomberg when he evaluates the psychologist's work from a labor union standpoint. Hence also the tolerant but penetrating questioning of the psychologist's orientation by Dr. Kerr, who views management-labor relations in broad social-historical perspective.

Psychologists as well as other students of labor relations must face these lines of questioning. They must hammer out answers that satisfy their own high standards of impartial, thorough, scientific investigation. The use of refined research techniques for collecting and analyzing data will not suffice; design of the study with proper regard for the relevance and adequacy of the answers and full consideration of pre-suppositions and limitations are even more essential. Objectives of productivity and efficiency, collaboration and democratic group decision, industrial peace and harmony, "morale" defined to mean contentment with the job and the company—these are heavily weighted with value judgments that call for explicit statement and justification. Conclusions about labor relations that omit reference to long run consequences for the union organization and for the company or that fail to weigh implications for the eco-

conomic system and for democratic social-political processes are bound to remain fragmentary and questionable at best and dangerously misleading at their worst.

In all these matters, the professional organizations, and particularly the Industrial Relations Research Association, can play an important role. Along with the cultivation of cross-disciplinary thinking, a vital need exists for increased contacts between investigators with different social philosophies and contrasting group sympathies. Social research that fails persistently to expose itself to criticism from the opposite side of the fence will almost inevitably slip into a partisan position. The investigator's desire to remain a detached, aloof scientist too often means that he unwittingly accepts the outlook and biased assumptions of those under whose auspices he works. Meetings like the one here recorded afford opportunity for discussion of a kind that makes scientific complacency less comfortable.

Fundamental questions in another direction are concerned with the structure of socio-psychological theory that will prove most serviceable in dealing with labor relations. While the papers in this volume exemplify applications of different conceptual schemes, there is no examination or comparison of alternative psychological approaches. The problem is touched upon at a number of points, however, most definitely by Mr. Worthy in his expression of doubts about "field theory." The need for more useful concepts and systematic theories of motivation and social dynamics is generally recognized. Broad and valid generalizations are scarcely to be hoped for until we can substitute clearly defined psychological and social variables for ambiguous common-sense factors like wages, supervision, personnel policies, and "good industrial relations." Psychologists at a future conference might profitably explore the virtues and defects of different theories in contributing to an understanding of labor relations and to the guidance of relevant research.

One further theme stands out prominently in comments by the discussion leaders. It is the emphasis on better communication between psychologists and administrators. Concern is expressed over the failure of both industrial executives and union leaders to make greater use of the knowledge and techniques that psychology offers. A number of remedial suggestions are proposed, particularly by Mr. Worthy and by Drs. Bellows, Taylor and Shellow.

The treatment of this problem primarily in terms of improved communication and mutual understanding gives rise to a serious question. A tacit assumption appears to be present that harmony prevails between the purposes of the psychologist and those of the

administrators who are to use his results. The assumption is reasonable as long as one concentrates on the psychotechnician employed in the service of management or union. Since the interests of management in production and profits and the interests of working people (non-economic as well as economic) often fail to coincide, however, the technician who works for one group is severely limited in efforts to gain understanding and acceptance from the other. Moreover, the investigator who proceeds independently to conduct dispassionate analyses of the psychological and social processes is likely soon to run athwart the desires and special interests of either employers, unions, or both. The problem then becomes one not of clearer communication between scientist and administrator but of finding disinterested sponsorship for the development of the research.

The psychologist's role as technician aiding one leadership group or another to find more effective manipulative procedures must be distinguished from his role as social scientist seeking basic knowledge. In the process of making psychology "useful" in labor-management affairs there is danger that it may tackle only the "practical" problems as seen by practical men while neglecting more fundamental problems. Closer liaison between psychologists and users of their research is surely desirable. But let it not be forgotten that the potential users include all mankind, present and future. And that the breadth and validity of knowledge regarding labor-management relations is ultimately more important than the effectiveness with which it is communicated.



Part I

THE ROLE OF PERSONNEL PSYCHOLOGY  
IN IMPROVING LABOR-MANAGEMENT  
RELATIONS





# SELECTION AND PLACEMENT OF EMPLOYEES

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IT IS COMMONLY recognized that the most significant development in industrial psychology during the past ten or fifteen years is the growing concern of industrial psychologists with the sentiments, feelings and attitudes of workers, supervisors, and managers, and with the interplay of people in the social organization of the industrial enterprise.<sup>1</sup> Interest in this development has tended to create a blind spot—reflected at least in the recent publications of some industrial psychologists—with respect to the continuing importance of effective selection and placement of employees as a tool for the maintenance both of good labor-management relations and of the efficiency and stability of the industrial organization and of our industrial civilization.

Underlying this latter statement is, in part, the point of view that *good labor-management relations cannot be maintained in the absence of productive efficiency on the part of employees*. While such terms as efficiency and high production have acquired a somewhat noxious feeling tone in certain circles, it is nevertheless necessary to face the fact that efficiency in the production and distribution of goods is an essential need in industry and a necessary prerequisite to the accomplishment of desirable social objectives and to the maintenance of social stability.

The adverse effects of unwise selection of employees are reflected directly in increased labor costs; in the cost of turnover; in lost time; in the form of increased compensation payment for accidents, etc. Such expenditures are reflected directly in the balance sheet of individual industrial organizations in the form of higher costs for manufacturing and distributing goods. Such costs are of interest not only to individual enterprises, imbued with the altogether laudable desire of making a profit, but also to society at large, inasmuch as wastefulness in production, whether it be in the use of materials or of human resources, ultimately expresses itself in increased living costs and lower standards of living.<sup>2</sup>

Industry is constantly being asked to provide higher wages; to

<sup>1</sup> M. S. Viteles, "The Past and Future of Industrial Psychology," *Journal of Consulting Psychology*, 1944, p. 8.

<sup>2</sup> A. W. Kornhauser and F. A. Kingsbury, *Psychological Tests in Business*, University of Chicago Press, 1924, p. 172.

lower prices and provide for wider distribution of its goods; to shorten its hours of work; to pay increased taxes for social and other purposes. This program calls for a reduction in manufacturing costs. This need, as suggested earlier, is of significance not alone from the viewpoint of the individual manufacturing and commercial organizations, but also from the viewpoint of achieving broad social objectives, since one basic test of any civilization is the extent to which it improves the material conditions of those who live under it.<sup>3</sup> On this, it is of interest to note, there is agreement even between the defenders of capitalism and the apostles of communism, since both groups make the level of the material welfare of the great masses of people a test of the economic and social system.

Material welfare may not be all of life, but in a world where scarcity prevails, it is a necessary prerequisite for the attainment by the masses of the aesthetic and emotional values of life. . . . The success or failure of any economic or industrial system will be reflected in and measured by the material condition of the great masses of people; . . . the preservation of any economic system relies inevitably upon a steadily advancing welfare of its people.<sup>4</sup>

It is a good thing to drive out the capitalists, to seize power and achieve freedom. That is very good, but, unfortunately, freedom alone is far from enough. If there is a shortage of bread, a shortage of butter and fats, a shortage of textiles, and if housing conditions are bad, freedom will not carry you very far. It is very difficult to live on freedom alone. In order to live well and joyously, the benefits of political freedom must be supplemented by material benefits.<sup>5</sup>

It is well recognized that because of the wide differences in suitability for varied jobs which characterize members of the human race, the selection of those workers best qualified to meet high production standards represents one firm basis for increasing the efficiency of industry and for meeting the economic demands imposed upon it and upon an advancing civilization. The current problem appears to be that of bringing striking conviction to both members of the industrial partnership—management and labor alike (particularly organized labor)—that the development of improved selection

<sup>3</sup> M. S. Viteles, "The Role of Psychology in Defending the Future of America," *Annals of the American Academy of Political and Social Sciences*, 1941, pp. 156-62.

<sup>4</sup> H. H. Tullis, "Wage Administration and Incentives," *Proceedings: Seventh International Management Congress*, General Management Papers, William and Wilkins Co., 1938, p. 29.

<sup>5</sup> J. Stalin, *The Stakhanov Movement in the Soviet Union*, Workers' Library, 1935-36, pp. 11-12.

techniques represents an effective device both for increasing industrial efficiency and for solving human problems which arise in the operation of the industrial plant.

There has been increasing awareness of this on the part of management, illustrated, for example, by the fact that while only 7.3 per cent of 2,452 firms surveyed by the National Industrial Conference Board were using tests in 1935, 203 or 49 per cent of 522 companies replying to a questionnaire in a survey made in 1947 reported that they had instituted testing programs between 1941 and 1945.<sup>6</sup> Labor, specifically organized labor, appears to be much less interested in the use of such devices, with the attitude concerning the use of scientific selection methods apparently ranging from merely passive acceptance to active resistance.

Some objective evidence of at least passivity in attitude with respect to the significance of improved selection is found in a recent study of union and management preferences for college courses in personnel work conducted by the Industrial Relations Center, University of Minnesota.<sup>7</sup> Of 40 individuals in union staff positions, none had taken a course in the *psychology of vocational selection, or in interviewing and counseling methods*. The percentage expressing the opinion that such courses "were worth while" was small indeed, constituting 13 and 10 per cent, respectively, for the areas mentioned. In contrast, of 397 individuals in industrial personnel positions, 15 per cent indicated that they had taken courses in *personnel psychology* and 51 per cent expressed the opinion that such courses "were worth while"; 22 per cent had taken courses in *tests and measurements* and 39 per cent considered such preparation for personnel work "worth while." In general it is of interest to note that the preferences and actual preparation of union personnel were more largely in the field of economics, labor legislation, and political science, whereas those of members of industrial personnel staffs were more largely in the field of personnel techniques, personnel management, industrial psychology, and general management. Perhaps one important area of research for the immediate future is the investigation of factors accounting for the attitude of labor leaders towards scientific vocational selection and the development of techniques for promoting a more realistic appreciation of the situation and of obtaining cooperation in the development and use of such methods in the interest of industry, of union members themselves, and of society at large.

<sup>6</sup> *Experience with Psychological Tests*, Studies of Personnel Policies No. 92, National Industrial Conference Board, 1948, p. 4.

<sup>7</sup> P. H. Kreidt and C. H. Stone, "College Courses for Personnel Work—Union and Management Preferences," *Personnel Journal*, Vol. 27 (1948), pp. 247-50.

A troublesome aspect of this situation, in my opinion, is the apparent lack of concern of organized labor with the necessity and possibility of maintaining high production and of reducing labor costs without, of necessity, decreasing the real wages (in terms of purchasing power) of the American population.

It is true, of course, that some labor leaders have taken a realistic view of the situation, even in the face of injustices perpetrated in some instances by backward managements<sup>8</sup> making unwarranted use of the speed-up system at the expense both of the earnings and the welfare of its employees.<sup>9</sup> Progressive labor leaders have recognized that the continued productivity of the industrial plant is a matter which is of concern to the employees, and that, in fact, the future of the union itself may depend upon union cooperation in reducing costs, including those resulting from poor employee selection and placement, in order to help maintain the competitive position of the employer and the continued operation of the industrial plant.

There is growing awareness of the fact that, as Briefs has suggested, "unions could not exist, let alone prosper, in the spheres of submarginality or even marginality," that is, where the firm with which a union deals is unable to, or finds it extremely difficult to, maintain financial stability.

Wherever firms or branches of industry lose their intramarginal status the union weakens, often to the point of withering away. Wherever firms or industries just break even over a period of time, the union may vegetate, but in a state of paralysis. When all is said and done, efficient unionism depends . . . on business prosperity—and *vice versa*. Business in distress hits back on the unions. It threatens their security and perhaps, their very existence. Large firms hard pressed by competition, depression, changes in the demand schedule, etc., cause the union to reflect that jobs, rates, hours, and the union itself may be at stake.<sup>10</sup>

Such are the factors which point to the need for giving adequate consideration to achieving low production costs in a developing program of industrial psychology, and to the further extension of

<sup>8</sup> It is perhaps of interest to note that the most extreme instances of speed-up and misuse of the productive power of employees are apparently to be found under the communistic rather than under the current capitalistic system. This has been discussed in M. S. Viteles, "Industrial Psychology in Russia," *Occupational Psychology*, 1938 (Spring Issue), pp. 1-19. Of interest in this connection is a recent article by D. A. Schmidt, "Czechoslovakia: Lesson to the West," *New York Times Magazine*, July 31, 1949.

<sup>9</sup> National City Bank (New York), *Monthly Letter on Economic Conditions*, July, 1949, p. 79.

<sup>10</sup> G. A. Briefs, *Can Labor Sit in the Office?*, Supplement to Summer, 1948, Number of American Affairs, National Industrial Conference Board, 1948, pp. 5-7.

scientific techniques for the selection and placement of employees as one effective way of achieving this objective. Apart from immediate and ultimate economic considerations, the intimate relationship between vocational adjustment and the general mental adjustment of the worker represents a second reason for giving improved selection an important place in the program of industrial psychology.

Moreover, insofar as psychological techniques increase the probability of hiring fully qualified workers, they constitute a major contribution to good labor-management relations and a first line of defense against industrial conflict which arises so frequently in connection with the hiring and discharge of employees. Contracts and even less formal agreements with labor frequently call for the reinstatement, on a seniority basis, regardless of performance, of employees laid off for lack of work. Under such conditions, mistakes made in selection are not easily corrected. Experience also shows that among the most troublesome of grievances are those involving the discharge of an employee because of "unfitness." In such cases, management ordinarily finds little sympathy on the part of labor for its plea that the worker is incompetent. "That," says labor, "is a matter which should have been settled prior to employment." And whether or not this stand is justified, the issue is one which contributes to misunderstanding and strife. In view of this, it seems likely that a most fertile field for the promotion of improved labor-management relations in America of the future is to be found in cooperative effort by management and labor in the formulation of techniques and standards by means of which workers can be fitted to their jobs. Such standards, established through impartial psychological research, can do much toward eliminating at its source the problem of unfitness for work which so frequently clouds an otherwise smoothly operating and mutually satisfactory industrial relations program.<sup>11</sup>

Considerable time has been taken in pointing out the continued need for scientific selection and placement in a paper which might perhaps have better been devoted wholly to a consideration of significant research problems. However, the industrial psychologist cannot work well in an ivory tower, that is, without concern for the total situation, and still expect to produce effective and useful outcomes. For this reason it has seemed appropriate to discuss at some length the background against which the psychologist must project his future work and research in the area of scientific selection and placement.

<sup>11</sup> M. S. Viteles, "The Application of Psychology in Industrial Relations," American Management Association, *Personnel Series No. 35*, 1938, pp. 23-36.

Insofar as research methods and problems are concerned, the situation today is, in some respects, not far different from what it was 20 or 30 years ago. Industrial psychologists appear to be still as "busy as beavers" developing new tests when the situation still calls for the better standardization and evaluation of existing tests for which the newly created instruments are frequently merely substitutes. There seems to be an almost obsessional drive for making a test—and more particularly for identifying it with the author's name or that of his institution—even if it means that the test will be put on the market with the validation based, as is true in at least one recent instance, upon four varied population samples including a minimum of 6 and a maximum of 46 cases.<sup>12</sup>

The importance of *realistic*, *reliable*, and *valid* criteria is still sadly neglected, with the result that many research publications still close with the implication, if not the direct statement, that the selection methods would have proved to be very useful if only a suitable criterion had been available. Of course, some progress has been made in the improvement of criteria, particularly in work done by the military services during and since World War II.<sup>13</sup> The emergence of the critical incident technique from the work of Flanagan and Gordon;<sup>14</sup> the use of nominating techniques in the study of combat efficiency by Jenkins and his associates in the United States Navy;<sup>15</sup> the work of Guilford in isolating univocal factors representative of job as well as of test performance;<sup>16</sup> the development by Viteles and Thompson of photographic techniques for recording pilot performance;<sup>17</sup> the use of attitude scale techniques for the construction of criteria scales, as represented in a recent study of supervisory performance conducted at the Detroit Edison Company,<sup>18</sup> indicate that progress can be, and has been,

<sup>12</sup> *The Purdue Mechanical Adaptability Test* (Preliminary Manual), Purdue Research Foundation, 1946.

<sup>13</sup> G. A. Kelly (Editor), *New Methods in Applied Psychology*, University of Maryland Press, 1947, Chapter I.

<sup>14</sup> T. Gordon, *The Airline Pilot: a Survey of the Critical Requirements of His Job and of Pilot Evaluation and Selective Procedures*, CAA Division of Research, Report No. 73, 1947.

<sup>15</sup> C. L. Vaughn, "The Nominating Technique," in G. A. Kelly, *op. cit.*, pp. 22-25.

<sup>16</sup> J. P. Guilford, "Factor Analysis in a Test-Development Program," *Psychological Review*, Vol. 55 (1948), pp. 93-94. "The Discovery of Aptitude and Achievement Variables," *Science*, Vol. 106 (1947), pp. 279-82. See also *Army Air Forces Aviation Psychology Program Research Reports* (Reports Nos. 4 and 5), U.S. Government Printing Office, 1947.

<sup>17</sup> M. S. Viteles and A. S. Thompson, *An Analysis of Photographic Records of Aircraft Pilot Performance*, CAA Division of Research, Report No. 31, 1944.

<sup>18</sup> From an unpublished report made available to the author by the Detroit Edison Co.

made in the matter of developing suitable standards of achievement for the evaluation of selection and placement tests.

In spite of such developments, the day-to-day work conducted at industrial plants is still characterized by an almost complete disregard of the basic significance of the criterion problem in arriving at improved methods for the selection and placement of employees as a device for reducing production and distribution costs, furthering individual adjustment, and promoting industrial stability. For instance, the usefulness and practicality of carefully constructed work-samples has been overlooked, largely, in my opinion, because it is easier to "sell" management on the advantages of existing tests than it is to impress management with the need of adequate measures of work performance as a necessary tool in arriving at firm and defensible conclusions with respect to what can be accomplished by the tests. Secondary criteria, in the form of rating scales, rankings, supervisory opinions obtained in other ways, are still widely employed and little effort is made to establish in advance the validity of such techniques by comparison with objective measures of performance on the job. The development of improved criteria still remains a persistent problem to be solved in a program involving the use of better selection and placement as a contribution to improved labor-management relations.

Other problems which have existed since the early days of research and practice in the application of psychological techniques in the selection and placement of employees, such as the improvement of interviewing techniques, the validation and wider use of biographical data, etc., could be mentioned. However, instead of dwelling upon past and current omissions, it seems well to devote what time is left to a consideration of a few areas, relatively unexplored in the past, which need attention because they give promise of most immediate and effective returns in the way of improved labor-management relations.

One of the most promising instruments, in this connection, is the lowly trade test, or at least an elaboration of a type of test which, perhaps because of its very simplicity, has been relegated to a very minor position in planning the program of personnel psychology in industry. As a matter of fact, the entire problem of transfer and promotion, in which modern versions of the trade test can play a particularly important role, has been neglected in the interest of measuring aptitude of applicants for entry jobs. Actually, the question of changes in grade, of promotion to other jobs of employees already on the payroll, is a crucial one in the maintenance of good

labor-management relations. It requires only the perusal of a number of labor contracts to recognize that the question of appraising qualifications for advancement, where seniority is also a factor in advancement, presents many potential sources of conflict. A review of grievances arising in individual industrial plants, and a survey of cases requiring arbitration and conciliation, indicate again that many of these grow out of the application of clauses in labor contracts which require that qualification for the advanced job as well as seniority be given consideration in the choice of the employee to be advanced.

Well constructed and well standardized trade tests represent an objective method of establishing qualifications for advancement in grade or for promotion to a higher rated job. One difficulty, of course, is that such trade tests must be tailor-made for the situation existing in an industrial plant, particularly since the actual tasks performed on jobs in different plants bearing the same title may vary widely. Selecting men who meet seniority requirements for advancement on the basis of actual trade knowledge and trade skill represents a promising device for simultaneously promoting efficiency in production and reducing conflict in labor-management relations. A program for developing objective measures of trade or job proficiency, to be used in qualifying employees for advancement is one which, in my opinion, should appeal to both labor and management although, in this instance, both have apparently been equally negligent in recognizing the importance of such techniques in the personnel program of the plant. I am at present engaged in an extensive program of developing such trade qualifying examinations for use in Station Maintenance and Construction divisions of the Philadelphia Electric Company, and there is every evidence of acceptance of this program by employees and management alike.

A striking illustration of the possibility of enlisting union cooperation in the development of such trade proficiency tests is to be found in research which is being currently conducted by the National Research Council Committee on Aviation Psychology with funds provided by the Civil Aeronautics Administration. It is commonly recognized, as indicated in a report by a Presidential Board of Inquiry on Air Safety, dated December 29, 1947, that:

Proficiency of pilots is of major consequence today in commercial aviation. Persons of only moderate or average competency cannot be entrusted with the responsibility of controlling modern airplanes in flight. Newer and more modern types of airplanes have intensified this responsibility. To date airplane design has not succeeded in reducing significantly the



degree of proficiency needed in the pilot. Moreover, both as a matter of operation and as a matter of administrative regulation, the ultimate judgment of the safety of any operation rests with the pilot. The initiation of flight in many instances requires the concurrence of others but, once begun, its successful completion depends on the pilot.

The crucial question in insuring adequate proficiency on the part of pilots is that of establishing objective methods for determining whether a co-pilot is ready for promotion to the position of first pilot or captain who has primary responsibility for the efficient and safe operation of the commercial transport plane. While there is much merit in methods currently used by the Civil Aeronautics Administration in examining an applicant for the Airline Transport Rating, which permits him to hold the job of first pilot, there is also considerable evidence of an essential subjectivity and unreliability in the methods employed, which fail to provide adequate protection both to the applicant for advancement in grade and to the flying public. An extensive program has been undertaken and, as a matter of fact, is well on the way to completion, providing for the development of a standardized objective flight check which will provide wider coverage of skills and greater reliability in examinations for promotion to higher grades and for the maintenance of a rating.<sup>19</sup> Of prime significance in this connection is the fact that this study is being conducted with the active cooperation of the Air Line Pilots Association, particularly of its President, David L. Behncke, reflecting the recognition that a scientific approach to this problem is in the interest both of airline safety and of the maintenance of good labor-management relations. There are possibly many other illustrations of activity in this area unknown to the speaker, but there is nevertheless reason to believe that the extension of research in this area represents an important way of eliminating a source of conflict which frequently results in the deterioration of labor-management relations or in handicapping the establishment of good labor-management relations.

Another development of potential importance in improving labor-management relations is the current trend towards the adoption of *differential classification of applicants for employment* instead of merely selecting for a given job. The usual practice in industry has been to use a separate test battery for each job and to limit testing programs to a relatively small number of jobs in which hiring and adjustment problems are particularly pressing. Developments in the

<sup>19</sup> T. Gordon, *The Development of a Standard Flight Check for the Air-Transport Rating Based on the Critical Requirements of the Airline Pilots Job*, CAA Division of Research, Report No. 85, 1949.

formulation of "job families" and the experience of the Army Air Forces and other organizations point to the possibility of using a single battery to determine for which of a number of jobs a man is suited.

As is well known, in the Army Air Forces selection and classification program, "assembly line" methods were employed in running hundreds of thousands of cadets through a series of tests and applying the results with outstanding success in determining whether a given man could most competently serve as a pilot, bombardier or navigator.<sup>20</sup> In the Army Air Forces classification program, the number of occupations differentiated by a single battery of tests has been limited to three. Simultaneous testing for only three jobs would greatly facilitate the industrial testing program, but there is no reason why, with the use of proper validating techniques, the number cannot be extended to include ten, twelve, or even more jobs.

The USES has already gone far in research in this area by developing a new USES General Aptitude Test Battery, a combination of tests which measures a number of important aptitudes and supplies information regarding the individual's chances for success in learning to do a great number of jobs.<sup>21</sup> The Battery is being standardized on samples of workers employed in various occupations. Norms have already been developed for 20 fields of work representing approximately 2000 occupations. These norms are expressed as Occupational Aptitude Patterns and consist of minimum aptitude scores required for occupations characterized by similar aptitudes and grouped according to the Part IV classification code structure of the Dictionary of Occupational Titles. Using tests related only to individual jobs, as was the practice in USES offices as well as in industry, "it was not possible to test an individual for more than forty or fifty occupations even if two or three entire days were spent in testing. The General Aptitude Test Battery, however, makes it possible to obtain information about an individual's aptitude for several thousand occupations in a little more than two hours of testing."<sup>22</sup>

Recent work on the development of other batteries of tests measuring a variety of unitary traits facilitates a systematic approach to

<sup>20</sup> P. H. Dubois (Editor), *The Classification Program*, Army Air Forces Aviation Psychology Report No. 2, U.S. Government Printing Office, 1947. J. C. Flanagan (Editor), *The Aviation Psychology Program of the Army Air Forces*, Army Air Forces Aviation Psychology Report No. 1, U.S. Government Printing Office, 1948.

