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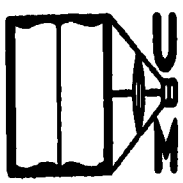

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A STUDY OF ROLE CONFLICT AMONG FOREMEN IN A HEAVY INDUSTRY

by
W. W. Charters, Jr.

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in the
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Committee in charge:

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PREFACE

The intent of this thesis is to bring social psychological theory to bear upon empirical data concerning industrial foremen. In pursuing this end, I have been given encouragement by a large number of persons at the University of Michigan who believe in the necessary interrelation between theory and research in the social sciences. Above all persons, I am indebted to Professor T. M. Newcomb, Director of the Social Psychology Program, for the guidance and support which have provided me with a secure foundation for my efforts. He is largely responsible for the social psychological theory from which I have extrapolated here, but in addition his insistence that theory must be