<sup>21</sup> Division of Occupational Analysis, War Manpower Commission, "Factor Analysis of Occupational Aptitude Tests," *Educational & Psychological Measurement*, Vol. 5 (1946), pp. 147-55.

<sup>22</sup> D. J. Dvorak, "The New U.S.E.S. General Aptitude Test Battery," *Occupations*, Vol. 26 (1947), pp. 42-44.

the problem of the differential classification of applicants for employment in relation to jobs available in a particular plant. The development of such a program is of immediate practical interest to personnel administrators because it makes possible a large-scale, all-inclusive testing program which can be conducted within the reasonable limitations of time, space, personnel, and administrative costs. As Selover and Vogel have recently pointed out in a study of clerical jobs,<sup>23</sup> the differential classification of applicants provides a means of making effective use of a tight labor market, since a large proportion of applicants can be hired—through selective placement—with greater assurance of using each on a job for which he is best adapted.

Equally important, from the viewpoint of improving labor-management relations, is the possibility of placing an applicant at work in which he can make maximal use of his aptitudes and other traits instead of merely filling a vacancy, that is, placing him in a job in which he can easily meet production standards but in which he will ultimately become dissatisfied because of the fact that he fails to find in it the challenge and the opportunities to which he feels entitled by virtue of the abilities which he actually possesses. Involved here is what can ultimately become a program with broad social objectives, a transformation of selection into a form of vocational counseling which simultaneously serves the purpose of providing efficient and satisfied employees to industry and business, gives the individual an opportunity to make fuller use of his physical and mental qualifications, and facilitates the optimal use of the human resources of the country.

In theory, and to some extent in practice, as represented particularly in the work of European psychologists, and to a degree in the program of the USES, the intimate relationship between vocational selection and vocational guidance has been recognized.<sup>24</sup> In fact, however, selection and placement programs have ordinarily been operated in such a manner as to disregard the maximum potential of the individual, with the result of producing a group of dissatisfied employees who frequently become the focus of industrial conflict. It appears only too true, as suggested by Hill, that:

The unhappy and dissatisfied employee is predisposed to believe the worst of his company, of his supervisor, and even of his government. He is ready to listen to every bit of false propaganda, to every agitator who

<sup>23</sup> R. B. Selover and J. Vogel, "The Value of a Testing Program in a Tight Labor Market," *Personnel Psychology*, Vol. 1 (1948), pp. 447-56.

<sup>24</sup> E. J. Keller and M. S. Viteles, *Vocational Guidance Throughout the World*, W. W. Norton Co., 1937, pp. 295-97.

assures him that his situation is the result not of his own acts but of his being exploited by other people (employers, huge corporations, or degenerate government). Every agitator knows that his first job is to make his hearers dissatisfied with their present position, and only after that is accomplished can he successfully direct their discontentment against constituted authority. Every revolutionary movement devoted a great deal of its efforts to the creation of active discontent.<sup>25</sup>

As suggested above, the elimination of dissatisfaction at work represents an important objective of the vocational and placement program. This leads to the third and final item to be discussed in this review of profitable areas of research and practice designed to improve labor-management relations. Involved here is an intensification of the effort to use psychological techniques in the direct *prediction of satisfaction* at work. Underlying such a program is the point of view, so aptly expressed by Bingham:

The degree of satisfaction a person finds in his daily employment is for him quite as important as is his proficiency in it. America has been prone to over-emphasize the economic and social values of productivity, efficiency, competence; while the values attaching to an individual's enjoyment of his work have been too frequently forgotten. When looking for indications of capacity to learn to do well the tasks of an occupation, we should not forget to search also for symptoms of capacity to develop a liking for them . . . symptoms of capacity for realizing those deep-seated personal values of *enjoyment* accruing only to the man who likes his work.<sup>26</sup>

There are reports of tests being used in a negative way for predicting freedom from dislike of the work itself as represented, for example, in statements quoted from a recent survey conducted by the National Industrial Conference Board, referring to the use of tests for restricting workers with low aptitude to repetitive or unskilled jobs as a means of reducing the incidence of the feeling of monotony.<sup>27</sup> However, a more positive approach is needed, particularly if the figures stated by Hand to the effect that the percentage of dissatisfied workers is in the neighborhood of 25 or 30 per cent, is accepted,<sup>28</sup> and if further consideration is given to studies of individual jobs in which the percentage of dissatisfied proves to be much higher.<sup>29</sup>

<sup>25</sup> L. H. Hill, *Pattern for Good Labor Relations*, McGraw-Hill Co., 1947, p. 23.

<sup>26</sup> W. V. Bingham, *Aptitudes and Aptitude Testing*, Harper and Bros., 1937.

<sup>27</sup> S. A. Raube, "The Problem of Boredom," *Conference Board Management Record*, December, 1948.

<sup>28</sup> T. J. Hand, "Job Satisfaction," in O. J. Kaplan (Editor), *Encyclopedia of Vocational Guidance*, Philosophical Library, 1948, p. 69.

<sup>29</sup> R. Hoppock, H. A. Robinson and P. J. Zlatchin, "Job Satisfaction Researches of 1946-47," *Occupations*, Vol. 27 (1948), pp. 168 ff.

The number of studies bearing upon the relationship of psychological measures, such as interest tests and inventories with job satisfaction, is particularly small.<sup>30</sup> Here is a field in which much remains to be done, not only in extending the area of investigation but in the refinement of the criteria of job satisfaction, particularly in distinguishing between satisfaction with the work and satisfaction with the specific job or "post" which the individual holds.

The entire field of job satisfaction studies must be intensively cultivated in order that the psychologist may fully contribute to the objective of providing industry and business with satisfied as well as competent workers representing good raw material for a program of successful and productive labor-management relations.

<sup>30</sup> H. D. Carter, *Vocational Interest and Job Orientation* (Applied Psychology Monograph No. 2), Stanford University Press, 1944.



# THE JOINT COMMITTEE IN JOB EVALUATION

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THE INCREASING use of job evaluation as a method of establishing equitable differential wage payments for different jobs has occasionally been the source of certain misunderstanding between managements and unions. Job evaluation properly conducted will not—cannot—discriminate against individual employees or employees on individual jobs. Rather, its basic purpose is to insure that the proportionate wage for each job is equitable in terms of the worth of the job in relation to every other job in the plant. It is just as important to have this basic purpose understood by union membership as by management. Otherwise, grievances may arise about such matters as individual job rates and/or individual employee rates, the changing of which would be harmful, or even fatal, to an entire job evaluation installation.

One method which a number of managements have found to be helpful in developing a sound understanding of the nature and purpose of job evaluation and also in administering a smoothly operating job evaluation system is to make use of a continuous management-union job evaluation committee. The advantages to management and union alike of such a committee are numerous indeed.

A joint management-union committee results in a far greater likelihood of both union membership and leadership understanding the real purpose of job evaluation, namely to establish wage rates for different jobs in proper relation to each other, and *not* to cut rates or increase rates in general. Such mistaken ideas of the purpose of job evaluation are found far more frequently than one might suspect. Without doubt they have arisen in part from the use made of job evaluation by many companies during World War II to get permission from the National War Labor Board to make certain wage increases. After settling on the so-called Little Steel Formula in 1942 as the ceiling of wage levels, only a very few other reasons were accepted by the Board as a justification for wage increases. Among these few acceptable reasons were “intra-plant” inequalities. If a company could present convincing evidence that some of its jobs were underpaid in comparison with others, the Board would normally approve increases for the underpaid jobs to

bring them into equitable alignment with other jobs in the plant. A company that has not made use of any job evaluation system invariably will find a number of such underpaid jobs (as well as some that are overpaid) when the jobs are evaluated. The identification of the underpaid job, with the resulting War Labor Board approval for increases in rate on these jobs, was the first acquaintance that many employees and unions had with job evaluation. Wages on jobs that were found to be above the evaluated rate were seldom if ever reduced by the Board. Under these circumstances, it is quite understandable that something less than a correct understanding of the real purpose of job evaluation often resulted. A joint management-union committee, from the very beginning of a job evaluation program, will do a great deal to prevent the growth of such misconceptions.

A joint committee also often prevents individual job rates being made the subject of formal grievances. Once all jobs have been carefully evaluated, it is unwise to permit single isolated jobs to be increased above their evaluated rate as a result of the filing of a formal grievance. This assumes, of course, that the jobs have been evaluated as carefully and accurately as possible. When the evaluations have been made by a joint committee, there is far less likelihood that a justifiable reason for changing an evaluation will be advanced.

A joint committee is very helpful when jobs should be re-evaluated because of actual changes in the jobs. Production processes seldom remain static and neither do jobs. The work performed by men on a job with a certain job title may be markedly changed as production processes change. Occasionally the job changes call for higher levels of skill, experience, education, and other factors that determine the worth of a job, but far more often the reverse is true. When this occurs, the wage on the job should be lowered. This does not mean that present incumbents on the job will suffer a cut in wages. A number of methods are in general use to prevent this from happening. But new men hired on a job after such changes have taken place should recognize the relative position of the job for which they are hired. A joint committee that understands the true purpose of job evaluation is extremely helpful in re-evaluating jobs that have changed.

Another service that is usually rendered by a joint committee occurs in obtaining the job descriptions upon which the job evaluations are based. No system of job evaluation can be more effective or accurate than these job descriptions. Needless to say, the job descriptions must be complete, accurate, and often meticulous in



detail. If this step is slighted, the omissions and/or inaccuracies are certain to arise later to plague whoever is charged with the operation of the plan. The union members of a joint committee often know as much, and sometimes far more, about the jobs involved than do the management members. The job descriptions written by a joint committee furnish a solid foundation on which the evaluations may be based.

A committee of the type discussed should be a continuous committee. It will perform a real service during the early stages of installing the system and getting the jobs properly into line. It will also be of help in evaluating new jobs as they arise and in the re-evaluation of jobs that change. The committee should be advisory and should be headed by the plant official in charge of wage administration. The values to be gained from a joint committee depend in large measure upon the training, experience, point of view, and (to use a very much overworked word) the personality of this man. The training and experience requirements are self-evident. Job evaluation is somewhat technical and the man in charge of the program should be familiar with the basic as well as the technical phases of the work. The point of view requirement is less tangible but no less important. It involves recognizing the importance of democratic processes in committee meetings, encouraging the committee members to present and discuss all suggestions that come to mind, and willingness to consider impartially all information before decisions are made. The personality of the man in the wage administration assignment is also of vital importance. He must have the respect of both management and union for his technical competence, willingness to hear both sides of a question, and ability to make impartial and fair judgments.



# IMPROVING SUPERVISION THROUGH TRAINING

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## *New Concepts in Supervision*

FOR THE PAST five years I have been working with four large industries in an attempt to improve supervision. The program centers on what has been called democratic leadership in management.<sup>1</sup> The basic feature of democratic leadership is to shift the responsibility for decisions from the leader to the group. In making this shift, one changes the leadership from the autocratic type to the democratic type.

This change in the placement of responsibility for solutions gives rise to some questions. If, for example, a group solves problems, how is one to decide which of the solutions suggested represents the group? One method is to use a majority vote. When this is done, the group is divided into a majority and a minority and as a consequence one may develop two or more opposed sub-groups. Another method<sup>2</sup> is to attempt to obtain a hundred per cent agreement in the group. In order to accomplish a full meeting of minds, free discussion is essential and the leader develops a new leadership role. His effectiveness becomes primarily one of being able to conduct a problem-solving conference. It is this type of leadership that seems essential if the group is to remain unified and constructive. To achieve this effect, the leader must develop skills in sensitivity and permissiveness. At the same time, he must not permit himself to become a passive leader, but must be able to exert controls. Permissiveness and controls seem somewhat contradictory activities, and the interpretation of these becomes one of the important problems in training and an important area of investigation.

<sup>1</sup> A. Bavelas, "Morale and the Training of Leaders," Chapter 8 in *Civilian Morale* (edited by G. Watson), Reynal and Hitchcock, 1942. A. Bavelas, "An Analysis of a Work Situation Preliminary to Leadership Training," *Journal of Educational Sociology*, Vol. 17 (1944), pp. 426-30. L. P. Bradford and R. Lippitt, "Building a Democratic Work Group," *Personnel*, Vol. 22 (1945), pp. 2-13. N. R. F. Maier, "A Human Relations Program for Supervision," *Industrial and Labor Relations Review*, Vol. 1 (1946), pp. 443-64.

<sup>2</sup> K. Lewin, "The Dynamics of Group Action," *Educational Leadership*, Vol. 1 (1944), pp. 195-200. K. Lewin, *Resolving Social Conflicts*, Harper and Brothers, 1948. K. Lewin, R. Lippitt and R. K. White, "Patterns of Aggressive Behavior in Experimentally Created Social Climates," *Journal of Social Psychology*, Vol. 10 (1939), pp. 271-301.

For the present, it seems clear that some of the controls are as follows:

1. Problems presented must fall within the leader's area of freedom. At each level of supervision there are problems that a supervisor may decide himself. It is these problems that he can share with the group that reports to him if the group members have interest. Thus, decisions cannot violate company practices or policies (unless the supervisor involved is at the policy-making level) nor can they violate working agreements since problems involving these factors do not ordinarily fall within the supervisor's area of freedom.<sup>3</sup> Frequently, the "how to do a job" rather than the "what job to do" is the problem that can be solved.

2. Presenting the subject for discussion in such a manner that it is a problem rather than a criticism of the group or an individual in the group. Whether or not a group becomes defensive or interested in solving a problem depends in considerable measure on the way it is presented. Just how important the manner of presentation is we do not know, but it is clear from case studies that the incidence of defensive reactions can be traced to the supervisor's statement of the problem. On one occasion the supervisor stated as his problem the fact that certain members of the group failed to close file drawers. Immediately the group requested new files which would operate more smoothly. Considering the condition of the files this appeared to be a defensive reaction.

3. Serving in the role of an expert. The supervisor frequently has much background and information which is of value in solving a problem. Instead of using this information as a way to discredit solutions and thereby gain an advantage over group members, he can give the group the benefit of his experience by presenting them with the information at his disposal.<sup>4</sup> For example, he can point out how much space the group will have in the new office location and ask them to help plan the office arrangement. If he withheld this information and the group planned an office arrangement which required too much space, he would be in the position of having to reject certain solutions. Soon his position would be one opposed to that of the group. If all relevant facts are given at the outset the problem becomes more interesting because it is more difficult.

4. Reducing hostility by permitting free expression. In permitting the expression of hostile reactions one reduces frustration and encourages motivated behavior. My own research in this field indicates

<sup>3</sup> N. R. F. Maier, "A Human Relations Program for Supervision," *Industrial and Labor Relations Review*, Vol. 1 (1946), pp. 443-64.

<sup>4</sup> *Ibid.*

that frustration and motivation are opposed processes.<sup>5</sup> By reducing frustration, one reinstates problem solving behavior. Rogers' <sup>6</sup> work also supports this contention.

5. Encouraging all members to participate in the discussion. This technique causes members of a group to interact. In interacting, the members learn their areas of disagreement, they learn about group fairness, and they learn that each cannot have things his particular way. It is in free discussion that social pressure can operate. Social pressure is always present in social behavior. The leader uses social pressure for constructive purposes by seeing to it that all feel free to participate. Certain dominant individuals must become aware of their role as listeners and certain reticent individuals must learn that they owe it to the group to speak their minds. The leader can play an important part in bringing about these awarenesses.

6. Protecting the minority. The leader can do much to relieve hostility and to bring deviants back into the group by showing special consideration to minority positions. Frequently, a few persons refuse to go along with the group because they feel excluded. If the leader gives this group of individuals special attention, demonstrating a desire to have them in the group and giving their opinions the most favorable interpretation possible, they can be made to feel that they have not been excluded from the group.

7. Making the group responsible for agreeing on a solution. A group may attempt to escape the responsibility of working as a group and continue to disagree. In practice this is much more rare than is usually anticipated. When it occurs, however, the supervisor can bring this responsibility to awareness. He can point out that a new problem has arisen, which is, "How can we get together on a solution?" Since the objective is to obtain a meeting of minds, the problem cannot be settled by taking a vote and following the majority. Thus, when full agreement is the objective, the leader becomes reluctant to split the group and holds out for keeping the group intact. This makes the leader and group members more permissive. It also forces each person to realize his responsibility as a group member. Social pressure operates in a constructive manner and one hears such remarks as, "Oh, Bill, why don't you give the idea a try?" "Come on, Jim, don't be so damn selfish." In such instances the group, not the supervisor, is applying pressure.

8. Keeping the discussion on the subject. Whether or not progress is experienced in group discussion depends, to some extent, on

<sup>5</sup> N. R. F. Maier, *Frustration: The Study of Behavior Without a Goal*, McGraw-Hill Co., 1949.

<sup>6</sup> C. R. Rogers, *Counseling and Psychotherapy*, Houghton Mifflin Co., 1942.

whether or not extraneous matters are discussed. The responsibility of keeping a discussion problem-centered belongs to the leader. However, this can easily lead to regimentation. Enough leeway should be permitted to avoid introducing into the discussion an atmosphere of pressure or strictness. Further, the supervisor must be careful not to judge whether something is irrelevant. He might ask the person whether his ideas are tied in with the problem; if the person feels they are not, he can ask whether the issue raised should be discussed at a future time. Thus again, a balance must be struck between a rigid and fully-controlled discussion and one that is loose and disorganized.

It is apparent that the types of control discussed above are different from those used by an autocratic leader, and yet it can be seen that they are techniques which are psychologically sound in their effectiveness.

The techniques of sensitivity and permissiveness likewise deviate from those ordinarily used by an autocratic supervisor. These may be listed as follows:

1. Sensitivity to feelings rather than to words or logic. The supervisor must be trained to realize that the reasons a man gives for being for or against something frequently are irrelevant rationalizations. A man doesn't like something and it is the dislike that is a fact that must be accepted with understanding. Often the objections to something are fears but the words expressed are criticisms. To require proof or evidence in such instances merely increases insecurity. The fact of fear must be accepted and respected. Fears can best be overcome by permitting them to be expressed and recognized for what they are.<sup>7</sup> Thus, the supervisor must react to the feeling tones and not to the words. This sensitivity to feelings must be developed through training.

2. Permissiveness must be developed. A permissive supervisor is not on the defensive; he has no "face-saving" reactions and he is primarily concerned with the way the group members feel. Basically he believes that the group members, through free discussion, can integrate their various interests better than he can. He believes that a group is more able to solve its problem than an outsider. As a consequence, the permissive supervisor becomes an active listener. The function of permissiveness in group discussions is fundamentally the same as in non-directive counseling.<sup>8</sup>

3. Reflecting the feelings expressed. As in counseling,<sup>9</sup> the tech-

<sup>7</sup> *Ibid.*

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*

nique of reflecting feelings demonstrates permissiveness; it encourages discussion and it brings feelings out in the open where they can be freely examined and explored. It is an aid to insight in that only through the explorations of ideas and feelings can new relationships be discovered. It is desirable for the supervisor to use a blackboard for this purpose. By means of writing opinions on the board he shows acceptance and permits further exploration since he now can ask, "Are there other ideas on this matter?"

Further exploration is one of the best ways of having poor ideas rejected. The supervisor must learn not to discredit poor ideas. If he puts a poor idea on the board and then requests other ideas or reactions he can get poor ideas rejected without acting as a censor or critic.

4. The use of exploratory questions. Problem solving can be enhanced in a group by the use of analytical questions. Such questions as, "How could that be done?", "Would that plan be useful under emergency conditions?", help explore issues further and bring out additional details. Care must be exercised so that the questions asked do not discredit, degrade, or indicate an objection to the idea.

5. Summarizing ideas and solutions. The value of summaries from time to time is to see to it that all members are properly understanding the issues. Summarizing also serves as a means for holding interest in that it permits progress to be experienced.

The techniques of listening and reflecting are in direct contrast to the techniques of selling employees on a solution. Frequently supervisors confuse the idea of giving up autocratic techniques with the adopting of skill in selling ideas to employees. As a consequence they employ sales techniques and believe they are using the democratic technique. Such supervisors are more difficult to train than many autocratic supervisors because the latter are not confused in their distinctions.

### *Some Training Problems*

It is apparent that the training problems involved in the institution of the type of program described are very large. The supervisor must undergo a great deal of change and, as we know, a *change* is frequently met with resistance. At the present time, we know that the democratic technique is one of the best change techniques we have. It is, therefore, desirable to use it as a means for obtaining acceptance of the democratic concepts themselves. In this respect I disagree with Lewin<sup>10</sup> who has expressed the opinion that autocratic methods may be necessary to achieve democracy.

<sup>10</sup> K. Lewin, *Resolving Social Conflicts*, Harper and Bros., New York, 1948.

The change required, in this instance, is a fundamental one and actually amounts to a personality change. The supervisor must not only view employees differently, but he must also view himself and his position in a new light. The change in attitude toward employees is not as difficult to obtain as the change in attitude toward one's self or one's position. This is evidenced by the fact that one can obtain the ready acceptance of higher management for the program when they view it as a program for supervisors beneath themselves, but when the program is given for them to practice they seek ways to demonstrate that the program is not adapted to their positions. Likewise, lower levels of supervision react by wanting to know why their boss doesn't practice democratic leadership. Thus, generally, the program can be accepted as applying to others before one can see it as applying to himself. This observation leads to two basic requirements in training.

1. Higher management must practice the democratic method so that those below can experience it first hand and also to supply the motivation that higher management's support may give.

In one training unit, which included three levels of supervision, we had succeeded in motivating the first-line supervisors to try the group decision technique. These attempts were successful in that the men reacted favorably and the results were good. Some weeks later, however, interest declined and further illustrations of its use were not forthcoming. Personal interviews with first-line supervisors revealed that they, as a group, had rebelled because the men to whom they reported had failed to practice the group method with them.

2. Role-taking procedures<sup>11</sup> and discussions, using problems supplied by the group, must be used to create the experience that the method applies to the group members' problems. Such experiences can then be extended by having group decisions in which all agree to try the method the following week.

In the previous case, in which the first-line supervisors rebelled, this step was missing for the higher levels of supervision. The role-taking and group decision phases were applied to the first-line supervisors and higher levels merely gave their consent and support.

The value of role-taking and discussion as change agents for attitudes is most difficult for management to accept. Industry has been sold on visual aids and sees role-taking and discussion procedures as time consumers. Unless one experiences their value personally

<sup>11</sup> A. Bavelas, "An Analysis of a Work Situation Preliminary to Leadership Training," *Journal of Educational Sociology*, Vol. 17 (1944), pp. 426-30. L. P. Bradford and R. Lippitt, "Building a Democratic Work Group," *Personnel*, Vol. 22 (1945), pp. 2-13.



they are not convincing. Since higher management frequently judges the program on intellectual grounds, they are not easily convinced. Even when such individuals consent to observe these procedures, this observation is given limited time; usually just enough to arouse hostility because the observers experience a threat to their own attitudes. Hostility passes when roles are played a number of times and then one can be satisfied that a major step has been taken. However, this added time often cannot be obtained.

It has been my experience that attempts to cut the program invariably are in the reduction of role-taking and discussion time. In one industry, the abbreviation of the training time is now being corrected by a follow-up program consisting largely of role-taking and discussion procedures.

I have indicated that attitude change, which is akin to personality change, is a basic training problem. This does not mean that the usual training problems are not also present. Some of these may be evaluated in passing.

1. It is apparent that effective training must be preceded by a *need*. At the present time this is not a difficult problem. If supervisors are asked on what phase of the job they feel they most need help, there is almost complete agreement that help in the area of dealing with people is most needed.

2. Knowledge about psychology is important. Such subjects as individual differences, frustration, attitudes, motivation, fatigue, and counseling are of vital interest to supervisors and can, in part, be taught by the lecture method. For this type of training, time is readily made available. These subjects have a value in encouraging an analysis of human relations problems and permit the use of the discussion method.

3. Skills must supplement this knowledge. In order to develop skills, practice on the job, interviews with trainees, and role playing are needed. When the basic attitude change is accomplished, the opportunity for developing skills is no longer difficult to obtain.

4. Certain aptitudes must be present in the trainees. However, we have not found these requirements very great. Although persons with above average intelligence absorb the knowledge content more readily than others, their attitudes are not more easily changed. We have also seen very autocratic personalities change attitudes more readily than the friendly type of paternalist. It is desirable to investigate this problem in detail since it is quite possible that the traits which make for good supervision, when a company does not train its supervisors in democratic methods, may be quite different from the traits that are essential to good democratic supervision.

It seems that some men are autocratic merely because they have not given attention to human relations, but when they see these relationships as problems they develop a real interest. Thus, men with engineering training can become interested in psychological problems when scientific concepts are incorporated in the training.

### *The Risk Technique in Group Discussion*

For some time now we have been using a technique which seems highly effective for reducing fears. It amounts to the non-directive counseling method applied to groups and is based on the assumption that our fears are not the opposite of our goals. Thus, the fear of a union shop does not necessarily reflect a desire for an open shop. Rather, the avoidance of the one alternative leaves the person in the open shop camp. Sometimes it is only because the union wants the union shop that suspicion is aroused. Likewise, the union may fear to lose its gains, and management's opposition to the union shop arouses fear. Analysis of the fears reveals a different problem from that shown by an analysis of the motives.

Likewise, the fear of the group decision technique is not the same as a desire for autocratic methods. Thus, the problem in training is not a matter of demonstrating that the democratic method is superior to the autocratic, but rather the problem is one of removing the fear of a change. To reduce fears, one must release expression and this is the crux of the risk technique.

After a conference training group has been presented with a description of the difference between autocratic, laissez-faire, and democratic techniques by reporting the children experiments of Lewin, Lippitt, and White,<sup>12</sup> the group is asked, "What are some of the risks that management would take if supervisors practiced democratic leadership on the job?"

Each risk that is presented is recorded on the blackboard. Frequently, the risk is reworded by the discussion leader to point up the issue. This procedure is similar to the "reflecting feelings" technique in non-directive counseling. A little discussion follows to determine the amount of support and the degree of feeling that the statement written on the board represents a risk. The leader uses his office to support the reasonableness of the risk in case the rest of the group opposes it. By this method, the group soon feels free to express risks and the leader ceases to be an individual who is trying to sell them something. Group members also can recognize unreasonableness in each other.

<sup>12</sup> K. Lewin, R. Lippitt and R. K. White, "Patterns of Aggressive Behavior in Experimentally Created Social Climates," *Journal of Social Psychology*, Vol. 10 (1939), pp. 271-301.

A group of 18 to 28 usually finds 13 to 22 risks with a mean of 18. The risks include statements indicating that production will fall, quality will decline, the union will oppose the method, morale will drop, supervisors will lose prestige, the union will get control, the decisions will be selfish, planning will be inefficient, time will be wasted, etc.

At regular intervals in a 12-week program (one day per week), the list of risks is re-examined and, whenever there is unanimous agreement that a risk no longer applies, it is removed from the list. This procedure allows social pressure to operate. The group members interact with each other and the leader finds himself in the position of having to protect minority individuals who still have fears. Of importance is the fact that the risks gradually are removed. Even the discussion on individual differences, during which the democratic method is not mentioned, is followed by a reduction in the list of risks. The discussion on counseling, which occurs last, usually serves to have the last items removed. When all are not removed, it is because one or two persons still wish to retain one or two risks.

It is also of interest to observe that presenting the group with a knowledge of the controls (given at the outset) which logically overcome certain risks, has little effect on the fears. Even the report of cases which show that the method works on the job fails to influence the risks to an appreciable degree, but a personal success with the method causes that individual's risks to decrease.

The technique of removing risks causes the group values to come to the fore so that the trainer no longer is in a position of defending the program. Rather, the support for the program comes from the group membership who soon assume the responsibility for reducing the list of risks. Frequently, it is claimed that they initially did not understand what was meant by a risk. With changed attitudes, many of the risks begin to appear ridiculous. An analysis of the risks throws added light on the problem.

We have compared the risks submitted by 10 top and intermediate management groups with those submitted by 39 groups of college students taking similar training on the campus. It was assumed that management and student personnel differed primarily in business experience. If the risks submitted are judgments supported by experience, then the risks should be different in the two groups since management personnel have had much more experience in supervisory problems than students.

This analysis revealed that (1) the number of risks, (2) the type of risks, and (3) the order in which they occurred in the list, were

surprisingly similar. Only one difference, which is not statistically significant, seems worthy of mention, namely that the student groups seem somewhat more distrustful of workmen.

We conclude, from this failure to obtain a difference, that the fears are not based on business experience but are emotional objections. These objections are then rationalized to point up some undesirable consequence. Both management and student personnel can use logic, so that the risks constitute deductions of all of the things that might be different if a change is introduced. Students, however, felt their risks were incomplete and that they would be able to think of more and better ones after they had business experience. Thus, experience tended to give confidence in opinions but it did not aid in furnishing opinions.

It was also found that if risks are requested after certain controls and industrial experiences with the method are presented to a group, the content of the list of risks is not altered. However, less support is given to those risks which are answered by the added content, but this is offset by the fact that more support is given to other risks.

### *The Quality of Group Decision*

Although it may be conceded that objections to the democratic type of supervision are largely attitudes based upon fears, there is one type of objection that may have a factual basis. This is the doubt that may be raised as to the quality of group decisions. There is little question but that group decision makes for better acceptance than decisions imposed by the leader. However, high group acceptance of poor quality decisions may not always be as desirable as less acceptance and better quality.

The relative importance of acceptance and quality, of course, will vary with the type of problem. If the problem is merely one of determining who will work on Sunday, the actual solution is unimportant, but an acceptance by the group that the person chosen is a fair choice is of great importance.

On one occasion, two out of three girls were needed for Sunday work. All three had dates and none wished to work. Obviously, any solution that the supervisor would present would meet with objections. He put the problem to the girls. The discussion revealed that one girl had a date with girls and all agreed this was not a real date. She therefore agreed it was logical for her to work. Of the two remaining girls, one had a date with the man she was engaged to, while the other had a date with a new man. All of the girls agreed that an engaged girl could alter her date, so it was agreed that the

girl with a new conquest had priority. She was excused from Sunday work despite the fact that she had least seniority and had worked less often on Sundays.

In other instances, the group may expect to improve the quality of decisions because they are near to the job. Thus, they know why men violate safety practices, which individuals are spoiling a job, why they stop for coffee the first thing after leaving the company garage, etc. These sources of information can be tapped to improve solutions and at the same time supply acceptance and motivation.

On one occasion a supervisor of a repair crew had a group discussion and asked the crew for ideas on how the job could be improved. The discussion revealed that the crew thought that the company procedure on difficult repairs was all wrong. The plan used was that when a repair man failed to do a satisfactory repair job, a more skilled man was sent out on the job. The men said they had no way of learning about their mistakes by this method. The group's solution was that, in case of a customer's report of a failure on a repair, the foreman should accompany the man who first visited the job, and together they should locate the difficulty. This method, the men thought, would supply added work interest in that the men would be able to follow up on their work; it would give added training; and it would prevent the foreman from passing unfair judgments on their work.

The group's solution was put into practice and within six months the number of "repeat" repairs fell to one-fourth of the original figure. Thus, a nearness to the job supplied essential information for a good solution.

However, there still remain problems whose solutions have the quality of inventiveness or elegance. Suppose the supervisor or an expert knows a better way to do the job. Must he abandon a good idea if the group cannot discover this superior solution? Watson<sup>13</sup> and Shaw<sup>14</sup> found that group thinking is better than individual thinking, but this is true only when no outstanding creative individual is involved. What happens when the leader has an elegant solution that the group members cannot discover?

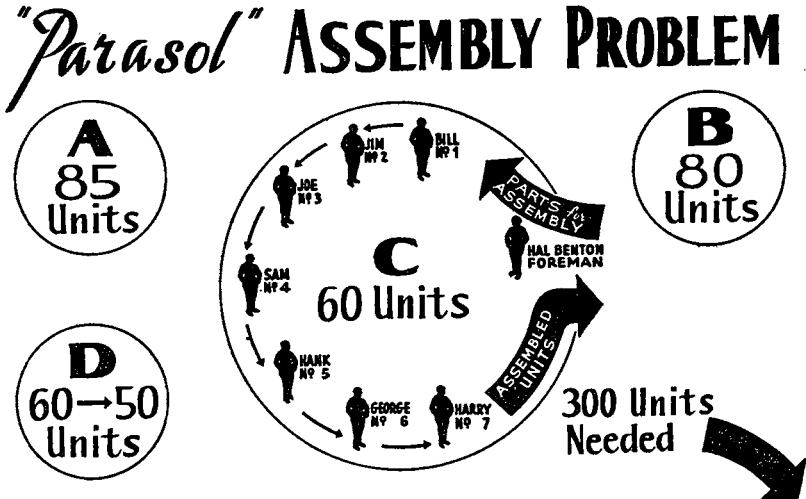
In order to test this possibility we selected an industrial problem, one solution of which had the quality of elegance.

The problem chosen was a sub-assembly job in which seven men worked on a production line. The separate operations were given

<sup>13</sup> G. R. Watson, "Do Groups Think More Efficiently than Individuals?" *Journal of Abnormal and Social Psychology*, Vol. 23 (1928), pp. 328-36.

<sup>14</sup> M. E. Shaw, "A Comparison of Individuals and Small Groups in the National Solution of Complex Problems," *American Journal of Psychology*, Vol. 44 (1932), pp. 491-504.

as requiring like aptitudes. One man in the group, however, was a slow worker and was described as a bottleneck. Because of him, production was low. The question raised was how to increase the group's production. In the actual presentation all relevant details were supplied and the following Figure was used to describe the situation.



Each circle represents a group of men working on a sub-assembly job. Seven men work in a circle and assemble a piece of equipment. The production of each group is shown in the diagram.

The foreman in group C has a problem. Work piles up in Joe's position so that production is slowed down. The company needs more production and both groups C and D are falling behind. Each group has a foreman, but the foremen do not have the authority to exchange men. How can the foreman of group C best solve his problem? The foreman of group D attempted to solve his problem and as a result his production fell from sixty to fifty units.

The solution regarded as elegant was periodically to rotate the position of the men so that the work of the slow man would be spread to all positions. Logically, this solution should make the pace of the line equal to that of the average of the group's ability and motivation.

Twenty small groups (of five to seven) of college students, and 40 students working as individuals, all failed to present the elegant solution as the method to use. Almost all of the solutions were di-

rected toward removing the bottleneck. This preliminary experiment demonstrated that the elegant solution was not obvious.

Further, it was found that when the instructor presented the groups with the elegant solution it was not accepted by more than half of the persons and very few of those accepting it regarded the solution as superior to others suggested.

The problem was now changed in two basic ways: (1) Roles were assigned so that each person in a discussion group could be given a position in the production line and a definite attitude to portray. (2) A person was put in charge of the group and was asked to play the part of the foreman and to reach a decision that all of the workers would agree to. This person was specifically trained or instructed. The following experimental conditions were then used.

Condition 1. A total of 31 individuals was asked to work on the problem as individuals and come up with a recommendation such as an expert might evolve.

Condition 2. A total of 42 individuals was given the roles and each was told that these roles would give him an idea of the kind of men he had to deal with. Each person was asked to recommend a solution as in Condition 1.

Condition 3. A total of 29 groups of persons was given the roles to play and a person untrained in guiding group thinking was asked to be the supervisor. He was asked to hold a discussion and obtain a unanimous group decision from his workers.

Condition 4. A total of 17 groups was given the roles as in Condition 3, but the leader was trained in democratic leadership as well as in how (a) to influence the direction of thinking, (b) to ask questions which lead out of blind alleys, and (c) to keep the group trying out new ideas. These added instructions were based upon the author's studies on how to improve reasoning performance. He also knew the elegant solution, but was instructed never to supply it or any part of it. He was merely to stimulate the group. The writer, as well as instructors, played these leadership roles.

The results obtained from these 4 conditions are shown in Table 1, which divides the solutions presented into 7 types.

It will be seen that only in Condition 4 does the elegant solution occur with any degree of frequency (73.5 per cent). Thus far, we cannot say to what extent the leader's knowledge of the solution contributed and to what extent his skill contributed to the results. The fact remains, however, that in the preliminary experiments the leader was unable to sell the solution to the groups.

It is also important to note that the next best solution, that of finding some way of giving the less capable workers less work to do,

was progressively more often presented as we go from Condition 1 to Condition 2 to Condition 3, in which this solution was presented 25.8 per cent, 54.8 per cent and 72.4 per cent of the time, respectively. Thus, a knowledge of the roles was better than no knowledge of the roles. When actual people played these roles there was even more recognition of individual differences than when these roles were not played. The attack on Joe, the slow worker, was primarily confined to Condition 1. Joe was the bottleneck and the problem became one of removing the bottleneck. When real people were made a part of the situation by introducing roles, the inadequacy of this solution became apparent. The removal of Joe would create bad morale and become a threat to the next slowest worker.

TABLE 1

Relative Frequency of Each Type of Solution				
<i>Conditions for Solving</i>	<i>Individual (Without Roles) Per Cent</i>	<i>Individual (With Roles) Per Cent</i>	<i>Group (Untrained Leader) Per Cent</i>	<i>Group (Trained Leader) Per Cent</i>
Number of cases	31	42	29	17
A. Elegant solution	0.0	2.3	3.4	73.5
B. Give less capable less to do	25.8	54.8	72.4	17.7
C. Change Joe's make-up	4.8	0.0	0.0	0.0
D. Promote Joe to foreman	4.8	4.7	1.7	0.0
E. Get rid of Joe	50.0	9.5	3.4	0.0
F. George mentioned in solution	0.0	17.5	3.4	0.0
G. Solutions violating stated conditions	14.5	10.7	15.5	8.8
Total	99.9	99.9	99.8	100.0

The last two conditions in which groups were used may also be compared on the basis of the acceptance of the decision reached. Since unanimous decisions were desired we shall consider the frequency with which this condition was obtained. For this comparison we have divided the trained leaders into two groups, those led by the author, who it was supposed was most highly trained, and those led by instructors, who followed the author's instructions.

These results are shown in Table 2. This table shows that complete acceptance was obtained most frequently under the conditions which also led to the elegant solution. Thus, the quality of the group decision did not have to be sacrificed for the sake of acceptance. As a matter of fact, acceptance and decision quality went together as leadership skill was increased.



TABLE 2

Acceptance of Solution Under Different Leaders		
<i>Type of Leader</i>	<i>Number of Groups Listed</i>	<i>Per Cent Unanimous Agreement Was Obtained</i>
Untrained	29	62.1
Instructed	11	72.7
Most highly trained	6	100.0

Discussions following the solution indicated that no one suspected that the leader had a solution in mind. All groups felt that the solution was supplied by the membership.

These experiments show that a leader who has creative ideas need not sacrifice them in order to obtain acceptance. Rather, he can use his leadership skill to lead a discussion which will result in a creative solution, one that groups as well as individuals fail to achieve without this leadership. If he lacks a creative idea himself, he can still achieve acceptance and have a solution that is at least as good as one he could obtain by working alone. Thus, if his own ideas are fair and have objective excellence, he can stimulate creative thought. If, however, he attempts to take advantage of a group or impose his ideas on them, then the group will throw obstacles in his path. Supervisors so inclined are not ready for democratic supervision.

### *Summary and Conclusions*

In this paper, I have attempted to point out that the problems in human relations training are primarily problems in attitude change. Attitude changes which involve attitudes toward one's self and one's fellow man amount to altering personality. If training methods are to accomplish this type of change, they must approach the techniques of therapy rather than the techniques of disseminating information.

Primary concern was given the problem of training supervisory attitudes and skills for democratic leadership in management. By this technique, each supervisor, regardless of his level in the organization, would solve problems which involve group attitudes by a type of conference procedure. The main objective of the conference would be to resolve differences and reach a solution which represents a full meeting of minds. This type of leadership introduces new types of controls which are consistent with a permissive and open-minded type of social behavior. These new leadership controls are briefly described.

Special consideration was given to a "risk technique" which adapts non-directive counseling principles to conference procedures. Work along this line has revealed that fears are a major action-barrier to the democratic type of supervision.

One serious question concerning the use of the democratic technique was raised for detailed consideration. Assuming that it is an excellent technique for obtaining acceptance of the group which participates, what can be said about the quality of decisions obtained by the method? Experiments bearing on this question were reported briefly. The results clearly indicate that the skilled leader need not sacrifice the quality of solutions in order to obtain a solution that has acceptance. Rather, if he has the proper skill, he can actually raise the problem solving ability of the group to a creative level and have increased satisfaction. With lesser skill he can still obtain good solutions and a high degree of acceptance.

## DISCUSSION

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The greatest usefulness of personnel technology is not realized because of failure to understand its nature. Among those who lack this understanding are: managers of organized labor and workers, managers of industry and business, and sometimes even personnel research workers themselves.

It might be well for us to examine first the fact of misunderstanding of the objectives and procedures of personnel technology—and then to attempt to treat personnel technology in terms of its aims and objectives, as well as its fundamental philosophy.

It seems that personnel research workers have been remiss in at least one important respect. They have failed to get their purpose and ways of doing across to managements of organized labor (as well as employees); they have even fallen short of getting it across to managements of business and industry. The relationship of personnel research workers to these two different kinds of management is, I believe, crucial. Channels of communication to those who could well use the product are lacking. If we were able to communicate freely with labor and business leaders, we would be able to put across without lag the functions and purposes of personnel research. There is need for building a common terminology, for a close, free interchange of ideas, with the sole objective of clarifying problems and developing mutual understanding. It may be that half or seventy or even ninety per cent of the effort of personnel research workers should, for a time, be directed toward this kind of public relations.

What could we hope to gain? We could hope to gain primarily the acceptance of research workers as relatively unbiased people, people who can approach the problems confronting labor and business perhaps more analytically and impartially than these managements themselves can. In other words, there should be careful cultivation of the field before we can expect to reap a harvest from the application of personnel tools.

With this setting, let us turn to the nature of personnel technology. What is the aim of the personnel research worker? In the first place personnel technology may be defined simply as a way of doing—a

way of developing, evaluating and applying procedures for handling employee problems. The goal is to increase production and at the same time increase worker satisfaction. If we recognize that sometimes the two aspects of the goal are at odds with each other, it can be said that in the long run personnel technology leads through worker satisfaction to increased production. Personnel technology is less concerned with short-term gains than with those which may come about slowly but have stability over a relatively long period of time.

Why in the past have managements of unions been less receptive to the values of personnel research than has been the case of managements of business? Business and industrial managements have supported and sponsored personnel research and are increasing their support. Managements of unions, on the whole, have not done so, and I believe at the present time it could be said they are not inclined in that direction. The resistance to the change that personnel research can effect seems to be much greater where unions are concerned. The resistance on the part of union managements is in part a result of their identification of personnel research with production speed. Few personnel research workers would agree that we are concerned with production *per se*. Most would agree to our statement that increase in production sustained over a long period of time cannot be accomplished without attendant increases in worker satisfaction and happiness. Is it not true that personnel research has been identified by unions with Taylorism and with so-called scientific management? I am afraid that it is. It is true that much of the preliminary conversations of personnel research consultants with management and labor during a situation survey is concerned with breaking down that whole point of view and in explaining the why's and wherefore's and *modus operandi* of personnel research.

Since personnel technology is a relatively new field, users of its products are interested in knowing how or from where the personnel research worker gets his knowledge. A large portion of it comes from the field of psychology; methods of test construction, counseling techniques, statistical methods, and learning and training methods are a few of the distinct contributions made by psychological science. However, personnel technology does not necessarily confine itself to psychology. Certainly economics, sociology, engineering, and to some extent law and perhaps also accounting play a role. If engineering is present, it is not present in the sense of Taylorism as utilized by the larger steel companies toward the beginning of the present century. Personnel technology is emerging as that combina-

tion of the various sciences and discipline areas which can best bring about the goal of maximum production coupled with maximum happiness and well-being of workers.

An overview of the fields now emerging as work areas for personnel research is of interest here. First there is the area of communications. In its broad definition this area includes all personnel research endeavor. Personnel research implies a multiple effort participated in by workers, by labor managements, and by business managements as well as by personnel technicians. Work on employee turnover, or on job evaluation, for example, can be a communication device with wide participation. However, the most direct communication work has been concerned with such problems as reading and writing as well as training, attitude surveys and the development and installation of suggestion systems. The work of Rudolph Flesch, which has been applied to the field of employee-management understanding by Paterson and his students, is an important case in point. From Flesch's work there has developed a readability index which assists those who produce written communications for use in industry to pre-evaluate the readership level of their materials. The implications of this readability formula should not be underestimated as far as human understanding is concerned. The material by E. T. Raney in a recent study has shown that more than 50 per cent of company newspapers, handbooks, and house organs can be read effectively only by college graduates.

Suggestion systems offer a means of multiple participation in management activity which have been utilized by many companies, for example, the General Motors Truck and Coach Division, as a communications device. The development and evaluation of such systems have largely been neglected by psychologists. Safety training and safety controls offer other media for communication as, of course, do merit rating and evaluation when feasible to use them and when they are coupled with counseling techniques of a non-disciplinary and non-directive kind.

One of the newer problems with which the personnel research worker is concerned is that of permissiveness and control. Norman R. F. Maier has conducted experiments in this area with the cooperation of two of the Bell Telephone Companies, as well as with several other industrial and utility establishments. In essence, Maier worked with informal groups of labor and management representatives who were encouraged to rub elbows in a non-directive, unstructured situation in the hope that mutual understanding and insights would emerge. Maier felt that this democratic approach developed a sense of belonging that could be achieved in no

other way. We have seen a good bit in the literature of psychology with respect to so-called permissiveness. Some degree (perhaps a large degree) of permissiveness on the part of management is imperative. Workers now, to a considerably greater extent than was the case ten years ago, set their own pace and do as they please. The problem here seems to me to boil down to the matter of understanding and teamwork, with considerable emphasis on mutual understanding. This understanding and teamwork pertains to agreement on mutual goals and how these mutual goals can be achieved. It adds up to multiple participation—participation by all concerned in policy decisions as well as details concerning ways and means of accomplishing smaller, day-to-day objectives. The present strife between management and labor is of such a nature in many plants as to preclude, at least at the present time, the exercise of this type of control through mutual understanding and working toward common goals.

It is certainly true that workers may quit, leaving the factory unattended. To be sure, also managements of business may take it upon themselves to quit business, leaving workers high and dry without payroll. Another alternative is for the government to step in, as is the case in some other countries, and manage business. This, I suppose, the government would do as a last resort. It probably would not be very satisfactory as far as the worker as a producer is concerned, nor would it in most cases be of great benefit to the community. This leaves us with the one solution, and it seems now to be the only possible solution—for workers and management to work together with understanding. For that reason the field of communications toward mutual understanding, and the teamwork that might result, is probably the greatest area for endeavor of the personnel technician or the personnel psychologist of the future.

Organizational problems are of importance. Our line and staff organizations as they now exist (in both the organizations of labor and of business) are primitive indeed. The line and staff type of organization has been handed down through a good many centuries of military history. There have been some pioneer explorations into new types of relationships which do not depend upon a hierarchy but rather on the principle of "working with." The work of C. G. Browne and others on concentric organizational charts is a case in point. These include study of problems of delegation of authority and responsibility.

In summary, I would predict that the areas of endeavor of personnel technicians, attempting as they are to develop conditions of maximum production accompanied by maximum job satisfaction,

will change in the future. This will probably not mean a reduction of work on such problems as the assessment of individual workers and management, and needed work on differential classification as well as the old problems of selection. It will mean a shift of emphasis so that the next half century may see vast increases in the number of applications of sound research work in participation, communications, organization—areas that are concerned primarily with human understanding.

Personnel technologists might well begin by classifying the nature and objectives of their own technology to managements of labor and of business.

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These three papers by Messrs. Maier, Tiffin and Viteles show in very able fashion not only that the personnel techniques discussed do not merely contribute toward the maintenance of good labor-management relations, but that they hold promise of increased usefulness as research continues in some of the important areas the speakers have mentioned.

One point in particular struck me. It is this: that despite the certainty that these various personnel techniques are useful, the degree to which they have gained acceptance in industry is really very small. For well over a quarter of a century we have been saying that tests can be profitably used in industry; yet as late as 1941 the percentage of companies using tests was decidedly limited. Dr. Viteles points out that about half of a large number of companies instituted test programs during the last war. Those were days when cost-consciousness was at a minimum, especially in case cost-plus contracts were involved. With the return of the buyer's market, one can safely predict the elimination of many of these recently inaugurated test programs. Other personnel techniques have, for the most part, had even less acceptance in industry than tests.

Viteles has mentioned that better selection of employees contributes to cost reduction through higher productivity, reduced turnover, reduced absenteeism, lower training costs and so on. He has further pointed out that efficient and profitable operation of the business is an absolute essential to good labor relations. He says the unions are not yet convinced, by and large, of this fundamental fact concerning our economic system. On that point Mr. Gomberg can speak better than I. But, assuming this fundamental to be

agreed on, we can say that neither managements nor unions are generally convinced that the personnel techniques discussed here today do actually contribute toward profitable operation of the business.

I should like to devote my time to a consideration of what we can do to bring about better acceptance in the next twenty-five years than we have had in the past twenty-five years. While most of the things I mention will not be new, they have not been said often enough and they certainly have not been put into practice in the past as we shall have to apply them in the future.

### *Better Understanding by Management and Union Leaders*

One area to which we ought to give attention is that of promoting directly a better understanding of what we have heard today, among top management people, top union people, and personnel and labor relations administrators. That objective is being approached, though slowly, through the fact that more and more people in such positions in the future will have had college courses in personnel administration and industrial psychology.

We can hasten the process of understanding by learning to talk and write our findings in every-day, non-technical language. Many of us, I know, at one time tried to educate our bosses to understand critical ratios, correlation coefficients and multiple regression equations. What success we had in selling our programs is a tribute to their patience. Fortunately, few psychologists these days take pride in writing things so they are hard to read; but we have much to accomplish in developing explanations that are as simple and straightforward as we know they should be.

We can hasten the process of understanding also by writing articles for non-technical journals which are read by management, union and labor relations leaders. Here again, we can remember when any attempt to "popularize" psychology was frowned on within the profession, especially if the psychologist made any money doing it. Such articles are now recognized as a useful service to those who could utilize psychologists in their organizations.

Finally, we can hasten the process of understanding by efforts to integrate the profession with management, union, and other groups. Such efforts should broaden the point of view of psychologists as well as increase their opportunities to make contributions in the field of labor-management relations. Participation in such joint sessions as we are having today represents a good example of effort in this direction.



### *Psychologists Who Like the Business Atmosphere*

It is recognized by any psychologist who has held industrial positions that the conditions of work differ markedly from those in a university. In the university he pretty much writes his own ticket with respect to what research he will do and how he will do it. In a company, he usually has first to convince one or more of his own bosses and also some operating and staff people in other lines of authority. He finds that a dozen men have to say "yes" to a program, but one "no" is enough to stop it. Some of his pet ideas are compromised; some are lost completely. Always he is dealing with men who do not understand his techniques and objectives.

This situation is really no different from that which confronts other specialists in the business organization. Physicists, chemists, industrial engineers, even cost accountants have much the same problems. To many persons, there is a challenge in this type of activity which makes occasional successes very gratifying, and frequent compromise tolerable. But some persons in any profession do not find satisfaction in this type of work.

In part, industries need to learn how to supervise research specialists more effectively. But the professions also need to recruit and train more men to whom the business atmosphere will appeal. In a profession such as psychology, with a history which is largely oriented toward the university laboratory, it is clear that most men who enter the field do so because laboratory research appeals to them. It is natural that only rarely will a man emerge from that setting who also likes selling and promotional work. We should try to get more such men interested in entering the field of psychology.

### *Modest Claims*

Popular articles in the past quarter-century have often left the impression that tests and merit rating procedures are almost miraculous. Although reputable psychologists decry this implication, I think we ourselves have often had a feeling that technical personnel procedures will bring about quite a revolutionary improvement in the personnel job. We often leave the impression that tests will markedly improve the caliber of persons hired; that rating forms will greatly improve the effectiveness of promotions and wage administration; that attitude studies will greatly enhance knowledge of factors contributing to morale; and so on.

There is a sense in which all this is true. All of these personnel functions are very complicated; and being so, there is a great deal of imperfection in the way they are done. Often you can double

the effectiveness of doing these jobs by using some technical personnel procedures. But these jobs are so hit-or-miss, at best, that even after you have doubled the effectiveness, they are still very imperfectly done.

To use test programs again as an example: When we put a good test program into a company, the improvement in the caliber of persons hired, although it may be really substantial, is hardly discernible to the industrial supervisors who get the new employees. The main reason is that each supervisor sees only a few new employees each week or even each month. There is great variability from time to time, at best. This happens partly by chance, partly because of changes in the labor market, partly because of the degree of pressure he puts on the employment department to get people in a hurry, and so on. When we start using tests, he gets better people, on the average. That we know. But his span of observation is not great enough so that he can tell whether we are doing a better job in the employment department or whether he is just having a run of better-than-average luck in getting good employees.

Is it good public relations for psychologists to "plug their wares" on such a modest level? This is a sixty-four dollar question; but one can make a case for believing that it may be true. If we try to make our techniques appear to be revolutionary—and if, then, the expected results are not readily apparent to operating people or union leaders—we leave them disappointed with us. On the other hand, there is plenty of evidence that industries are accustomed to the process of hacking away at their problems in order to achieve small improvements. Industrial engineers are elated if they find that the girls on an assembly line can use bent-nosed pliers more efficiently than the straight-nosed ones previously specified. Production people are glad if, by moving a machine from one room to another, they can eliminate one 50-foot trucking operation. Most improvements come by shaking the job down, day after day, rather than by thinking of something big. Psychologists may gain much if we can come to be regarded as fellow-participants in the day-by-day job of improving the operation of the business, rather than as possessors of semi-miraculous formulas.

### *The Professional versus the Scientific Point of View*

Inasmuch as psychology has historically been a science, and a laboratory science, rather than a profession, there has been a tendency for us to regard problems which were given to us as opportunities to do research. We have felt it was not possible, or at least not reputable, to approach a problem on any other basis. I remem-

ber a friend once deploring that a company had asked whether he could help them, starting Monday morning, in hiring about a hundred apprentices for tool and die training. He told them such a job was not possible without several months of research.

We have much to learn about how to behave in such a situation. The physician does the best he can for a patient right now. He knows that better treatments will come out of research during the coming years, and that some of the things he now does will be proved ineffective. Nevertheless, this patient is a subject for treatment by him, not for research. Psychological techniques will, I am sure, be more widely used as we develop clearer concepts of the distinction between research and practice.

*Emphasis by Psychologists on Cooperative Effort between Managements and Unions in Installing Personnel Techniques*

The cooperative way of speeding up acceptance of new ways of doing things will certainly prove fruitful in many situations. It has been emphasized by several speakers today. I think each situation has to be examined to see whether bringing the union in on the discussion will really facilitate acceptance or whether it will simply give the psychologist another hurdle to jump in securing adoption of his recommendations. But union-management cooperation certainly should be considered in promoting personnel programs.

The papers presented today offer incontrovertible evidence that personnel psychology does make a real, though not revolutionary, contribution to the improvement of human relations in industry. We may look for valuable new discoveries as research continues along both new and traditional lines. Perhaps we need to be most concerned, however, with ways and means by which what is already known may be more widely recognized and applied.

**WILLIAM GOMBERG**

*Director, Management Engineering Department,  
International Ladies Garment Workers' Union*

*Comments on Paper by Viteles*

Mr. Viteles speaks of the criterion of efficiency as the guidepost against which good management-labor relations must be measured. It is one thing for an engineer with typical engineer's blind spots to make this objective the guidepost of his thinking. It is quite another to see a psychologist with such a distorted set of values, particularly within the social frame of reference which is implied in the paper.

Professor Viteles rather cavalierly asserts that there is an apparent lack of concern on the part of organized labor with the necessity and possibility of maintaining high production and reducing labor costs. While the next paragraph, of course, carries the usual patronizing qualification that there are some progressive labor leaders, the implication very definitely is that generally management stands for high production and labor is interested in low production. It should be clear even to an elementary student of economics that conflicts between management and labor do not take place over long-term efficiency. They take place over the wage-price-profit ratio. If they took place over efficiency, or perhaps better yet, productivity, then layoffs would be no problem for the worker because quite obviously a factory would be open all the time. The closing of a factory because it is unprofitable for the employer to build up an inventory would become an offense against the country's welfare. Today, however, this practice of restricting productivity is good business. Its practitioner is greeted as a man of great business acumen who keeps his inventories low. When the worker uses the same technique of restricting productivity to satisfy his own short-run objectives he is denounced for feather-bedding.

Then, what motivation is there for efficiency among workers? Viteles attempts to talk in terms of long-term economic considerations. Short-run low costs for the manufacturer may mean fewer jobs, more work and less pay. It is somewhat amusing to see the psychologist take the long-term point of view in considering the very people whom he is supposed to understand. An elementary axiom of psychology should be that people live in the short run, marry in the short run, bring up their children in the short run, and develop neuroses and psychoses under the stress of insecurity, all in the short run.

The function of the union is to preserve human values. It is the function of the union to ask pertinent questions. When new fuels, for example, are substituted for old fuels, does the added efficiency of the new fuel justify the creation of ghost mining towns and the leaving of people stranded without a means of livelihood?

It is difficult for unions to become enthusiastic about selection techniques in industry. Viteles is aware that many psychologists feel that they have an acceptable test with validity correlations of 0.4 and even lower. Unions do not look upon workers as abstract collectives. They are frankly concerned about the injustice to workers who may be falsely classified as incompetent, that is, they are unfortunate enough to fall into that 0.6 part of the correlation,

remaining between 0.4 and perfect correlation. Might I add that the number of new workers taken on by the average firm is generally so small that even this correlation coefficient of 0.4 is meaningless because of the small size of the groups.

Yet the trade unions are invited to hitch their policies to this rickety device, all in the name of science. Naturally, if these tests are used to select new workers from the open market to whom the union has incurred no particular obligation, the company and the industrial psychologist are likely to be met with indifference rather than opposition. If, on the other hand, they are to be used as a determinant of in-plant promotions, then they will have to be a good deal more valid before the union will permit them to be the criterion of judgment of whether or not any particular worker is to be frustrated or permitted to go ahead.

What is so disturbing in Mr. Viteles' approach is the great emphasis placed upon psychology as a tool to select the proper worker for the job rather than upon the adaptation of job specifications to workers.

As an engineer I know that many technological changes in industry today are not motivated by increased physical productivity. They are motivated by the desire to utilize unskilled labor which may be purchased at a cheaper price than skilled labor because of our wage structure. An interesting experiment was conducted during the last war. Two factories manufacturing the same product were set up in two different ways. In one, the operations were reduced to their simplest repetitive components. In the other, enough different operations were made up into individual work assignments to sustain the interest of the worker. By all engineering assumptions, the former factory should have been more productive. The reverse turned out to be true.

Now, of course, the argument of the psychologist could very well be that poor selection techniques were used in choosing the workers for the first factory. To put it bluntly, as a group they were too intelligent for the jobs they were given and became bored. Is it the function of the industrial psychologist to devise tests so efficient that they will select Aldous Huxley's nerveless gammas so that this simplified factory will again equal the productivity of the more complex factory because it would be cheaper this way?

In the latter part of his paper Professor Viteles speaks of job satisfaction tests. He emphasizes that dissatisfied industrial workers become the focus of industrial conflict. If this concept is to be socially constructive, then the assumption must be that there is

a wide enough variety of jobs available to please everybody in the population. Such a situation is exceedingly unlikely, particularly during this time when a polarization seems to be at work dividing the old semi-skilled jobs between those that become very highly skilled and those that are routine, repetitive and boring. It is my own feeling that many employers are interested in these job satisfaction tests as a coefficient of the union-proneness of future employees, rather than being interested in any abstract concept of one big happy family.

*Comments on Paper by Tiffin*<sup>1</sup>

The problem of job evaluation in collective bargaining today is no longer whether or not the union is to participate in the process or whether it is to stand on the sidelines. If job evaluation is introduced into a union factory, there will be participation or there will be no formal job evaluation.

This union participation may take one of two forms. First, there is direct participation right from the design of the plan and the inception of its operation. Secondly, there is the attitude of standing away from the plan and letting the employer do whatever he pleases, the union remaining free to protest the results of the plan. In either case, the details of the plan will be the subject of discussion between the employer and the union.

The first thing that must be remembered is that job evaluation will seldom be the sole guide to the fixing of the wage structure. In collective bargaining, job evaluation is looked upon as merely the determinant of one of the factors which influence the relative wage structure. It is viewed as a systematic device for measuring relative job content. Lawshe has already demonstrated the lack of validity of the National Metal Trades Association plan for this purpose, as is clear from the following quotation. It is what many of us in the labor movement have contended for a long time.

While there is considerable agreement from plant to plant insofar as the presence of factors is concerned, there is variation in the extent to which they contribute to "total point" ratings and consequently, to the existing wage structure. "Skill demand", for example, varies from 77.5% in one plant to 99% in another. That this is true, is significant since all three plants use point rating scales in which the point allowances for the various items are relatively the same. It is clear that the extent to which each item or factor contributes to the total cannot be determined by inspection

<sup>1</sup> Certain of the comments here and in the following "general discussion" pertain to a technical treatment of job evaluation which Dr. Tiffin included in his oral presentation but omitted from his published paper.—Editor.

of the scale alone and the end result may yield results different from those intended by the makers of the scale.<sup>2</sup>

Thus an unpredictable elastic yardstick is offered by workers as an objective measure of relative job content. Quite obviously this means that different job evaluation systems must be devised to suit not only the needs of a particular company, but the same plan may not be applied to all departments even of the same company. It means that as the unions learn more about the technical details of these plans, rigid point plans like the National Metal Trades plan will have rougher and rougher going as the unions attempt to expel them from the collective agreement.

Dr. Tiffin's recommendations, encouraging union participation in job evaluation, are sound provided too much is not expected from them. Wage scales are the result of many forces—tradition, supply and demand, seasonality and job content. Job evaluation attempts to measure job content only. It is for this reason that it cannot become the sole determinant of the wage scale.

#### *Comments on Paper by Maier*

Mr. Maier in his paper is recommending a technique to factory managers which has been used by progressive educators ever since John Dewey wrote his first tracts on education.

However, there seems to be a confusion here between the trappings of democracy and its inner substance. Maier is quite aware of this. He states that the main purpose of his technique is to deal with the how of the job rather than with whether or not the job is to be done at all.

Now the essence of democracy is the diffusion of power among contending groups so that they must reach agreement in order to function. The trappings of democracy granted at the sufferance of a despot and removable at his whim represent a very transparent façade for the real thing. Maier's technique, no matter how well intentioned or sincerely offered, must of necessity degenerate into a manipulative technique. You are not asking or consulting people about what to do. You are maneuvering them so that they do what you want, but more efficiently. Perhaps such techniques are indispensable to the operation of a business enterprise. It is an open question whether or not an individual business enterprise can operate along any other but authoritarian lines. If it must, then Maier has something to offer, but this should not be confused with democracy.

<sup>2</sup> C. H. Lawshe and G. A. Satter, "Studies in Job Evaluation I," *Journal of Applied Psychology*, Vol. 28 (1944), p. 197.

Perhaps I can best illustrate what I mean by citing the example given by Maier. You will recall that he describes a situation where a supervisor needed two of three girls for Sunday work. All three girls had dates, one with girls, the second with her regular boy friend, and the third with a boy of whom she hoped to make a new conquest. The supervisor called all the workers together to determine "democratically" which two of the girls should be compelled to come in on Sunday. After deliberation, the group decided that the girl who could keep her date was the girl seeking the new conquest.

If that factory were organized, the problem would be handled by asking the girls whether they would be willing to work on Sunday in the first place. There would be no implied assumption that the girls' dates after working hours were any less important than the employer's production problem. If the girls are not willing to work after regular working hours, the employer is expected to seek a different solution to his production problem. This makes the difference between real democracy, where power is distributed between the employer and the working force, and play-acting democracy, where all problems are solved on the basis of the satisfaction of the employer's achievement of his objectives.

Thomas Jefferson once observed that the continuation of democracy did not lie in the idyllic cooing of the lion and the lamb. It rested in the mutual suspicion and distrust of equal contending groups, neither of whom would permit the other absolute power. They would function together by compromise.

I do not mean to imply that there is no room for the industrial psychologist in the democratic scheme of things. Not at all. However, the psychologists must make up their minds within which system of values they are going to practice their techniques. Psychology can be considered among the social sciences. It is anxious to receive support, and some business spokesmen in rather unabashed terms have made clear under what set of circumstances the social scientists may expect to receive business support. They want operating techniques which will promote their own private concept of good industrial relations, that is, the relationship between the good shepherd and his sheep.

Frankly, I am suspicious of any technique which purports to eliminate all industrial conflict. What we have to know is how to handle these conflicts without rending the social fabric of the country.



*General Discussion*

Morris S. Viteles: Labor's interest in short-run gains, which Mr. Gomberg emphasizes, must not be permitted to obscure the basic importance of long-run economic improvement. The long-term approach offers more fundamental security than does the short-term. Quotations like those in my paper from a management spokesman and from Stalin regarding the need for increasing material prosperity indicate agreement on this point. Management is not blameless; it does restrict production, but its view is more elastic and more aware of the long-run role of increased production and the effective use of human resources. Our concern must be with total human satisfactions.

William Gomberg: Union labor is *not* opposed to high production, but we want first things first. The basic economic problems of industry come before such things as the techniques of psychological selection. Plant shutdowns and unemployment are management's method for restricting production. Management's interest is in costs, not in best production. Prices and production are controlled by management in the interest of profits. If labor is to go along with moves to increase job efficiency, first give us unrestricted and continuous production by management.

Dr. Tiffin assumes that job evaluation is the sole determinant of wage structure. This assumption when applied has proved disastrous. Job evaluations deal with job *content*. But the relative content of jobs is only one factor in determining wages. The union wants job content to be part of wage determination, but only a part. For example, traditional wage relations in the industry must also be taken into account. Any psychologist ought to understand that these traditions and customs are an integral part of the factory's social environment. It is difficult to understand what useful purpose is served by upsetting these relationships which both parties accept as equitable. Professor Viteles observes in some writings on job evaluation in 1941 that the maximum range of capacity between the least intelligent and the most intelligent never exceeds three to one. This suggests that if income is to be distributed according to what jobs are worth, nobody should be making more than three times what anybody else is making. Given \$200 to distribute between two people according to their relative worth, one would receive no more than \$150 to the other's \$50. We all know, however, that it would not take too much effort on the part of the \$150 man to get away all of the \$50 from the other person. One of the tools used to get part or all of this \$50 away would be long

talks about the great responsibilities which fall upon the shoulders of the \$150 man. If job evaluation experts keep insisting that their techniques are the only guide to the relative worth of jobs, then they ought to be careful lest the labor movement apply their philosophy to the whole range of incomes, from top to bottom—not only within the working group.

Norman R. F. Maier: Mr. Gomberg objects that the procedure I described permits management to have its way, and he quotes my reference to the need for limiting employees' discussion to the "how" rather than the "what." My point was that men could not solve all of the "what to do" problems because this would permit them to change the industry. Each level of management has its specific problems, and the procedures I described should be used at each level.

That democratic group decision techniques can be manipulative has certainly to be considered. I felt that the requirement of 100 per cent agreement on a solution should protect men from a scheming management and for this reason I placed emphasis on it.

Why should the union criticize participation when it frequently demands more of a say-so itself? Do the union leaders want participation for the men or for the union? Whom do the leaders represent?

William Gomberg: Professor Maier indicts his procedure when he asks: "Do the leaders want participation for the men or for the union?" It has been precisely our point of view that management finds many of these so-called democratic techniques attractive because they hope thereby, though fruitlessly, to drive a wedge between the union and its members. To put it crudely, it sounds very much like streamlined union busting.

Francis D. Tyson <sup>3</sup> (from the floor): I am moved to make a few comments on Professor Tiffin's presentation on job evaluation. The question I wish to raise has to do with aim and method in the social sciences and in contemporary psychology. Is there not a real danger of overemphasis on techniques and of unwarranted satisfaction with what is merely taxonomic analysis in narrow areas of study?

Economics has been, at its best, a discipline of human evaluation, although it must be admitted that a hundred and fifty years of intellectual endeavor in Britain, Germany and the United States have resulted in all too scant agreement. We are, today, badly in need of aid from a scientific psychology, with special regard to problems of motivation and the determination of group behavior.

Are not some of the representatives of the new science of psychol-

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ogy in danger of getting bogged down in mere taxonomy, or classification of facts, as was so long the case in economics? Does such unfocused approach reflect a certain naïveté? May I call attention to the practical hazard, for instance, of limiting your contribution to the substitution of a new psychological "jargon" in job evaluation, to compete with that developed by the engineers, who initiated job study decades ago? Why not start by formulating psychology's distinctive objectives?

There is surely no need to begin anew as if nothing had yet been done in the field of job study. On job evaluation, for instance, with all praise for the technical effectiveness of Professor Tiffin's work, would it not be wiser to practice division of labor, recognizing that a major part of the work in this field is primarily that of the engineers, a task early pre-empted by them. The engineering divisions of some of our big companies in Pittsburgh—for example, Carnegie-Illinois, Westinghouse, and Alcoa—have been making definitive job studies ever since World War I. They have long used representative committees with good effect, even, as so widely in Steel, to resolve job inequities and arrange effective wage and salary classification systems. Are we not "carrying coals to Newcastle"?

The true role of the psychologist, as he assays the task of human evaluation, and the study of men at work, should be to measure the interaction of human interests and abilities with industry's work requirements. You need not concentrate, at this late date, on mere improvements of the procedures devised by engineering management. The American Management Association and Society for the Advancement of Management are fully competent to serve that end in industry, where such work must be done, rather than in the university.

"Why and to what end," rather than merely "how," is the true concern of the social scientist. A vast and still uncharted opportunity calls for the humanizing and socializing of the essential work of the engineers and technicians of industry. We need not seek full identity with their techniques or limit our approach to the narrower problems already recognized by them. Our job may best begin with critical review of such work, looking to its redirection—for instance, to the joint use of job study by organized labor, as well as by management alone. Industrial economists may be further along in grasping the larger problems engendered by industrialism, having passed through the period of taxonomic study and mere concern with method, and having knocked their heads against stone walls for too long! Economists now ask the cooperative aid of psychologists, as of other social scientists, in the study of really significant problems of

value, for the more rational guidance of our complex and confused economy.

Sadie M. Shellow <sup>4</sup> (from the floor): The remark has been made that the unions are not interested in psychology. Ten years ago I presented a paper to the American Psychological Association urging young psychologists to go to the unions, learn their needs, and work out programs with them. Only recently has any effort in this direction been made. Psychologists spend a great deal of thought and time and money in presenting to management the services which they offer; and even then they have some difficulty in educating management to the proper use of psychological services.

The unions have not been interested in psychology because psychologists have not been interested in the unions. Furthermore, the unions have had in many cases an attitude of suspicion toward management-employed psychologists. This suspicion is a natural consequence of the hostility which has been part and parcel of management's attitude toward labor unions in the past. Hostility on the part of management begets suspicion on the part of the union in regard to any techniques which management employs to improve output.

Psychologists who are interested in serving the union must acquire knowledge of labor-management relations, the history and development of the trade union movement, and its place in industry today. The psychologist can be in a position to make a lasting contribution toward good labor-management relations since as a scientist he is capable of understanding both sides and should function as an interpreter to the union of management and to management of the union. He should exert his efforts to bring about an industrial situation in which the worker finds adequate satisfaction in his work and management receives a fair profit.

<sup>4</sup> Consulting Psychologist, Milwaukee.

Part II

PSYCHOLOGICAL STUDIES  
OF LABOR-MANAGEMENT RELATIONS



## THE ATTITUDE SURVEY APPROACH

DANIEL KATZ

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THOUGH SURVEY procedures have been widely used to obtain measures of employee morale they have received little attention in the investigation of labor-management relationships. It would seem that employee morale bears some relationship to the ability of labor and management to work out amicable arrangements and that, therefore, even surveys of employee morale would have some relevance to this larger problem. But survey procedures have been grossly neglected in studies of labor-management relations and perhaps for these reasons: For one thing, the usual surveys of employee attitudes are very limited in scope and do not thoroughly explore the significant needs, wishes and perceptions of workers as they relate to identification with the union and identification with the company. In the second place, even a relatively complete study of employee morale in a single plant omits other group structures and patterns of interrelationships in the complex labor-management picture—for example, it omits the interpersonal and power relationships within company management and within the local and national union structure.

These limitations of morale surveys for understanding labor-management relations are not, however, basic weaknesses in survey procedures as a methodological tool in this field. Rather they reflect what from a theoretical point of view is an historical accident—the fact that pressure for the use of surveys in industry has come from personnel departments and management groups interested in employee reactions to programs of employee benefits or in the level of understanding of company information. If survey procedures are to make a contribution to labor-management relations, they must move in new directions. I shall attempt to describe these main directions and, then, mention briefly a small beginning we have made at the Survey Research Center in this area.

In the first place, the survey of rank-and-file employees must go beyond the objectives of the usual morale survey. It is helpful to know something about the general level of worker satisfaction with his job and with the company, to get worker evaluation of working conditions, wages, opportunities for upgrading, and employee benefits. But this is not enough. Three other general sets of objec-

tives should be added. One set has to do with perceptions and attitudes of workers toward the two structures in which the workers have dual membership, the company and the union. We need to know the degree of the employee's involvement in the company structure and in the union structure. We need to find out his perception of the goals of union and management and his perception of their compatibility. Does he see the union as basically dependent upon the company or is the relation one of interdependence or of relative independence?

A second area to explore is the worker's reactions toward the representatives of management with whom he comes into contact, specifically the foremen under whom he works. And the counterpart of this picture are his attitudes and perceptions regarding the representative of the union he knows best, his steward. What is his conception of the role that the foreman and the steward should play? And how does he feel about the daily treatment he gets from the foreman on the one hand and the steward on the other? Does he see an essential conflict in their roles? Is it all right for a steward to accept a promotion from the company and become a foreman?

A third area is the specific content of labor-management negotiation and conflict, both past and present. The conflicts over wages, working conditions, or other issues in the past leave their mark and determine something of the worker's general confidence in his union or in his company. In terms of present problems, how does he feel about the issues coming up for negotiation? How do these issues relate to his present needs and frustrations? In other words, these second two areas give specific definition to the general context of degree of acceptance of union and management goals suggested as the first set of objectives.

In addition to broadening the objectives of studies of workers' attitudes, there is need also for surveys which will take account of other parts of the picture. At least four more surveys are called for:

1. It is important to study management at three or more levels. First, a study of foremen is indicated since they are the largest single source of contact with the worker. The foreman's attitudes and practices toward workers, the degree to which he is work-oriented or employee-oriented, the degree to which he secures their participation, the degree to which he is a genuine channel of communication, the relations he has with the stewards in his department, his own attitudes toward the company—all furnish pertinent material. A second-level study is needed of the rest of management within the local plant. What is the basic operational philosophy of top management and how is it reflected down the line? What is the power struc-



ture within the management group? How does this power structure affect relations with the union? What are the attitudes of top management toward the union? How does management evaluate its competitive position in the industry relative to union negotiations? A third study in the management structure goes beyond the local plant and includes the larger enterprise of which the plant is a part. Carried to its logical conclusion this would include the board of directors and the absentee owners. It really calls for a study of the centers of decision in a given company.

2. Paralleling surveys of management at all levels should be studies of the union at all levels. The broader survey of rank-and-file employees, already outlined, is really the study of the union and the company at the lowest level. It is not correct, however, to jump from this rank-and-file employee survey to a study of stewards, because we would then omit the important area of informal leadership in the union. Stewards and union officers sometimes are pushed into demands on management by the informal leadership within their ranks. As official leaders they cannot easily retain their leadership if they are behind rather than ahead of the groups they are leading. The survey of stewards themselves will seek parallel types of information to that obtained in the foreman survey. At the higher levels of union leadership it is important to know the basic ideology about the aims of labor organization, the strategic objectives of the organization, the tactical moves planned for the immediate situation, and the power structure within the union. In addition it is valuable to know how open the channels of communication are from the rank-and-file to the leadership. Union leaders sometimes are poorly informed of the wishes and wants of their members and will fight for pensions for tactical reasons when their workers really want an immediate wage increase.

3. Even if we had adequate surveys of the rank-and-file, of company management, and of the union leadership structure, we would not have a complete story. There is still the problem of the industry-wide situation that calls for surveys of a number of different types of companies and unions within the industry. A smaller company, which does not set the pace for the industry, may have a big advantage in harmonious relations with its union and workers. The Harbison-Dubin study was especially valuable in that it compared labor relations of General Motors in Detroit, where the major struggle on wages is fought, with Studebaker, which follows the Detroit pattern.<sup>1</sup> The Harbison-Dubin study, however, was essentially an

<sup>1</sup>F. H. Harbison and R. Dubin, *Patterns of Union-Management Relations*, Science Research Associates, 1947.

anthropological study and needs to be supplemented with surveys giving more detailed and more quantitative data on the same problems. A series of studies in different concerns within the same industry is also valuable because it can give estimates of the weights to be assigned to local factors. For example, a generalization about union-management relations may have to be modified somewhat to take into account the sub-culture of different geographical areas, or of differing community conditions, or of differing historical backgrounds.

4. Finally there should be surveys specifically oriented to get the facts of union-management conferences from the minor meetings about grievances through the major negotiations around the bargaining table.

It is obvious, of course, that the closer the survey comes to the center of conflict, the more difficult it will be to get full information from the principals through personal interviews. More and more, however, the public is becoming a party to these negotiations and both sides are often eager to get their story to the public. Moreover, once the immediate issue has been decided, it is possible to secure more detailed information from the participants, especially if there is a guarantee that there will be a considerable time lag before the study is made public. One major factor making for secrecy on the part of union and management is the fear that the other side may take advantage of information which research might disclose. Yet, often the failure of either side to make clear its position leads to the worst possible interpretation by the other side and by the public.

This, of course, is a highly ambitious program and calls for many different types of surveys using special samples for the various areas to be covered. It entails highly skilled and highly trained interviewers who employ a much freer type of interview than would be used for a national cross-section. It means, moreover, that important relationships will appear only through an interweaving of the information obtained from the different surveys.

We have made only a modest start in the direction of this type of use of survey procedure in a study of an automobile plant.<sup>2</sup> In this beginning attempt we put our main emphasis upon three surveys: one of a cross-section of the rank-and-file workers in the production departments; the second, of all foremen in the same production departments; and the third, of all union stewards. In addition, levels of management above foremen were interviewed. The study of rank-and-file employees covered some of the usual dimensions of worker satisfaction and in addition sought measures of the degree

<sup>2</sup> This study was made possible by a grant from the Office of Naval Research.

of acceptance of union and management goals, of the perception of compatibility of union and management objectives, of the expectations of possible changes in the pattern of union-management relations. The foremen were interviewed on the same types of questions but were also asked questions designed to get at their management philosophy and practices toward their workers and their attitudes and practices toward union stewards. Finally, union stewards were queried along similar lines. These three separate studies are being combined in the analysis of the data to give a more adequate picture of the day-to-day relations between union and management at the grass-roots level. Though this study still omits a number of important areas which need to be explored, I will mention a few of the findings as examples of the possibilities of the survey approach. More detailed reports of the results are being presented in forthcoming publications from the Survey Research Center.

In the plant we studied, the attitudes of rank-and-file workers clearly indicate a substantial basis for industrial peace. The great majority of workers see no fundamental conflict between the aims of the company and the aims of the union. Ninety per cent of them feel that union and management get along either *fairly well* or *very well*. The dominant tendency among the men is to give credit both to union and to management for the good working relationship. A majority also believe that the company is interested in the welfare of the union, and that the union is interested in the welfare of the company. Moreover, the men feel that the union officials are interested in the welfare of the company. Though most of the men see production as the goal of management, they do not think that management is after an unreasonable profit. They feel that the things the union wants most are fair wages, good working conditions and fair play. They see no essential reason why both management and the union cannot achieve their goals, but they recognize that each side may have to give up something in the process. Negotiation, compromise, and understanding the other side's problems seem to them the way to reduce conflict. Only one in five says that union and management are not usually pulling together for the same kind of things. And only one in five sees management primarily wrong and the union primarily right in their relations with one another. Moreover, some 53 per cent of the men approve of the idea of stewards becoming foremen. Thus, there is a high degree of perception of the interdependence of the two groups.

The men in the plant thus show little of the ideology of class conflict in the traditional sense. Their belief in the essential com-

patibility of company and union goals and their perception of the interdependence of company and union are the background which permit the peaceful settlement of differences. Recently, the company, in an effort to improve its competitive position for the day when the buyer's market returns, tried to tighten standards on a new assembly line. This problem in another company might have been settled only after a costly strike. In the plant under study, however, a solution was finally achieved after prolonged negotiation.

The union, however, is in no sense a company union, and the workers, who accept the idea that both company and union can get what they want without getting in each other's way, are strong union supporters. They see their union as the means of sticking together to improve their position and to guarantee fair play. An over-all code based upon the whole interview with the workers showed some 58 per cent of the men likely to take the union's side and about 30 per cent inclined to make an independent decision based upon who was right.

This favorable attitudinal background, therefore, does not mean that there will be peace at any price in this plant in the future. The dual loyalty to company and to the union can lose its dual character and the men will consider themselves primarily as union members, if the company should appear to take a position which seems to them to run counter to union goals and worker needs. There is, furthermore, one slight warning sign for the future in that a small minority of the men see union-management relations at the plant as changing toward a less desirable state of affairs. Sixty-seven per cent see no change, three per cent see a change for the better and 18 per cent think relationships are deteriorating.

The belief in the interdependence of company and union and the perception of commonality of goals of the two groups is paralleled in the perceptions and attitudes of the union stewards, save that the stewards are not quite as optimistic as workers. The foremen are even more inclined to differ from the rank-and-file on the question of basic differences in the aims of union and management. Both foremen and stewards do, however, feel that management and union get along well; but foremen give credit for this fact to management in a ratio of two to one. On the other hand, union stewards do not claim that credit for good relations should go exclusively to the union. Their modal response stressed both union and management. Similarly, while foremen think the company is concerned with union welfare, a sizeable minority (35 per cent) hold that the union is not concerned about the welfare of the company. The stewards, like the men, see a reciprocal concern by both union and company

in the other's welfare. Moreover, a plurality of foremen (42 per cent) see the aims of the union as opposed to company goals. But the majority of foremen feel, nevertheless, that both groups can get along through negotiation and compromise. Sixty-one per cent of the foremen see management as completely or primarily right and the union wrong, as against 41 per cent of the stewards who see management as primarily or completely wrong and the union as right. It is interesting that both foremen and stewards are much more pessimistic about future relations than are the workers. Twenty-six per cent of the foremen feel that union-management relationships at the plant are getting worse and nine per cent see improvement. On the other hand, 41 per cent of the stewards see things changing for the worse and five per cent anticipate improvement.

In brief, the conflict phases of union-management relations appear more sharply defined in the attitudes of the leadership groups than in the attitudes of the rank-and-file. Foremen are more class-conscious than stewards in this particular plant. This reflects the fact that the union in this company has won more acceptance from top management and has played a larger role than is customary for a union. Many foremen resent this growth of power whereas the aspirations of union stewards do not carry them beyond the present situation and they see no fundamental conflict in interest between company and union. The recent attempts to tighten standards have made the union leaders less optimistic about the future.

The leadership practices of foremen and stewards can be related to the attitudes of the men working under them through combining the material from the three surveys. In departments where stewards and men report that their foremen consult them about decisions in the shop, there are more favorable attitudes toward the company than in departments where foremen do not follow such participation practices. Similarly, in departments where stewards and men report that stewards consult men about decisions there are more favorable worker attitudes toward the union than where stewards do not follow such participation practices.

In departments in which there is essential agreement in the reports of the three groups about a clear-cut power relationship between the foreman and steward, whether or not the foreman or the steward is the dominant figure, the attitudes of the men show little perception of conflict between company and union. In departments where the power relationships have not been decided the men show greater perception of conflict between management and union.

It would seem from these and similar results that part of the labor-management relationship can be understood at the local level of the plant itself. What the local union leaders do, and what the representatives of management do, has an effect upon the attitudes of workers; and the attitudes of workers do set limits on what can be done to mobilize them for conflict situations. Obviously, however, we need to narrow the limits within which behavior can be predicted. The local studies must be supplemented, therefore, with surveys of management and union leadership, if necessary at the national level, to give more precise determination of causal relationships.

## THE GROUP DYNAMICS APPROACH

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THE GROUP dynamics approach to labor-management relations used by the Research Center for Group Dynamics must be seen as part of a broader research program on group functioning and intergroup relations in a wide variety of social settings. As a relatively small part of this larger effort to develop a basic theory of social behavior, we have done several studies in industrial settings.

Group dynamics research in labor-management relations has been characterized by the use of a field-theoretical formulation with emphasis on dynamic concepts, and the use of action research. This experience with action research in a setting of social conflict has necessarily raised problems of values and of democratic ethics. This paper discusses these interrelated aspects of the group dynamics approach with illustrations of studies made in industrial settings.

Basic to the approach is the conviction that nothing is so practical as a good theory, both in research and action on social problems. The way of theorizing seen as most useful by group dynamics is called field theory. Field theory describes the interdependence, and the influence on each other, of various phenomena in the situation being studied. Obviously, field theory provides no simple panacea for organizing the complicated variables of the labor-management relations problem into one simple pattern, but it does promise to provide a guide for handling the changing and flexible aspects which are inherent in the relations between any two groups such as workers and their bosses.

A major demand in approaching the labor-management relations problem through field theorizing is that the field be seen as a whole. This means that an adequate theory about the worker-manager problem would take into consideration all of the factors which are important in understanding a given situation and which are often ignored in theoretical approaches which do not consider the entire field. We can illustrate this by stating the general principle that any specific contact between labor and management is affected by many influences from sources outside that contact. A grievance discussion between the steward and a foreman, for example, is determined by forces which cannot be recognized or understood if one assumes that this is simply a relationship between two persons. The discussion between these two men is at a conscious face-to-face level. But

each has pressures upon him which originate from his own personality needs. In addition, the steward has demands working on him which are created by his co-workers, and the foreman is under the pressure from other foremen and management. What is more, each of them is operating in terms of the demands created by the policies of the institution to which they belong. Management has made these policies for the foreman and the union has made them for the stewards.

Each of these institutions, in turn, is influenced by the national policies of their respective organizations; and the national policies of the union or company are developed in response to forces at work on them within our total society. This face-to-face discussion, then, has within it influences from many other social units. Thus a really adequate theory about the phenomena involved in any labor-management relations contact will have to consider the problem as a whole and realistically deal with all the forces within the entire field which are important to this relationship.

It is important to note that what we have been saying about the interdependence of these various social units within the entire field of labor-management relations points to a need for an integration of ideas on another dimension, namely, across the boundaries of the numerous social science disciplines. If we are to explain adequately the phenomena of labor-management relations it is necessary that our theory integrate the methods and findings of economists, political scientists, sociologists, anthropologists, social philosophers and many others. It is fair to say that each of the various social science disciplines typically approaches labor-management relations with reference to some one social unit and ignores the influence of the rest. For example, the psychiatrist and individual psychologist are most concerned with the individual person. The social psychologist, sociologist, and anthropologist most frequently work with the sub-group or the institution as a whole—which, in this case, means the department within a company or a total company and its union. The economist, political scientist, and social philosopher most often attack labor-management relations at the level of the total culture in our society. We shall be in a much happier state in studying and acting on labor-management relations when we are able to theorize and make measurements which adequately combine the emphases from each of these disciplines in such a way that the field can truly be seen as a whole. This is a large task for future research, and only small progress has been made to date.

The term group dynamics itself implies that we are interested in understanding the forces involved in this relationship. Since the rela-



tionship between worker and manager is by its very nature a changing and flexible affair, it is important that a theory of labor-management relations have within it concepts adequate to deal with the dynamics of this relationship. Some dynamic concepts which can be useful here are the following: force, a field of forces, and conflict between forces. We shall define these concepts and illustrate their use by describing several industrial studies in which they have been used.

The first study which has been reported in part in a recent issue of the journal *Human Relations* grew out of a practical problem in a garment factory of how best to introduce technological changes in job methods in order to avoid the usual strain in relations between management and workers and the accompanying drop in efficiency.<sup>1</sup> Normally, in this factory, when an experienced and efficient sewing machine operator undergoes a change, either through transfer to a new job or through changes in work methods on the present job, there is a very marked drop in morale and production, and a very slow recovery to the previous level of morale and production, if they return to the previous standard at all. Other studies had shown that this drop after a change is primarily due to social and psychological factors rather than to technical difficulties of relearning.

In this experiment the changes to be made were introduced to the employees in three different ways. These three methods of making the change differed in the degree of employee collaboration with management in making decisions about the proposed change. The first method was the non-participation procedure. In this method, the employees were simply told what changes were taking place in the factory. They were allowed to ask questions and full answers were given them; that was all. The second method involved the use of group representatives. In this case, the workers were called together and told that a change was taking place. They were then asked to appoint representatives who met with members of management to make decisions as a group about the work design and piece rates involved in the change. The third method provided an opportunity for all persons who were to be influenced by the change to participate directly in the discussion about the new work design and piece rates. We shall call this the total participation method. In this case, the workers who were to receive this experimental treatment were brought together and were told about the need for the change. They then made decisions as an entire group with some representatives of management as group members.

All groups participating in this experiment were matched for the

<sup>1</sup> Lester Coch and John R. P. French, Jr. "Overcoming Resistance to Change," *Human Relations*, Vol. 1, No. 4, pages 512-532.

difficulty of the job, for the amount of change to be made in the job, and for the level of productivity before the experiment.

The findings were these: The degree of morale shown by these groups was proportional to the degree of participation that they had in decision-making. For example, the amount of aggressive criticism expressed against management was highest in the non-participant group, was low in the groups who experienced the representative method, and there was no aggression under the total participation treatment. The turnover and absentee rate was also highest in the non-participation group and lowest in the total participation group.

In terms of production, the findings were that all the groups showed a sharp drop in amount produced immediately after the change was made. The non-participants never did recover to their previous production standard within the 30 days that management allowed this group to stay together at their low level of production. Those workers who had the representative treatment recovered their former speed in two weeks. Those who participated as a total group in the decision-making had recovered their former speed in several days and went on improving. They were 15 per cent better than their previous standard at the end of 30 days.

But why did participation yield these results? From interviews, observation of workers, and other data it was clear that the best way to understand these data was by postulating the presence of certain forces on the worker pushing him to conform to a certain standard of behavior and attitude. By a force we mean a tendency to locomotion in a given direction. In this situation there were a number of forces at work. There were forces put upon them by management to raise their level of production for obvious reasons. There were forces which the workers put upon themselves to raise their level of production in order that they might have increases in pay and eventual promotions. There were also forces acting against those already mentioned, which were created by the worker's lack of skill and his desire to avoid strain on the job by taking it easy. Obviously, these forces were not all in the same direction. Some of them tended to raise production and others tended to lower production. If we recall the results, it is clear that these forces were not equal in strength for all groups. In that group in which production was restricted, after the changes, we can assume that the forces holding down production were the strongest. In those groups in which production was enhanced after the change, we can assume that the forces toward *raising* production were the strongest.

The variety of forces at work in this situation may be called a

field of forces. These forces played against each other in such a way that each group had different behavior, or attitudes, as a resultant. This influence of the group on its members to conform to certain behavior or attitudes may be called a group standard. One can describe the effect of the experimental variables used in this experiment by saying that they strengthened the group standards relating to how hard one should work.

In the non-participant group this group standard was strongly in opposition to the induced forces which management put upon them to increase their production on this new job. Not only did they restrict production, they also became openly aggressive against management. Here we have an example of conflict between labor and management resulting from the rejection of induced forces. These induced forces were rejected by the group because of the lack of participation. On the other hand, the total participation resulted in the acceptance of these same induced forces, and consequently there was no conflict.

We have seen, then, how it is possible to use the dynamic concepts of force, field of forces, and conflict of forces in better understanding labor-management relations. Let us see how these have been used in another investigation. In this case we asked the question: What happens to a person if he does not conform to the group standard within his group? We knew from laboratory studies and an investigation in a housing project that persons who deviate too greatly from the group standard are rejected by the group. There was an opportunity to check this in an industrial setting when we were asked to come in and study a large business office where the tasks were of a routine nature and the morale was known to be low. The employees complained about their interpersonal relations with each other and with management. They said in interviews: "I am worried about what other people think of me here. Do they like me? Do I act right? I doubt that the boss knows who I am."

Our first step was to administer a sociometric questionnaire to all employees in order to discover the friendship structure of the office and the forces at work toward making friends. We reasoned that some groups develop stronger forces on members to join and remain in their group. It was felt that it would be helpful to determine the variations in strength of this group cohesiveness since the major complaints concerned the interpersonal relations and the effect of group formations in the office. We also wanted to know how these social relationships were related to production, since the work-flow in this office allowed very little personal contact between worker and boss and among workers themselves.

Analysis of the data from the sociometric questionnaire showed that there were relatively few friendship groups in this office and many persons who had no friends at all. Turning to the production records, it was found that there were great differences in the level of production from one friendship group to another. It was clear from an analysis of these and other data that the friendship groups had their own group standards; some to work hard and some to take it easy; some to identify with management and others to aggress against management.

In examining the production records it was noted that the most popular girls were rarely high producers. Accordingly, the correlation of popularity in the office with productivity was computed and it was found to be  $-.67$ , which means that there is a general tendency for the more popular girls to have lower production records and for the unpopular girls to be the best producers. When a number of girls were transferred to another office, it was necessary to break up some of the friendship groups and to change the seating of others. It was predicted that this reshuffling of the informal social organization would result in those employees with high production being rejected by any groups with low production, whereas the employees with low production would be acceptable as friends in any group. Consequently, there should be a negative correlation, after transfer, between the level of productivity and the change in popularity. The data showed that there was indeed a very high negative correlation of  $-.85$ . Almost every high-producing worker lost popularity as a result of the shift whereas low-producing workers gained friends.

Thus, it appeared that the small friendship groups developed group standards concerning their level of production, and they rejected from the group those employees who produced too much more than the group standards. The employee was faced with the unhappy choice between restricting her production to a low level and having many friends, on the one hand, or doing what management would call a good day's work and becoming a social isolate, on the other. Management increased this conflict by usually giving the highest ratings on their appraisal plan to those workers who were most unpopular. Here again, these data can best be interpreted by explaining the events in this office in terms of fields of forces and conflict between forces.

It should be noted that these two studies have limited themselves to the confines of the factory or office and have omitted a discussion of the wider social field such as unions, the community setting, economic conditions, and others. Consequently, no generalizations can

be made about broader problems of labor-management relations, which are so much influenced by forces in the larger social field.

The study on friendship grouping can serve to illustrate another characteristic of the group dynamics approach, namely, a broad methodological strategy for combining basic and applied research. This strategy consists of a sequence of three steps moving from applied research to basic research and then back to application: first, preliminary field studies of practical problems are conducted to develop relevant hypotheses; second, those hypotheses are then tested more rigorously in precise laboratory experiments; third, investigations are conducted to discover how this verified knowledge can be applied to specific problems in real life settings.

1. In this example, the preliminary field study consisted of an interview survey of employee attitudes toward personnel practices. The survey showed that the employees complained about their relations with each other and with management. Our preliminary interpretations of these findings were that group standards enforcing conformity of members existed, and that deviates from these standards were rejected.

2. Two more carefully controlled laboratory experiments had confirmed these hypotheses.<sup>2</sup>

3. Finally, this verified knowledge was used in the investigation, which we have already reported, about friendship groupings and popularity in a large office. It should be noted that the valid application of this knowledge required an additional investigation of the friendship structure and the production records in this particular office. Further field experiments are required in order to validate in this life setting those principles about *how to change* morale and productivity which have been derived from other dissimilar settings.

In several phases of this overall strategy of research the researcher is more or less directly influencing the actions taken to solve labor-management problems. For example, in field experiments, surveys, and consultation, the research knowledge is directly influencing human relations. Thus we have been forced to consider the direction of these influences and the value framework for judging them. For example, the question "Is it 'right' or 'fair' or 'good' for workers to participate in decisions about technological change?" is in part a question of values. Another persistent question: "Is it more important to have satisfying and harmonious interpersonal relations, or to have high production?" Such questions cannot be decided by

<sup>2</sup> K. Back, *The Exertion of Influence Through Social Communication*. Ph.D. thesis, Mass. Inst. Technology, 1949. S. Schachter, *The Deviate in the Face-to-Face Group*. Ph.D. thesis, Univ. of Michigan, 1949.

scientific research alone, but require some value framework or ethical system, either implicit or explicit.

We believe that one of the most important causes of disagreement among researchers in the field of labor-management relations is the failure to distinguish between such value statements and scientific statements. So it is important to make explicit our values when proposing solutions or when evaluating research. Accordingly we will attempt to indicate briefly some working assumptions of a democratic value framework most relevant to the labor-management problem. These highly tentative assumptions represent a preliminary guide to the research worker and practitioner rather than an absolute system of values.

Our central norm of democratic ethics states that *social policy-making, and social change must involve the maximum collaborative participation of all persons and groups concerned*. The rationale for this norm involves two related convictions:

1. The *value* statement that persons should be treated as *ends* in the sense that the structure and functioning of society, of institutions, and of smaller sub-groups should be judged ultimately by their services to the development of each member-person.
2. The *empirical* statement that any social policy, decision, or solution to a problem is more likely to achieve its purposes if it represents an influence from the unique insights, experiences, and needs of the persons and groups concerned.

Let us now examine the operational meaning of the norm of collaboration as applied to labor-management problems. First of all, who are the "persons and groups concerned?" Obviously all persons and organized groups in both labor and management are vitally concerned; but because of the interdependent nature of our economy all others are, to a lesser extent, concerned as consumers of industrial production and as producers of materials and food used by those in industry. Thus the government as the representative of all the people is rightly a collaborator in influencing policies and changes in labor-management relationships through legislation.

The fact that such groups as farmers and consumers and others are less concerned than labor and management means that there should be correspondingly unequal degrees of participation in decision-making. However, groups which are equally concerned should collaborate equally in the sense that they are given equal opportunity to influence the decision and neither group uses its power to restrict the participation of the others. Collective bargaining, within a legal framework, often meets these requirements of our norm of democratic ethics. However, most observers would agree, we sup-

pose, that there are some cases of very unequal power, sometimes in one direction and sometimes in the other, between labor and management in the United States today. Ordinarily the use of such unequal power in order to restrict collaboration or to influence policies and changes through force and threats of force is unethical. Thus the norm of collaboration prescribes a methodology for resolving conflicts without resorting to the use of force, and considers conflicting interests the "raw materials" out of which the most common or most harmonious interests are to be constructed.

Nevertheless, right social behavior in some conflicts between labor and management could include the use of force or the refusal to collaborate; for the maximum collaboration possible in any concrete case will *in the long run* depend on both the strategic effects of a long series of events and on the interdependence of all forces in the field at a given moment. Thus it could happen that specific refusal to collaborate on the part of a given company or union would, in the long run, increase the total collaboration between them and between labor and management in other inter-dependent factories. Such an ethical refusal to collaborate at the moment does not mean that collaboration must be abandoned as a long-range goal.

We should hasten to point out that such ethical decisions can be right only if they are based on correct strategic analysis and on the best available scientific information. Thus the norm of collaboration implies the ethical obligation that all parties involved should obtain the best possible knowledge and understanding of the effects of their decisions and actions.

Similarly both labor and management have an obligation to improve their own and each other's skills of collaborating; for collaborative problem-solving is a difficult art and science, which can be maximally utilized only where all parties concerned are highly skilled. In a sense this is saying that our norm implies that collaboration must also be educational in its intent. Each party must keep open the channels of communication not only in order to influence the outcome of the collaboration but also in such a way as to improve the understanding and skill of both itself and the other party.

We must now point out that the researcher who influences such decisions is faced with the same ethical choices as the manager or the workers. The same democratic norms and strategic thinking should guide his behavior. Several special implications at the operational level should be pointed out:

1. Collaboration with all concerned means that the researcher should collaborate with both labor and management. This means,

for example, that action-research should either be sponsored jointly by labor and management or that the researcher should simultaneously or successively carry out researches in collaboration with both labor and management.

2. The social scientist has a responsibility to see that the results of his research are used to promote collaboration, and that they are not used to restrict it.

3. In his role as expert—whether as researcher, consultant, or teacher—the social scientist has the ethical obligation to use collaborative methods in his contacts with others and to promote their use by others.

Let us look back now and see where we stand on this still programmatic group dynamics approach to labor-management problems. Several promising beginnings may be listed:

1. The actual amount of research on labor-management relations, conducted within the framework of group dynamics, has been very limited. For the most part it has been at the level of the face-to-face sub-group, and here it has contributed to the development of knowledge and theory and has usually been effective in improving labor-management relations. Though there is great need to extend the research to the level of culture, we believe that the face-to-face group is a strategic target in research planning because of the development of methodology at this level—particularly the development of actual field experiments. In the long run, further knowledge at this level may be a most practical step because of the extraordinary power of the face-to-face group as a medium for changing both persons and institutions.

2. The basic principles of conflict, co-operation, and inter-group relations developed in laboratory studies and in field studies in other institutional settings are beginning to be applied and validated by research in the field of labor-management relations.

3. A field-theoretical approach has been useful in both research and practical applications; and some progress has been made in developing the conceptual tools for doing research involving the total field.

4. A first attempt has been made to make explicit an ethical framework which can guide the behavior of practitioners and social scientists working in areas of social conflict.

On the whole, the group dynamics approach to problems of labor-management relations has shown sufficient promise of producing both practically useful results and improved scientific knowledge so that its research efforts should be both continued and expanded.



## THE CLINICAL PSYCHOLOGY APPROACH

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THE FACT THAT in no phase of industry do the emotions play as important a role as they do in labor-management relations makes it obvious that this is potentially a fruitful area for clinical research and the application of clinical technique. Yet, paradoxically, relatively little has actually been done in this field. There are a number of valid reasons for this.

To begin with, the complexity of labor-management relations effectively precludes clinically oriented research in the sense of the carefully controlled *experiment*. Relationships of this character cannot be studied in the laboratory. Too many of the variables cannot be subjected to control. Furthermore, an attempt to study the problem piecemeal is apt to be unproductive because, unless all of the elements are taken into account, the findings are likely to be misleading.

Since the scope and complexity of the problem precludes controlled experimentation, at least under present circumstances, the case study method appears to offer the greatest promise. Fortunately, examples of good and poor labor-management relationships are to be found on every hand. In theory, at least, they should offer the research clinician ample opportunity for a study of the factors which produce good or poor relationships. Yet in spite of this, little has been done using this approach.

There are several reasons why even this primarily *descriptive* approach has not yielded a great deal thus far. First, and of utmost importance, it is difficult for an "outsider" (one who has not actually sat in on intra-management and intra-union, as well as union-management, deliberations) to obtain a comprehensive insight into the etiology of the relationships. To obtain a balanced picture of the causal factors, the researcher also must know intimately the history of the labor relationships in the company; the dominant, policy-formulating personalities in both the company and at the local and international levels of the union; the economic position of the company; and the internal political situation in the union both at the local and international levels. In addition, he should know at first-hand the company's personnel policies and practices and the character of its line supervision from lead man to president. In short, he

must actively have "lived" with the problem if he is to understand it thoroughly. This means that he must have access to confidential data and be the confidant of top management. It is for these reasons predominantly that the typical research psychologist has thus far made little progress, even in making descriptive studies, and this applies even to psychologists employed by the company full-time. Many lack status (are thought of as test experts and little more) and others are not thought to be qualified by temperament or experience to take an active part in labor-management relationships. The only exception would be where a member of top management, e.g., the vice president in charge of industrial relations, had been trained in clinical psychology. He would have both the status and the contacts which would enable him to make a truly comprehensive descriptive analysis.

In the absence of such a member of top management, the management consultant who has been trained in clinical psychology can often make very worth-while contributions, not only from a descriptive point of view, but from a pragmatic one as well. No one has a better opportunity than he to inform himself fully about the company and union. Owing to his peculiar position as an informed and interested outsider with status (anyone who costs from \$50 to \$150 per day has status), he is listened to with respect. When, as is often the case, in addition he is "father confessor" to top management, his influence is further enhanced. This is especially true where top management is insecure and frightened.

The consultant, moreover, usually has another advantage over the traditional clinical psychologist; he need not be thought of as a "psychologist," even when he is one. The term "clinical psychologist" all too often arouses anxieties in those the clinician studies and desires to help. The consultant can use his psychological and psychiatric insights but he does not have to reveal them. To his client and others he is just "another management consultant, specializing in personnel administration and labor relations."

The consultant's clinical insights can often be especially valuable in that they enable him to evaluate the personalities of both management and union representatives at the policy-forming level. In terms of these insights, he can often be helpful in planning strategy and in guiding management on the right course. As an outsider, free from final responsibility for results, and relatively apart from the emotional conflicts inherent in the labor-management relationship, he can be unhurried and objective in his appraisals and his recommendations. He cannot remold personalities, but he can at least prevent management from making the more egregious of the blun-

ders to which it is often prone. With the better adjusted executives he can often provide valuable insights into their own personalities and those of others, thus aiding them in their labor-management relations.

In the actual bargaining situation, the consultant, if he has correctly appraised the make-ups of the management and union representatives at the policy-forming level, can prevent much friction. This is because he will be able to predict with some accuracy their behavior and reactions to specific proposals. With this knowledge he may be able to *integrate* their goals (in the sense of Mary Parker Follett) so that both parties can gain at least a partial gratification of their needs. At the same time, he will probably also be in a position to appraise middle management as well. Their parts in bettering or worsening labor relations can also be ascertained and corrected through him. Similarly, he can discover the conditions which are contributing to employee ill will and initiate action to correct them. At the same time, he can recommend harmless outlets for employee aggressions and methods for stimulating their identification with the employer without necessarily impairing their loyalty to the union.

It is not to be inferred that *only* the clinician who is a management consultant can do these things. What is meant is that he can accomplish them most easily and effectively when his role is that of paid consultant helping management when it is in trouble. Other psychologists are as well qualified technically, but they often lack the status and influence to get the job done, or even to obtain permission to get the facts.

### *Problems of Psychological Study*

It is inevitably a temptation to the academic (and sometimes industrially naïve) research clinician to believe that his techniques are all that are necessary to insure labor-management harmony. While there is no doubt that diagnosis and therapy have much of value to offer, it must be remembered that at best their contribution can be only one of several elements. While the personalities of the participants play important roles in labor-management relations, the course of the latter is shaped basically by forces which transcend the influence of any individual or group. These are economic conditions (in good times, union demands are great and employers tend to yield easily; in bad times the reverse is true) and shifts in the prevailing political philosophy (under the New Deal, labor was favored; today the pendulum has swung back nearer to the center). A program to insure good labor-management relations must take

all these factors into account. This necessitates, therefore, some knowledge of labor economics and politics as well as clinical psychology.

Under the most favorable conditions, the study of labor-management relations is not easy. This is because of the infinite complexity of the causal factors. For example, the tone of most labor-management relationships is established by a few key individuals in the company and in the union. Of these, the dominant figure or figures in management are usually the more important. This is because it is their *attitudes*, and the policies which reflect them, that determine the kind of union with which management will have to deal. If top management is, or its predecessors have been, arbitrary, autocratic or dishonest in dealings with employees, it will very likely have a militant union to face. This is because only that kind of a union can cope with this type of management. The leaders of such unions are apt to be as intransigent as management.

Even where the members of top management and the union leaders are reasonably well adjusted, as most are, two practical considerations make the study of their characteristics and attitudes difficult. The first of these is the pressure under which most of them work. They simply do not have the time for what they consider to be "frills."

Second, their consciousness of their *status* makes them reluctant to serve as "guinea pigs." The research, if any, must be limited to their underlings. This is particularly true of management. It has been traditional in studies of labor relations to regard management as sacrosanct. Actually, of all of the elements in labor-management relations, they merit study most of all because *they* are the key determinants of its character. Nevertheless, such a study can be made formally only with great difficulty; there will be too much resistance. Hence, it is usually possible to make it only indirectly in the course of consultation.

In the final analysis, however, the greatest barrier to any type of clinical study of the dominant parties in labor-management relations, whether they be well or badly adjusted, is the *fear* which such a study arouses in them. Clinical psychology, to say nothing of psychiatry, is to most people in business a strange and fearful discipline. Implicit in it is the threat of personal exposure; of the baring of secrets which even they themselves cannot face, much less reveal to anyone. This fear is rarely verbalized; in most cases the individual himself is not fully aware of it. All that he knows is that he does not wish to be studied or even helped clinically. These resistances can be broken down, but it requires much time and patience

on the part of the investigator. In the case of the consultant they are actually dangerous. It is easy for the executive to turn on the consultant. When this happens, he is no longer a consultant. In the meantime, they often effectively preclude a detailed study of the chief protagonists in the heat of labor-management conflict. This is unfortunate because it is under such conditions that a study will be most revealing.

It is relatively easy for almost any qualified psychologist to obtain approval to study the members of the line organization at the lower levels. Top management is usually quite happy to grant the necessary permission. The subordinate may not like to be studied or treated, but there is usually little that he can do about it. The principal limitation of studies of this character is that the subjects have only incidental and indirect influence on labor-management relations. Actually, the greatest value of such studies is what they reveal about the make-up of higher levels of management; e.g., the insecure executive rarely has strong subordinates. In most business organizations, the lower ranks of supervision and the mass of the workers have little knowledge of or voice in the formulation of company policies which affect labor relations.

The same is true in the larger and more powerful unions. There is little democracy in the town-meeting sense in a large local, to say nothing of an international. As a matter of fact, there cannot be if the union is to be effective in its dealings with the employer. The members must be rigidly disciplined and regimented if they are to be useful as a force against management. In consequence, nearly all the members and most of the stewards are essentially voiceless in union policy formulation and execution. As in management, a small group holds the power and establishes the policies, including those governing labor-management relations. Unfortunately, the leaders at this locus of power are almost totally inaccessible to clinical study and therapy. Certainly management can never initiate such study.

The contribution of lower level supervision and the workers to labor-management relations, while indirect, is not unimportant. Briefly it is this: If, as a consequence of bad policies or the poor administration of good policies, the employees are goaded to extremes of frustration and hostility toward management, this will have an effect upon labor-management relations. First, it will affect their productivity, attendance, care of equipment, attitudes toward supervision, etc. Evidences of poor morale will present themselves at every hand.

Second, under such circumstances, many employees (including much supervision) will identify themselves predominantly with the

union. It becomes their leader. They accept its pronouncements uncritically; they do what it demands of them. Under such conditions, the union can channelize and displace the aggressions of these employees, regardless of their source, onto management. This accounts for the frequency of bitter and often senseless attacks upon company property and those employees (the "scabs") who are still identified with the employer.

While there is some place for clinical diagnosis and therapy applied to individuals at the lower levels in industry, its contribution to an improvement in labor-management relations will probably not be great. To begin with, most of the maladjustments and psychoses encountered among rank-and-file employees (anxiety states and other neuroses, schizophrenias, manic-depressive conditions, etc.) have little direct bearing upon labor-management relations. The only condition of any significance is paranoia. Occasionally a mildly or acutely paranoid individual becomes a supervisor or becomes active in the union. Then there is trouble. However, this occurs relatively infrequently. When it does, moreover, there is little the clinician can do to cure it.

The principal contribution of clinical psychology to labor relations at this level is in the field of group reactions. The consultant can devise methods for the detection of the sources of common employee dissatisfactions, e.g., exit interviews, opinion polls, etc., and can persuade management to correct the conditions leading to the more legitimate of these discontents and to provide harmless or even constructive outlets for the hostilities arising from them. In some cases, this can be supplemented by individual counseling, which offers opportunities both for additional catharsis and also for providing emotional support for the insecure and fearful. These steps are chiefly palliative. They serve to keep employee hostilities at a low level and keep them from being displaced onto the employer by the union. However, the key to the conditions which *create* these hostilities is to be found in the personality make-up of the dominant individual or group in top management. Thus the responsibility for the character and tone of labor relations always comes back to the members of top management.

### *Some Personality Types Who Cause Trouble*

On the basis of the careful observation of a number of executives and union leaders in action in conflict situations, it has been possible to note the personality characteristics of some of the more common types of persons who cause trouble in labor-management relations.

None of those who were observed (all of whom were men who manage substantial businesses or control large unions) are psychotic (they could not hold these positions if they were acutely mentally ill) and relatively few are seriously neurotic in a clinical sense. On the other hand, nearly all exhibit minor maladjustments, e.g., compulsions, insecurities, needs to compensate, etc., which have an effect on their handling of their unorganized employees and the members of their unions. Casually observed, they would appear to be quite normal and well adjusted; it is only when they are observed at close range and especially during the stress of labor-management conflict that these conditions are apparent.

This is not to imply that there are *no* well adjusted executives and labor leaders. There are many. However, they are of lesser interest here because, unless they have inherited conflicts or are the victims of political pressures which they cannot control, they usually maintain reasonably harmonious labor-management relations.

As in all human relationships, no single nor simple pattern of characteristics manifests itself on either side. Certain conflict-breeding personality configurations do tend to be found most characteristic of management, while other slightly different ones characterize labor leaders. Examples of these will be described separately, the management patterns being considered first.

1. *The Man who Overcompensates for Weakness, Passivity and Dependence (The Little Hitler)*

The most common type of top executive to cause trouble in the field of labor-management relations is the individual who is basically *insecure*; the man who is not on top of his job. He is rarely a strong man even though he may be in complete control. Usually he is not aware of the extent of his fundamental weakness, passivity and dependence. Instead, he usually likes to picture himself as a strong, dynamic figure who must impose his will upon all his subordinates, regardless of the consequences. He is often gruff and intolerant to hide his inner lack of resolution. Such executives tend to have gained their positions by inheritance, by playing politics, or as a result of having been a docile "yes man" to a strong superior.

Labor relations tend to subject top management to unusual stresses which have the effect of upsetting already unstable emotional equilibriums. As a result, they arouse tremendous anxieties, often to the point of panic. The result is a purely emotional (often aggressive) response to the stimulus (the union demands) which aroused the anxiety. The response is likely to be one of the following:

- a. The executive may be an out-and-out appeaser—which inevita-

bly leads to more and more demands by the union to the point at which no more can be given, which is usually disastrous to the individual.

- b. He may over-compensate and be ruthless and brutal, using slug-gers and strikebreakers and calling for the militia when the situation gets out of hand. Such treatment inevitably strengthens the union.
- c. He may refuse to face facts realistically and takes refuge in insincere or dishonest dealing with the union (uses stool-pigeons, attempts to bribe union representatives, makes a scape-goat of a subordinate or attempts to make a "deal" with the union). In the long run, these tactics also strengthen a union.
- d. He may seek refuge in the courts (attempt to enjoin union activ-ity), stall indefinitely before government agencies, depend upon his trade association to fight his battle for him, or call in a con-sultant onto whom he can shift the responsibility.

Where such fundamental but generally unrecognized weaknesses exist, attempts at therapy are usually futile. Such persons do not want insight; they cannot face the extent of their weaknesses. Their egos are too weak. The chief hope lies in finding someone with sufficient status to permit the executive to become dependent upon him without too much loss of face. The consultant usually occupies this role. While he cannot change the executive fundamentally, he can often prevent him from making too serious blunders and lend him necessary resolution in dealing with the union.

## 2. *The Constitutionally Aggressive, Hostile Individual (The Fighter)*

A second type of person who often causes labor-management conflict is the exact antithesis of the weakling in top management. He is the ruthless "Captain of Industry" who has made a great business success, often as a pioneer, by virtue of his boundless energy, his aggressiveness and his indomitable will. Such men are usually arbitrary and autocratic. They rule their domains with a rod of iron. They are the typical "reactionaries." Rarely are they much concerned with human values. In consequence, sooner or later they come into conflict with the union. Since it takes a strong union leader to cope with such a man, a battle of the Titans often takes place. Each wants supreme power. Such situations often result in long, bitter, and bloody struggles for dominance. In most situations such an executive reacts to the challenge of the union in either of two ways:

- a. He may come out and fight the union openly and to the bitter end, or



- b. He may deny his aggressive and autocratic tendencies by becoming a "liberal" and talking at length about his concern for the welfare of his employees and similar humanitarian considerations. This is actually largely a gesture, however, because when the "chips are down," he emerges in his true colors as the ruthless, selfish autocrat.

Such men are wholly proof against insight or therapy. They have no inconveniencing neurotic symptoms (anxieties, etc.) so that they feel no need for insight or therapy. They would rather fight. The only hope here lies in displacing their aggressions onto objects other than the union. The consultant can help here, too. The objects onto which their hostilities can most readily be directed are:

- a. Competition, i.e., through sales or production drives, or
- b. Political groups, e.g., the government, the Democrats, the Communists, etc.

### 3. *The Psychopathic Personality (The Criminal or Gangster Type)*

In some companies, the management is in the hands of persons who have gained control by virtue of complete opportunism. They are totally amoral, unethical and without conscience. They are sometimes out-and-out criminals. They are completely selfish, dishonest and demanding. They have no reluctance to exploit their subordinates mercilessly; they are the constitutional "chiselers." There is nothing too low for them to stoop to. When faced with a union, such executives can be counted upon to try every underhanded trick which they and high-priced legal counsel can conceive.

Such persons can be given no insight, nor do they want any. Likewise, because they also suffer from no inconveniencing neurotic symptoms, they are not interested in therapy. Literally nothing can be done with such persons.

### 4. *The Senile Dement (The Aging, Alcoholic or Arteriosclerotic Executive)*

Occasionally top executives are encountered who were once highly qualified, but with advancing age have begun to exhibit the symptoms of cerebral deterioration. In the younger men, those in their fifties, the source of the difficulty may either be arteriosclerosis or chronic alcoholism. In older men, the cause may be senile dementia. Regardless of the nature of the condition, the victim is prone to excessive emotional outbursts, to consistently bad judgment, shows an incapacity to learn or accept anything new, has a tendency toward hyper-suspiciousness, is garrulous and exhibits a chronic morbid irritability.

When faced with a union, such persons often become confused

and highly emotional. They often show marked regressive tendencies, attempting solutions to their problems which may have been suitable when they were young but which are now totally inappropriate. They make no preparations for negotiations and follow no consistent course of policy. As a result, they are completely ineffective.

Obviously, since senile deterioration is an irreversible process, nothing can be done either to give them insight or to correct the condition. The only thing that can be done is to have them replaced or to have the responsibility for labor relations placed in other hands. The consultant can sometimes help to arrange for this.

On the union side, similar, although not necessarily identical personality make-ups make their contributions to labor-management conflict. Here, as in management, the maladjustments are relatively minor, but they often lead to a serious lack of objectivity in dealing with people and situations. The more common personality types encountered are the following:

1. *The Constitutionally Aggressive and Destructive (The Hater of Power, Privilege, and Authority)*

Basically this type of labor leader has the same make-up as the "Captain of Industry" already described. The principal difference is that due to environmental factors he has become conditioned to hate power, privilege, and authority in others. In short, his hostilities are directed mainly against those in authority. This makes management a natural and congenial target. Often he is a fanatic, a revolutionary. Many Communists have this personality make-up. Not infrequently his aggressions are so powerful that they cannot be satisfied solely by attacks on management. In such cases, he begins to attack others in the labor movement. This commonly results in internecine or "factional" fights within the union. Many of the early organizers were of this character (no other type could survive), but they are somewhat out of place in a more mature, conservative, accepted labor movement. They are particularly difficult to deal with at the bargaining table as they like a fight for its own sake. They are also implacable as enemies.

This type of union leader enjoys making trouble; he likes constantly to be causing unrest and conflict. Frequently, he will make vicious, libelous, and generally unwarranted attacks on management. Like all neurotics, he is proof against logic of any kind. He has little or no concern for the welfare of his union's members; they are merely pawns for him to use for his own selfish purposes. Most important, once he obtains an advantage over the employer, he is

totally merciless. With him, the end always justifies the means.

Persons with this make-up are very difficult to study because of their frequent paranoid trends and, as they are conscious of no inconvenience, they naturally seek no therapy.

From a management point of view, little constructive can be accomplished with such union leaders because they hate and distrust management. The unions, on the other hand, have little reason to eliminate them (unless they become too disruptive internally) because no task is too difficult or distasteful for them. They are the doers of the "dirty work." Hence, they must simply be accepted by management for what they are.

### 2. *The Exhibitionistic Autocratic Egoist Who Seeks Personal Power, Status and Prestige*

Such persons are primarily egoists. They seek chiefly narcissistic gratifications. To them, the labor movement is chiefly a means for their personal self-aggrandizement. Any gains that they get for their members are purely coincidental. They are utterly without concern for the rights and interests of their members, the employers, or the public.

In negotiations with the employer such a union leader will often flaunt his power simply for the personal gratification it gives him. At the same time, he will treat his members as serfs; they are simply the faceless ones who are to do as he commands. Such men are usually honest, but tend to be unreasonable in their demands, often because this is an excellent way in which to focus attention upon themselves.

Such persons are difficult to study (their egoism precludes their acceptance of the role of guinea pigs) and, like the others, their maladjustments cause no inconveniencing symptoms, so they feel no need for therapy which, obviously, cannot be forced upon them.

From the management standpoint, nothing can be done with them because any suggestion from management would be vigorously resented. Their power within the union is usually such that no member would dare to suggest therapy. In most instances no one would even care to, because many of these leaders are very productive of benefits for the members.

### 3. *The Psychopathic Personality (The Labor Racketeer)*

As in management, psychopathic personalities sometimes attain positions of power and influence in labor unions. Some of these are criminals who have discovered the opportunities offered by the labor movement for the exploitation of the worker, the employer, and the public. Such men are completely selfish, cruel, ruthless,

and remorseless. They are totally amoral and without conscience.

In their dealings they are prone to use gangster tactics, i.e., intimidation and violence, on both employers and members. They may be expected to break their agreements without hesitation since they are completely opportunistic. At the same time, they are equally ready to exploit their members. Their demands are wholly unreasonable and when they have the power, they are entirely without mercy on those who may oppose them. Such persons, obviously, can be neither studied nor treated.

### *Need for Psychologically Oriented Personnel Administration*

Due to the relative inaccessibility for diagnosis or treatment of most of those who determine policy in both management and the unions, the most promising course is one in which the major emphasis is placed upon *prophylaxis*. The program will need to include full use of selection and training techniques, enlightened policies in handling grievances, improved communication methods, personality development among supervisors and, in general, the procedures of psychologically oriented personnel administration. Such a program will not be productive of immediate results, but offers greater promise of yielding worthwhile improvements in the long run by minimizing the opportunities for even the mildly maladjusted to gain positions of power and influence either in management or the union. At the same time, the sources of employee dissatisfaction can be kept at a minimum so that the workers will have less incentive to attack management and feel the need for a union.

The goal of all research in labor-management relations, whether clinical or of any other type, is to promote greater harmony and understanding between labor and management. At present, many conflicts, most of them highly toned emotionally, obscure the fundamental mutuality of interests between the two groups. In the final analysis, both stand to gain more from cooperation than from conflict. In fact, both always lose when conflict becomes open. On the other hand, it is obvious that if they will work together, both will benefit; there will simply be "more pie to divide." The problem is to diminish and divert the fears, resentments and aggressions in both groups to the point where management and workers can see that it is to the selfish interest of each to cooperate with the other.

Clinical psychology and psychiatry, concerned as they are with the emotions and the maladjustments which produce emotional thinking and conflict, hold the ultimate key to harmonious labor-management relations. The solution is not a simple one. It will require much time,

perhaps five or ten years, to show even the first results. In the meantime, the resistances to the application of these disciplines will be tremendous by both management and labor. However, as present top company and union leadership passes from the scene and is replaced by those with a greater familiarity with and receptiveness toward these disciplines, the task will become easier. In the interim, it is the responsibility of the practitioners of these sciences to apply their insights in dealing with immediate situations. The greatest opportunity appears to lie in the hands of the consultant. A combination of patience, perseverance and insight on the part of all will eventually bring about the changes which are necessary if labor-management harmony is to be achieved.



## DISCUSSION

ROSS STAGNER

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It is a real pleasure to see the most advanced techniques of psychological science at last being applied to the problems of our industrial system. For much too long a time, the term "industrial psychology" has meant psychology in behalf of management—the techniques of selecting workers, training, rating, increasing efficiency, etc. We are now on the threshold of a true "industrial psychology" in which our professional methods and theoretical concepts will be applied to understanding the complex interactions of human beings which characterize the employer-employee relationship.

While thus paying tribute to these papers, I should like to say clearly that I think we are still *on the threshold* of this development. Psychologists are not as yet well-oriented in the economic field. We know a great deal about the individual, as a hypothetical average and also as a clinical reality. We know very little about how he takes on economic roles; the extent to which the pressures related to such roles may dominate, deflect, suppress, or merge with the deeper personal dynamics. We have some ideas about how man responds to threats to his ego, but considerably less as to how he forms group loyalties and reacts to group threats. We have a fair amount of information about his perception of the physical world, but not much on his perception of unions, management, economic systems and the like. Especially, we do not have a frame of reference into which we can fit the variables introduced by changing sociological groupings, by adverse economic developments, by the institutional organization of industry and unions. I feel, in other words, that we urgently need an integration of psychological material with that of the other social sciences.

At the risk of being called a traitor to my profession, I want to propose that the psychologist alone is in a poor position to contribute to the understanding of industrial relations. A team, composed of a psychologist, an economist, and a sociologist, would seem to be the *minimum* research force for study in this area.

Dr. McMurry, for example, has stressed the role of leadership. Surely this is important. John L. Lewis, Walter Reuther, Henry

Ford, Sr., E. T. Weir and many other vigorous personalities testify to its significance. But under what conditions does a given type of leadership function? How do leaders respond to changes in the economic cycle, to the legal and institutional patterns? What field forces condition the direction of hostility, of ego-aggrandizement, etc.?

The paper by Dr. Katz gives us at least a partial answer on this point, in that he stresses the way in which the industrial situation is *perceived* by the individuals involved. However, the survey method inevitably ignores differences of cliques and informal work groups. Over a period of time it might perhaps throw some light on the impact of changing wage levels, profits, competitive relationships, and similar phenomena. Even more useful, if practical, would be a combination of the survey with the group participation and decision technique sketched by Drs. French and Zander. Here we might get a picture of the extent to which face-to-face groups mold individual perceptions. Even in such cases it would be necessary to relate the data to the broad economic, political and sociological field.

Those of you who have participated in interdisciplinary team research are aware of the difficulties involved. There is a great deal of mutual misunderstanding due to vocabulary, background, relative emphasis, and so on. Nevertheless, we have found in the work of the Institute of Labor and Industrial Relations at the University of Illinois that it is possible to harness these individualistic horses and get them to work together. In this project we are studying several different establishments within the same community. Methods being employed include survey interviews and attitude scales, participant observers, projective tests, newspaper and historical material, class structure of the community, economic analysis of the industry, and many others. We have not, so far, attempted anything analogous to the group decision technique for changing any of these situations; we may look into this later, after we have completed a thorough cross-sectional analysis of the present status.

The frame of reference for interpreting these diverse data and their interrelationships is still being evolved. I do not think it too optimistic, however, to say that I believe we shall really succeed in applying an integrative approach, in which the contributions of the respective social sciences will provide balance and depth. It is in this kind of cooperative effort, we feel, that psychology can most effectively advance the field of industrial relations.



JAMES C. WORTHY

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An interesting feature of the papers presented on this panel has been the effort to achieve a closer degree of integration between the various social science disciplines. The emphasis of Messrs. French and Zander on this point is well taken. One of the conditions for substantial further progress lies in closer "integration of ideas" across the numerous boundaries that have been established.

The study of management-employee relations offers especially attractive possibilities for the encouragement of such integration. The problem is one of the most important facing our society, and yet it is small enough to be comprehended and worked with both in detail and in whole. It represents a practical unit of study on which can be brought to bear the special concepts and insights of each of the disciplines, not in isolation but in fruitful and meaningful integration.

The study of management-employee relations has a further (though as yet little realized) advantage for purposes of encouraging closer integration. This advantage arises out of the special role of the executive in the business organization and the necessity for his dealing with situations as a whole. The executive may utilize the findings and recommendations of experts, whether social scientists or otherwise, but his decisions and actions must be in terms of the special circumstances and requirements of the total situation with which he is dealing. He is thus *forced* to integrate, for to proceed otherwise would be to court disaster.

In a certain sense, business managers may be described as "practicing social scientists." They deal every day with the same raw materials as their academic counterparts. They may not always proceed in the same orderly and deliberate fashion or with the same regard for the niceties of scientific method, but many of them have remarkably clear insights and useful hypotheses which are more than mere rules of thumb. These insights and hypotheses, based as they are on experience in dealing with whole situations, can offer stimulating and fruitful leads to the scientist. Unfortunately, they have been largely ignored by specialists insulated in their own preconceptions and prone to discount heavily anything that does not fit easily into their established patterns of thinking.

If the social scientist can benefit from the knowledge and understanding of the executive, the executive can benefit equally from the concepts and findings of the scientist. This benefit can consist not only in helping the executive in a business sense by improving

his managerial and leadership skills, but more importantly in contributing to the betterment of the whole system of human relations in an important segment of modern life. The business executive occupies a strategic position in our society. As Mr. McMurry points out, he is able to exert tremendous influence for good or ill. In some cases the nature and direction of this influence are undoubtedly a reflection of the temperamental characteristics of the individual, but in probably the majority of cases the executive is actuated by a sincere desire to do the best possible job he knows how to do. Under these circumstances, the social scientists can make perhaps their most important contribution to the common good by communicating something of their ideas and knowledge to those in a position to act upon them, the business administrators.

The key, of course, is *communication*. Science for science's sake is sterile. If the social scientists are to influence the course of events, effective communication must be an essential part of their job. Unfortunately, in too many cases they have forced their thinking into conceptual systems which, however neat, are too far from the realities with which the administrator deals for them to make much impression upon him.

This point is well illustrated by a passage in the French and Zander paper, that dealing with the garment factory study. The attempt to describe what happened in terms of "field of forces," "conflicts between forces," etc., may or may not be necessary from a scientific standpoint, but it is certainly confusing from a business standpoint. The description of the experiment and its results would be exciting to administrators, and most of them would be highly receptive to any generalizations which might be drawn from it and applied to their own problems. But there are few indeed who would not be alienated by generalizations which are so meaningless to them in terms of their own experience and which provide them no guideposts for their own action.

It seems to me that a more understandable explanation of what happened in this particular experiment is to be found not in a set of concepts borrowed from physics, but in an analysis of what took place in the minds of the people in the three groups and why they responded the way they did. What was the meaning to the workers of the three different management approaches to the same problem? What significance was imputed to them as evidence of management's attitudes toward workers in general and toward themselves in particular? To what extent did these approaches accord with or run contrary to the culturally determined sentiments of employees as to what is right and proper?

Likewise, in the study of popularity versus productivity, the businessman is likely to be confused by the conclusion that "these data can best be interpreted by explaining the events in this office in terms of fields of forces and conflict between forces."

Were the workers rejected for high production per se or for personality characteristics which made it difficult for them to win the acceptance of the group? If the latter, may not their high production itself have been one mode by which they expressed their resentment at failing to win group acceptance, or an effort to re-build self-confidence and self-esteem by providing tangible evidence of their superior worth in the form of higher production records?

The negative correlations between productivity and popularity are so striking, however, as to suggest that other factors were at work in this particular office. One suspects that there must have been a conflict situation between management and employees and that high production was interpreted by other workers as an attempt to identify with management and hence good and sufficient reason to view high producers with suspicion and distrust. To make sense to a practicing executive, any explanation of what actually happened must be set in the context of the entire system of attitudes and relationships in this particular office and company.

As a businessman, it seems to me that the explanation given fails to meet the criteria of the authors themselves that "an adequate theory about the worker-manager problem [must] take into consideration all of the factors which are important in understanding a given situation." Neither does it seem to me that this criterion is satisfied by the idea of "field of forces," at least as that idea is enunciated in this particular paper. Such a formulation may be a neat and convenient way for the researcher to sketch out a problem, but to an executive it is very inadequate as a description and wholly wanting as an explanation. Above all, it is quite unlikely to influence anyone in a position to take action on a situation because it is so far afield from the realities of his experience.

One way of dealing with this problem of communication, of course, is through the medium of the consultant, the go-between between the academicians and the businessmen, and the interpreter of each to the other. Certainly there is an important role for such individuals. As a condition of their survival as consultants, they have had to learn to talk the businessman's language. As a result, they have been able to translate many of the findings of scientific research to executives and many significant advances in business practices have been forthcoming from their efforts.

On the other hand, while consultants can be extremely useful

to particular businesses, they cannot provide an adequate solution for the *general* problem of communication, the necessity for the thinking of creative social scientists finding its way gradually into the attitudes and behavior of broad sections of business leadership. There simply are not enough good consultants.

If the problem is ever to be solved in any adequate fashion, it must be in terms of the scientists as a group, particularly those specializing in the field of management-employee relations, dealing more closely with actual work situations, working more intimately with management itself, profiting by the experience and insights of creative management leaders, and developing systems of concepts and modes of expression which are meaningful and useful to those who must deal with (and not merely think about) the actual problems of group behavior.

The work of neither the consultant nor the universities can ever be too effective unless it is integrated into the patterns of management thinking and action. For this purpose, even consultants are sometimes found wanting. Management can depend on their counsel and advice for temporary periods, but it cannot use them as a permanent crutch or as a substitute for management's own understanding of its problems and its own skill in dealing with them. Unless the consultant is able to leave management better equipped to handle its present and future problems, there has been no communication, no learning, no permanent benefit.

Having some experience in business myself, I can agree wholly with Mr. McMurry's emphasis on the importance of having well-adjusted personalities at all levels of the organization structure, and with his statement that "the key to the conditions which *create* these hostilities is to be found in the personality make-up of the dominant individual or group in top management." We need to know much more, however, about the way personality works its way down through an organization. For this purpose, concepts of personality by themselves are not enough. We need a better understanding, for example, of the way different personalities tend to set up different types of organization structures and the way in which the structure itself, as well as the top man's methods of dealing with the people in the structure, influences the attitudes and behavior of people at all levels of the organization.

The danger of the primarily individualistic psychological (or psychiatric) approach is precisely its tendency to concentrate too exclusively on the individual and its failure, in many cases, properly to conceive of the individual as a functioning member of an organization and as molded and influenced, to some considerable extent,

by the pressures and the system of relationships prevailing within that organization. Such concepts, of course, are by no means lacking in the disciplines themselves, but those seeking to apply the disciplines to business situations are often likely to overstress such matters as selection, training, individual therapy, etc.

Granted, such matters are highly important, but they cannot stand alone. No amount of improved selection can be of much avail if the organization itself is wrong and if the newcomer is either shaped quickly into the standard mold or forced out.

Likewise, training in better methods of supervision is often a hopeless task, not so much because the individuals might not wish to improve their ways of handling people but because they themselves may be caught in a system which enforces behavior at variance with the principles being taught. So long as the system goes unchanged, no amount of "supervisory training" can be of much help. On the other hand, if the system itself is improved in such a manner as to tend to enforce desirable types of behavior, specific training might be much less necessary.

Much the same thing can be said of specific therapy, whether of the individual or group variety. In many cases such therapy is called for and can prove highly useful, but if the future course of labor-management relations depends on any widespread effort along these lines, we are lost indeed. There are not enough therapists among all the universities and consultants combined.

Manipulation of the situation in which the individual lives and works is widely practiced by clinical psychologists and psychiatrists in dealing with the psychoneuroses. A particularly fruitful area for further research would seem to lie in more detailed and more probing studies of general and specific factors in the working situation likely either to encourage or inhibit psychoneurotic behavior, particularly among executive and supervisory personnel. On the basis of the findings of such studies, it should be possible to manipulate and modify patterns of working relationships and systems of organization and control in such a way as to reduce substantially the need for individual therapy.

The great potential contributions of psychiatry and clinical psychology, it seems to me, are in the field of preventive rather than remedial action.

Our own experience at Sears, Roebuck indicates that attitude surveys offer a particularly useful and promising approach to the study of basic problems of management-employee relationships. Mr. Katz is quite correct in his criticism of much of the work which has been done by industry along these lines. At least, however, such surveys

are evidence of management's interest in understanding employee thinking and reactions, an attitude on the part of executives that speaks well for their receptivity to ideas and their concern for doing a better job of personnel relations.

Furthermore, while much of industry's work in the area is on a fairly superficial level, this is by no means true in all cases. Some of the work now being carried on by business itself meets the most exacting scientific standards and is contributing in an important way to the growth of scientific knowledge. Significantly, this growth of knowledge is not being achieved at the expense of what the businessman would call "practical results."

Mr. Katz sketches some interesting possibilities for extending the scope of surveys, and the experience of his group to date attests the usefulness and importance of such extension. The techniques developed at the Survey Research Center represent an impressive improvement over techniques generally employed, and industry can benefit materially from the adaptation of such techniques to its own work.

It is encouraging to note that the work described by Mr. Katz avoids the tendency, apparent in many surveys, to overemphasize the significance of smaller groups and of face-to-face relationships, to the relative neglect of the over-all system of relationships of which the working group is a dependent part. Certainly the relations of workers with foremen and stewards are important, but as Mr. Katz indicates (and the work of our own company confirms) these relations cannot be properly understood (much less influenced) merely from the study of the immediate work group itself.

We have found by experience that it is necessary not only to look at the existing context of attitudes and relationships, but to seek out the underlying factors at work in the particular situation. Among such factors we have found such things as the peculiarities of individual temperament, the general atmosphere and tradition of the organization, conditions imposed by the nature of the work and the technical processes employed, the character of the organization structure, the system of controls utilized by management, etc. These are matters which exercise a profound influence on the pattern and quality of inter-personal relations, and unless they are understood it is impossible to understand what is happening at the work place and why.

The great advantage of survey techniques, particularly those employed by the Survey Research Center, lies in the fact that they can be used as readily for the study of these broad underlying factors as for the study of employee attitudes and of face-to-face rela-

tionships. A further great advantage of surveys is that they represent a general type of method with which management is already familiar, and their results, if skillfully handled, can be readily interpreted to management. They are a technique which can be of very great value as a means for more adequate communication between the social sciences and the businessman.

I want to emphasize again the interest of progressive management in work such as that reported here today. Business executives are keenly conscious of many of the problems with which they are faced and readily receptive to ideas and suggestions which will assist them toward a more effective handling of such problems. On the whole, I think the social scientists have been prone to underestimate management's interest and its willingness to cooperate. It will be necessary, however, that they, the scientists, learn to talk the business-man's language, that they evidence some understanding of his problems as he sees them, and that they develop concepts that make sense to management people in terms of their own experience.

Such an approach can be rewarding alike to business, to labor-management relations, and to the social sciences. Despite certain shortcomings as to detail, the papers presented today represent considerable progress in that direction.

#### CLARK KERR

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Labor-management relations fell within the exclusive jurisdiction of the economists far too long. The economists explained too much quite incorrectly and left too much unexplained. In recent years other social scientists have been rushing into this field of study; most recently and most enthusiastically—and also in some cases most contrariwise—the psychologists.

The approaches of the traditional economist and certain psychologists offer an apposite and instructive contrast. This is not, however, a case of thesis and antithesis—for psychologists generally have too little familiarity with the propositions of economists to set out knowingly to refute them; but a synthesis may nevertheless ultimately result. The theme of this comment is that each, in a peculiarly significant way, has much to learn from the other.

In important respects certain representatives of the two disciplines stand almost completely opposed. Granted the mistakes of the traditional economists, some psychologists seem intent on reversing rather than correcting them by taking their position on the other

bank. A brief examination of certain contrasts may serve to indicate the ultimate middle ground.

1. *Competition and cooperation.* Economists, since Adam Smith, have deified competition; some psychologists, apparently, would rather vilify it. To the economist, competition was the life of trade. It led alike to the most efficient use of resources, distributive justice, and economic progress. The alternatives offered in a competitive market and society were a source of freedom to the individual. They gave him the opportunity to make his own choices between and among employments and products, as well as political parties and trade unions.

To some psychologists, judging by the papers presented in this series and other current output, cooperation is the source of all good. "Collaboration" and "harmony" are the new rallying phrases. Instead of "perfect competition," there should be "maximum collaborative participation of all persons and groups concerned." Just as it was proper to query the economist "with whom should you compete and for what purpose and what are the costs?" so is it equally pertinent to ask "with whom should we collaborate and for what purpose and what are the costs?" The doctrine of collaboration and harmony can lead as well to union-management restrictive collusion against the consumer or reduction of output by work groups, as it can to industrial peace and greater productivity.

2. *The environment and man.* The economist has tended to explain behavior on the basis of the reaction of rational men to their environments. Since men were equally rational, and all had the same goals, it was the environmental factors which were most important: labor as a percentage of total cost, sensitivity to the business cycle, steadiness of the work, the nature of the labor market, the nature of the product market, geographical location. Within each environment men and institutions (and they were assumed to act alike) were interested in maximizing net economic advantage.

The psychologist, at least in the labor-management field, seems more interested in such matters as status, face-to-face relations, a multiplicity of goals, irrational behavior, personality patterns, the relations of leaders and led. Instead of a bloodless creature, as pictured by the economist, we have man fully equipped with glands. Instead of men acting like impersonal institutions maximizing gain in a coldly calculating fashion, we have institutions behaving as irrationally as men. Instead of having a visible physical and economic environment, we have an invisible—to any but the trained psychologist—psychological atmosphere.

It certainly is true that the personality traits of the leaders of



management and unions have a great impact. But does this explain why management-union trouble around the world is greater in the coal and maritime industries than in pulp and paper and oil? Are the personality traits always so different, and, if so, is this unrelated to environment? Is the leader or the environment the truly independent variable?

It may be worth typing situations as well as individuals. The sound mind may need a sound environment. Institutions have formal goals and traditions and an apparatus which exist, in part, independently from the individuals who participate in and through them; and these institutions warrant critical analysis for their own sake. This is not to suggest, however, that there is a "group mind" but only that culture and personality interact.

The difference between the economist and psychologist, in this regard, probably stems from the basic approach of each. The economist tends to take a long-run, macroscopic view, and the psychologist a shorter-run, more microscopic view. Investigation of current relations within a face-to-face group is bound to lead to more concentration on the individual and his many goals, than is examination of longer-run national trends where the environment and relatively "rational" economic action play a greater part.

3. "*Dismal science*" and "*inhuman relations.*" Economics deserved the appellation "dismal science" even after the popularity of the doctrines of Malthus had run its course. Supply and demand, in the long run, would have their way. Some fluctuations in the volume of economic activity were inevitable. From the day of the Mercantilists until the day of Keynes, it was hardly respectable, however true, to suggest that man could and should, in some respects, control his economic environment.

The psychologists, from the start, in the field of labor-management relations, seem concerned with manipulation—how to get better morale, more productivity, increased loyalty. We live in a highly organized society; the parts involve increasingly interdependent relations with each other and with the whole. It is a purposeful society. It is only natural that problems of identification and of discipline should become of intense concern; and that industrial psychologists should be preoccupied with them.

But there is almost as much to fear in the success as in the failure of psychological techniques aimed at integration. The bulk of men, if there is anything at all to the "iron law of oligarchy," will probably always be manipulated to a degree, but their "scientific" and presumably increasingly successful manipulation may be a more serious matter. Then psychologists may really need to be concerned

with whom they call God and to whom they lend their talents. Today the opportunities are mostly in the direction of management. But identification with the union can be stimulated as well as with the employer. Perhaps workers can be given "less incentive to attack unions and feel the need for management," as well as the other way around. The greatest danger, however, is that management having found how to make contented workers, the state may learn how to make contented citizens, when the consultant to industry becomes the brain-truster for government. The common man, rather than be molded without his knowledge by a new psychological elite, might well prefer to remain un-regenerate and un-psychologized. Just as economists have failed to make an "economic man" out of man, however, so may the psychologists also fail in trying to make him into a loyal and contented cow satisfied to collaborate for any purpose, so long as he is allowed to collaborate.

4. *Interaction of the two disciplines.* Truth may well be discovered to lie between the viewpoints of the traditional economists and those of certain modern psychologists; and it is more likely to be found out through the joint rather than the separate efforts of economists and psychologists. Each can contribute to the other and to the common fund of knowledge. Rather than debate the general merits of competition versus collaboration, we may discover the most appropriate scope for each; or, perhaps, in the field of collective bargaining, instead of either perfect competition or perfect collaboration we may come to prefer acceptable accommodation. Rather than concentrating on man alone or the environment alone, we may consider a study of both relevant to our enquiries, since both we must obviously have. Rather than support the single-minded loyalty to self assumed for the "economic man" or the single-minded loyalty to the organization encouraged by those supporting "collaboration," we may find that the greater hope for democracy lies with a multiplicity of allegiances—to self, family, union, church, employer, and government, among others. The great danger is not that loyalties are divided today but that they may become undivided tomorrow.

#### *General Discussion*

Alvin Zander: While poor communication presents problems in the way that Mr. Worthy emphasizes, this type of difficulty is probably not as important as that of finding ways to help people change their attitudes. Collaboration between groups is the norm in a democratic society. Psychology is not concerned with manipulating,

but with helping people to work together in a manner that results in effective problem solving.

Clark Kerr: Accommodation, progress, and freedom should be the goals, with collaboration as a means, not a goal.

Daniel Katz: Dr. Stagner's proposed research team is an important means for the better *scientific understanding* of problems as well as a means for more effective conduct of research.

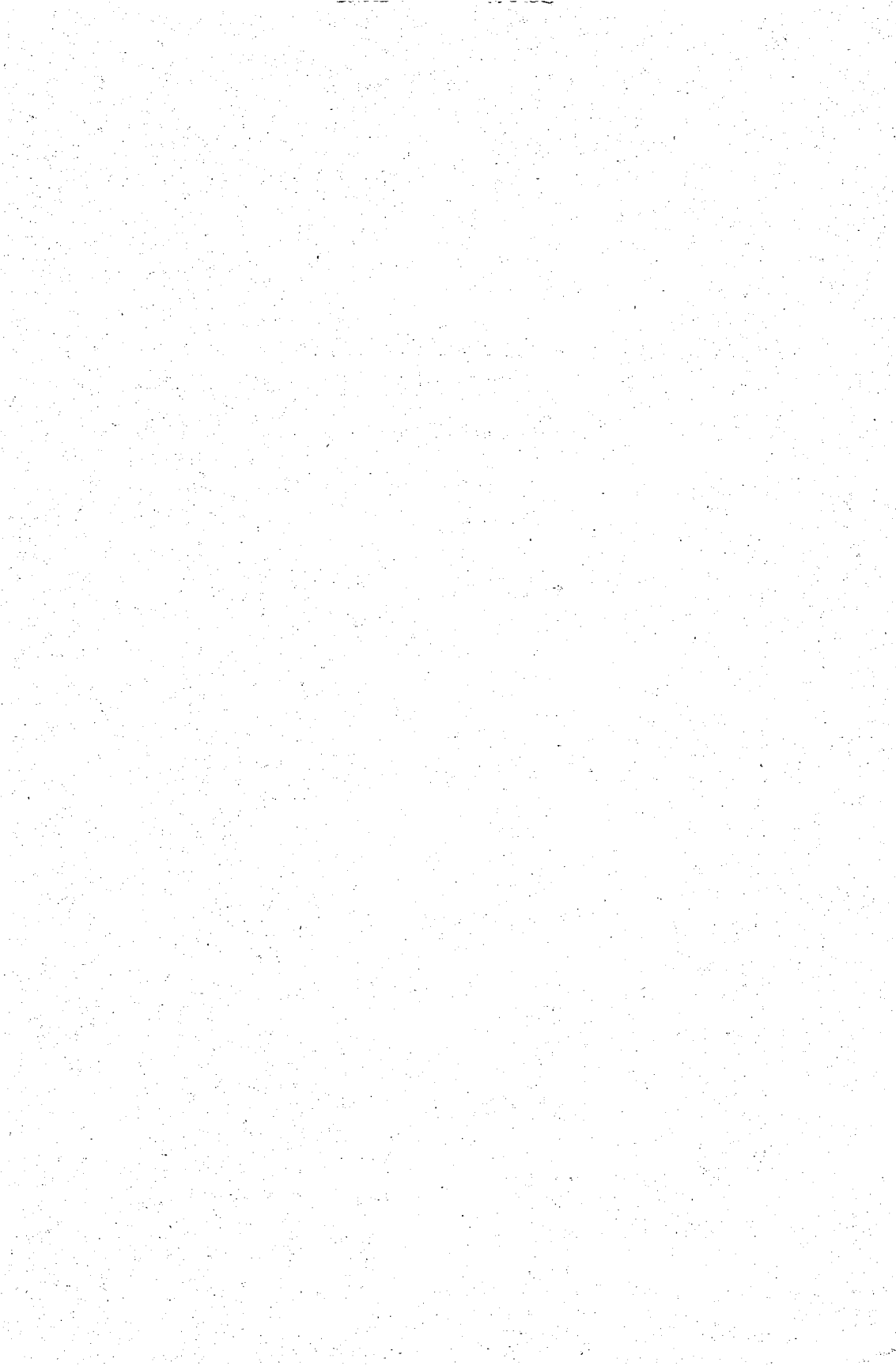
The problem of a conflict of interests between groups should receive more thorough consideration from psychologists. Group conflicts are not necessarily a matter of misunderstanding or inadequate communication. The solution of a conflict between two groups where the disagreement is due to false perception and where there is a basic agreement on fundamental assumptions may be an inadequate model for the conflict based upon a real difference of interest between the warring groups. Before action research moves into this difficult area it may be necessary to have more adequate understanding of the nature of group conflict based both upon research studies and theoretical analysis.

Unidentified Participant (from the floor): Profit is surely wanted but is it true that the operation of business with maximum job satisfaction for all is equally wanted? The difficulty lies in the conflicts of the various aspirations which taken as a whole can be said to be beneficial to America.



Part III

LABOR-MANAGEMENT RELATIONS:  
A CHALLENGE TO THE SOCIAL  
PSYCHOLOGIST



# TOWARD A THEORY OF ORGANIZED HUMAN EFFORT IN INDUSTRY

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A FORMER Nieman Fellow, writing in the August *Atlantic Monthly*, has provided me with a pointed introduction tonight: "Experiments show that a frog will strike repeatedly at a fly that is surrounded by sharp points, even though the frog's tongue be impaled," we read. Breathlessly we proceed to the next sentence to discover what science deduces from this odd behavior. But there isn't any deduction. There isn't even any more to the story. The next sentence reads: "Toads simply refuse to snap at a motionless mealworm."

It's like a mystery story in which nobody ever finds the body. Clues bob up in every other line, but we're never sure there's been a crime.

Are these findings good or bad for you and me? Should we cheer the frog and deplore the toad, or vice versa? Psychology doesn't say. The whole subject is summarily dropped in favor of "Social Facilitation among the Sumatran Great Apes," or "Speed of Problem-Solving among Stingless Tropical Bees."

We may not be able to figure out the Hidden Implications, but Psychology can. It appears to be from the sum of such experiments that it eventually develops the ground rules for *Rearing a Child of Six*, or *How to Get Ahead in Business*.

Perhaps there is a code book for psychologists that gives the key to interpreting behavior. But I prefer to believe that there somewhere exists a Psychologists' Committee to Co-ordinate Otherwise Disassociated Facts, which eventually will piece together these accounts of the behavior patterns of lower animals, and then tell us of the profane laity what we should do about them.

The industrialist who has sought help from psychology in meeting the baffling problems of human relations in his organization is quite likely to give hearty assent to these comments by James Colvin. Here, in humorous vein, is a challenge which we should do well to take most seriously.

No one knows how many millions of words have been written about human relations in industry, nor how many thousands of "disassociated facts" have been unearthed in this fertile field of

study. Certainly many of these words are meaningful, many of these facts are pertinent. But where is the Co-ordinating Committee that can tell us—and this is the focus of my talk tonight—what are the essential conditions for the successful organization of human economic effort?

We need today, not more disassociated facts, but an integrated theory. We need desperately to know how people can work together in business enterprises, efficiently and without undue strife, to produce and distribute goods and services for all of us.

In discussing this question I am adopting explicitly the framework of the free-enterprise system. I may be subject to the charge that this is too limited a frame of reference. It may be argued that an adequate theory of organized human economic effort must be applicable to any economic system. To limit discussion to our own system smacks of propaganda; it brings values into social science.

Perhaps it does. My answer is threefold: First, I don't think we can or should keep values out of social science, or physical science either, for that matter. It is more realistic to attempt to make them explicit, and therefore subject to criticism and experiment, than to adopt the undignified posture of the ostrich.

Second, the task of discussing an all-encompassing theory of organized economic effort is entirely beyond my intellectual powers. I think I know enough about the operation of business enterprise under our system to be able to discuss certain of its features critically. I don't know enough about other systems, actual or potential, to do so.

Third, I wonder along with many other people whether our free-enterprise system, in which I sincerely believe, is going to be discarded. I am convinced that if it is, one of the important reasons will be our failure to solve some of the acute problems of human relations which we face in industry today. It may be that these problems, unless solved, would make *any* economic system unworkable. If it were possible, I should like to have us be reasonably sure it is the economic system which is at fault before we discard it and adopt another, and not certain aspects of human behavior which may be inherent in *all* economic systems.

Is successful organized human effort possible within our free-enterprise economy? By "successful" I mean: Can the objectives of all the groups comprising the business enterprise be simultaneously achieved to their reasonable satisfaction without injuring the consumer or the public generally?

We must recognize that the purpose of a business enterprise in a free-enterprise economy is the production and sale of goods or serv-



ices at a profit. We may talk all we wish about the social responsibilities of business and industry; the fact remains that unless this fundamental purpose of making a profit is achieved, the enterprise will cease to exist.

It is equally a fact that the objectives of the groups comprising a business enterprise—owners, managers, workers—are not identical with the economic purpose of the enterprise. They may be compatible with it, but they are not identical. To be sure, logic demands that all the members *should* have this organizational purpose; for if it is not achieved, they will become members of a nonexistent organization.

We are psychologists here. We need not be reminded of the distinctions between logic and psychology, nor argue about what people *should* do. The fact is that what the members of any business enterprise *are* doing is striving to satisfy their personal needs.

This leads to what I conceive to be the cornerstone of a theory of organized human effort: All human behavior is directed toward the satisfaction of needs.

This is not an argument for a simple hedonism. People have social needs as well as biological, altruistic as well as egoistic. I am using "need" much as Murray or Lewin uses it—to refer to tension-states the manifestations of which are observable in behavior.

The people comprising an industrial organization are seeking through their membership in that organization to satisfy needs for food, shelter, power, prestige, social approval, knowledge, achievement, love, activity, and dozens more. And they work or restrict output, co-operate or fight, join unions or refuse to join them, obey rules or disobey them, invest money in the organization or withdraw it, formulate policy, give orders, delegate responsibility or keep it—and whatever else they do—because they perceive that by doing so they will best satisfy their needs.

I hope you will pardon me for laboring such an obvious point, but it requires emphasis. I have become convinced that the difficulties we face in industrial relations today are traceable in considerable part to industrial management's failure to perceive the implications of this straightforward characteristic of human behavior. Not only managers, but stockholders, union leaders, workers, and even industrial psychologists regularly ignore those implications. The industrial engineer ignores them when he blames worker stupidity or unco-operativeness for the small success of his pet incentive system. The manager ignores them when he blames "labor agitators" for the unionization of his plant. The worker ignores them when he accuses his foreman of "passing the buck." The

manager ignores them when he accuses workers of laziness and asserts that fear is the only effective motivator (for workers, of course, and not for him).

In the broadest terms we can state the essential nature of successful organized human effort in a free-enterprise economy by direct reference to this basic characteristic of behavior. *It is that set of circumstances under which members of the organization expect to satisfy their needs by directing their efforts toward the production and sale of goods or services at a profit.*

A considerable and intimate experience among managers of industrial organizations in the past decade has convinced me that their conception of the managerial task is often directly at variance with this generalization. They consider their job to be that of *making* people do what they decide must be done to achieve the organizational purpose. Some think of this process as the wielding of a whip: "Do as I say, or else . . ." In this case the "or else" means "or else I will prevent you from satisfying your needs." These managers did not disappear with the era of the notorious "industrial pirates." They are still with us in large numbers. They are among those who believe that a fair degree of unemployment is essential for good industrial relations. Fear, they argue, makes people docile.

Other managers think of the process as the offering of a bribe: "Do as I say because I am good to you." This we call paternalism. It is not dead either, although the term is currently in disrepute. It is based on the conception that gratitude makes people docile. Basically this is but a variant of the "whip" philosophy. If the bribe fails, as it usually does sooner or later, the "or else" comes immediately into view. The cold fury of the paternalist whose benefactions have not been appreciated is a striking but frequent phenomenon.

There are many managers today who believe they can make people work toward the organizational purpose by being "fair but firm." This is an obvious compromise between the philosophy of the whip and that of the bribe.

The continued existence of this conception is a pertinent illustration of our failure as psychologists to co-ordinate "disassociated facts." The facts of learning experiments do not suggest that there is any important difference in the relative effectiveness of reward and punishment as motivators. There is an indication that under some circumstances punishment may be more effective in the short run, reward in the long run. Generally we treat them as equivalent.

However, the facts of experiments on the consequences of frustra-

tion, some of the clinical facts of family relationships, facts emerging from studies of social perception, and ordinary observation all provide reason for believing that this short-run-long-run distinction is a critical one. I suspect we could demonstrate quite readily that overemphasis on punishment (implied or actual) as a means to influence behavior in a continuing relationship is virtually certain to defeat one's purpose and to destroy the health of the relationship as well.

I do not underestimate the complexities of this problem, nor the difficulties involved in achieving integration of these "disassociated facts." However, we may ask ourselves whether such facts are not actually misleading so long as they remain disassociated.

The common and significant feature of these and of most other current managerial philosophies is the idea that people must be forced somehow to work toward the organizational purpose. Personally, I believe we have plenty of psychological evidence for saying categorically that such a conception of human motivation is unsound. *If one expects to continue a relationship with people, it is not worth while to try to make them do anything.* Granting the many qualifications that surround it, the frustration-aggression hypothesis is a sound working principle in human relations. Apathy or hostility, in their limited manifestations, are virtually inevitable consequences for the manager who seeks to *make* people do his bidding. And the further consequence of either is defeat in some measure of the organizational purpose.

The manager who conceives his task to be to create conditions such that the members of the organization will *want* to direct their efforts toward the organizational purpose is indeed a rare individual in my experience. Yet it would seem that this is exactly the way to achieve successful organized human effort if it is true that the employment relation involves important needs, if it is true that all human behavior is directed toward need satisfaction, and if the frustration-aggression hypothesis is broadly valid.

Perhaps you will grant for the moment that if successful organized human effort in industry is to be achieved, management must create conditions such that people will want to work toward the organizational objective. If you will, it may be profitable to consider what one or two of these conditions might be.

At the head of my list of such conditions is what may be called "confidence." By confidence I mean the genuine emotional conviction that one will be able reasonably to satisfy one's needs through this employment relationship. Confidence does not rest on guaran-

tees or certainties; it is the belief merely that one will "get the best possible break" from those who control one's destiny in the organization.

This characteristic is, I believe, the first essential for the success of any human relationship. It is especially important when one group controls means for satisfying basic needs of other groups in the relationship. In a free-enterprise economy, managers control jobs, and jobs to those whom they employ are vital means for need satisfaction. If people are occupied with the attempt to satisfy their needs and if the employment relation is the source of means for satisfying critical needs, their first consideration must necessarily be "What kind of breaks can I expect from my employer?"

Confidence is difficult to achieve, particularly in large organizations. Much has been written about it, although rarely under this name. Many of the "disassociated facts" of industrial relations studies relate to it in one way or another. Consider, for example, why good communication is considered so essential within industrial organizations. Consider why so much stress is put on the careful formulation, publication, and administration of personnel policies. Why is emphasis put on advance notice to employees of changes affecting their welfare? Why must promotions and wage increases on a merit basis be so carefully administered, and why are elaborate seniority provisions usually in force when these policies have not been well administered? Why is the strategy of "cards face up on the table" rather than legalistic subterfuge urged in union negotiation and grievance administration? One major reason for the importance of such things as these is that they affect directly the confidence of employees in their management.

The absence of confidence is appallingly evident at all levels in many industrial organizations today. If employees genuinely expected "the best break possible" from management, would restriction of output be so prevalent, would militant and hostile unions flourish so well, would bitter strikes occur so frequently, would union negotiations be conducted in an atmosphere of so much suspicion, would arbitration be so often required? I think not.

It is not until one explores some of the "disassociated facts" of clinical psychology and psychiatry that the true significance of the employment relationship becomes apparent. It is a surrogate for, a modified continuation of the child-parent relationship, with much of the deep emotional ambivalence which characterizes that primary relation. Because it is modified, and because people usually do not recognize its real emotional significance to them, hostilities are more easily aroused and expressed. This makes still more critical the

existence of genuine confidence. Without it successful human relations in industry are completely impossible.

A couple of years ago I talked with the top management of a large company that had a remarkable change in the character of its industrial relations. Formerly this firm had been noted for conflictual relations in an industry that was itself anything but successful along these lines. Yet in the space of about a year and a half this situation had improved almost unbelievably. Hostile and dictatorial labor leaders had been ousted by an aroused rank and file, grievances had dropped to a fraction of their former frequency, productivity had increased, relations had become almost idyllic.

The story these managers told was simple. In desperation over the mess they had on their hands, they decided to make an honest, all-out attempt to act sincerely and openly on all matters affecting their employees. They began to publish the exact facts on important grievances even when management was clearly in the wrong. They used every means at their disposal to convince all levels of management, and through them the workers, of their genuine desire to give their employees "the best possible break."

There were no important economic changes, shifts in the political complex of the international union, or other external factors affecting this situation during this period. This management told me, in a somewhat dazed fashion, that as far as they could see, this single important change in their approach (implemented, of course, in a great many ways) was the only possible cause of the remarkable change in their relationship. For me, as you can guess, the explanation was obvious: They had succeeded in restoring their employees' confidence in them.

But confidence, although it is essential, is not enough. By itself it will not necessarily create a situation in which people will work toward the organizational purpose. They may be happy, but they will not necessarily be motivated to work.

A second essential, and I think equally obvious, condition is that efforts directed toward the organizational goal must be directly associated with the satisfaction of personal needs. Here we encounter several curious phenomena. I will mention but one: Practically all the means for need-satisfaction which workers today obtain from their employment can be utilized *only after they leave their jobs*. Wages cannot be used to satisfy needs at work. Neither can vacations, insurance benefits, pensions, recreational facilities, nor most of the other benefits provided by employers.

This odd fact, along with increasing mechanization and the resultant de-skilling of industrial jobs, has an unfortunate result:

Work becomes a form of punishment to be endured for the sake of need-satisfactions obtained outside of the work situation.

Work can be fun, as we all know. However, modern industrial practices tend more and more to rob it of the creative, egoistic, and social satisfactions which could make it satisfying in itself. And, what is more important, many managers consider this to be right and proper. I remember a plant superintendent who objected strenuously to the inclusion of a sentence in an employee handbook because it contained reference to the things "which make work fun." He stated flatly that work is not fun, and people should not be encouraged to think it is.

Does this phenomenon reflect the Biblical story of Adam and Eve's punishment: Henceforth they would be required to get their food and raiment by the sweat of their brows? Is it a hangover of the Puritan conviction that fun is sinful? I don't know. But I do know that the purpose of industrial organizations will never be particularly well achieved if the members of those organizations are encouraged to regard their work as a form of punishment.

To create the situation where work is itself genuinely satisfying, quite apart from the delayed rewards it provides, requires drastic revision of many managerial policies. It requires above all a sufficient change in management's conception of the employment relationship and of its own prerogatives to permit the development of genuine consultative supervision at every level of the organization. Unless one appreciates the "parental surrogate" character of the employment relationship, management's wariness with respect to this change will come as a surprise. Every rationalization and every side-stepping technique in the book are used to dilute the participation of workers, and even of lower and middle management, in the process of solving the real problems of the enterprise. The usual "suggestion system" is a good example of such dilution. So are most "joint committees." Yet genuine participation, to the point of deep emotional involvement of all members of the organization, is about the only source of satisfaction in the industrial setting for a considerable number of powerful human needs. Among these are needs for achievement, knowledge, prestige, creative activity, group approval, and power.

To make work itself genuinely satisfying may require also a considerable modification of the engineer's conception of efficiency. It is difficult to get him to recognize that there may be a difference between the most technically efficient method and the method which best achieves the organizational purpose. Engineering analyses and predictions of cost reduction are apt to be misleading in this respect.

I could cite some dramatic situations where greater productivity at lower cost has been the result of a compromise with technical efficiency, because the technically efficient method removed too much human satisfaction from work. In plant layout, process engineering, time-and-motion study, organizational planning, machine design, and many other phases of management, we would do well to ponder Chester Barnard's distinction between efficiency and effectiveness.

In this same connection I have wondered a good deal whether the time-honored practice of relating individual wages to individual performance is as effective as we think it is—even at management levels. Certainly there is beginning to be a body of evidence, some of it developed by the work of my former colleague, Joseph Scanlon, at the Massachusetts Institute of Technology, that a properly formulated, co-operative "cost-reduction sharing plan" can accomplish remarkable results. Examination of some of the "disassociated facts" in the psychological literature of competition and co-operation, as well as direct observation in industrial plants, might lead one to expect something of the kind.

Although it is bromidic today to state that wages are not the only incentive for human effort, I wonder if industry has really even begun to utilize the other possible incentives? Not that money is unimportant. It is the means for satisfying a great variety of vital needs. What is more, Scanlon's work suggests that we haven't given nearly enough study to the problem of the most effective use of financial incentives themselves.

Wage and salary administration consists customarily in a double process: (1) determining the worth of the job or position, and (2) determining the contribution of the individual and rewarding him accordingly. It is this second phase of wage and salary administration which I think needs critical re-examination.

In the first place, despite our elaborately conceived techniques for evaluating individual performance, are we able to do a sufficiently accurate job to justify the minute differentiations which are customarily made? I strongly suspect not. In the second place, and much more importantly, have we recognized the actual consequences of even the best administered program of individual evaluation for wage purposes on the people evaluated? Does the process, as we so logically and casually assume, increase the efforts of the individual toward the organizational purpose? Or does it, more often than not, create resentments and protective behavior which may lower the individual's value as well as his morale? Does it build teamwork and sincere co-operation, or does it undermine them? To cite but a simple illustration: What are the results for the individual, of an evaluation of

mediocrity, and no wage increase, therefore, when he is an employee of twenty or twenty-five years' service who is no longer at his peak but whose loyalty and conscientiousness (before the evaluation at least) are beyond question?

What would happen, do you suppose, if we ceased to use performance evaluations as a basis for individual wage adjustment—if, in fact, we ceased to relate individual performance with individual wages except as base rates were set by some form of *job* evaluation? Performance evaluations would be used, if at all, to measure growth and development, with the motivation for these derived from other aspects of the employment relationship. Where necessary, performance evaluations might be used to terminate employment. Additional financial rewards would be correlated with an over-all organizational measure of the degree to which the purpose of the enterprise was being achieved and be paid at frequent intervals as a percentage—*equal for all employees*—of base wages.

I know of plants in which such a scheme has doubled and trebled the results previously obtained under the usual individual wage incentive plans. Moreover, in several of those plants management members and office workers share in the financial rewards on an equal percentage basis with factory workers. It is an eye-opener to watch the handling, *by employees rather than management*, of the shirker in these situations. It is equally impressive to see the development of emotional involvement in the organizational purpose and the striking spirit of co-operation manifested at all levels even when economic conditions threaten severe frustration. Only direct observation of such situations can convey how remarkably untypical they are in the quality of their human relations. Remember, the common objective of the members of these organizations *is* the production of goods and services at a profit. Moreover, they are achieving it.

Of course there are definite techniques utilized in these plants to provide opportunities for the satisfaction of those social and egoistic needs which are normally frustrated in the industrial situation, and to tie those satisfactions to the achievement of the economic purpose of the enterprise. The important fact for my immediate point is that individual performance is not measured. The measure of performance is the degree to which the organizational goal is achieved by the whole organization. It has become a common purpose for the members because its achievement means the satisfaction of a great variety of personal needs, including those which money can satisfy.

Perhaps I have wandered too far afield. However, this question of financial incentives is encumbered with a host of traditions. Many of them are the outgrowth of implicit assumptions about human be-



havior which could stand critical examination. Moreover, it is a subject with which an adequate theory of organized human effort must inevitably treat.

Let me try now to summarize. Our free-enterprise economy is under fire today. It is more than possible that the occurrence of another major depression could lead to its abandonment in favor of another type of economy. But it is an open question whether the ills of the free-enterprise system are in large part the result of our failure to deal successfully with the problems of human relations within that system. Such problems, or related ones, might conceivably wreck *any* economic system.

The "disassociated facts" which comprise the field of industrial relations today cannot provide us with an answer to that question or with solutions to those problems. We require an integrated theory of organized human effort in industry. In its absence we may perpetuate philosophies, policies, and practices which are actually inimical to sound human relations, and to the achievement of the economic purpose of the enterprise.

Some of the current problems of human relations in industry are the consequence of the psychologically unsound conception that the function of management in the employment relationship is to *make* people work toward the purpose of producing and selling goods or services at a profit. An integrated theory of organized human effort would demonstrate that this conception is inconsistent with the facts of human motivation in relationships and that it ignores the implications of the frustration-aggression hypothesis. It would stress the soundness of creating conditions such that people would *want* to achieve the organizational purpose rather than trying to *make* them do so.

Such a theory would indicate the fundamental importance of employee confidence in management. It would re-examine critically the whole question of incentives, with particular attention to those important needs which may be satisfied directly in the work situation. It would perhaps question the emphasis customarily placed upon the relationship between individual performance and individual financial rewards. It might outline some hitherto ignored conditions for co-operation and question some of the supposed consequences of certain kinds of individual competition.

I wish there were time to discuss two other aspects of this subject. First, what would we do with a theory such as I am proposing if we had it? Its mere existence would not change the world much. Some pertinent questions in this regard were raised by Jim Worthy and Clark Kerr this afternoon. The whole difficult subject of the role of

the expert, of the pros and cons of "manipulation" of human behavior, is involved here.

Second, we psychologists need to learn ourselves how to function successfully in organized groups that include representatives of many other disciplines. The theory I am asking for will necessarily involve collaboration and conflictual "accommodation"—to borrow Kerr's term—among all the social sciences.

There is time, however, only to point to these problems. I would not have you think me so naïve as to be unaware of them.

I have mentioned some of *my* conceptions. Yours may be quite different. Frankly, I am not too concerned as to whether you agree with my ideas. I *am* eager to have you—and in fact all social scientists who work in the field of industrial relations—devote a significant amount of time and energy to the development of a valid theory of organized human effort, and to experiments which will test its major hypotheses. That is a challenge worthy of the best that is in us.



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PSYCHOLOGY OF LABOR-MANAGEMENT RELATIONS

1949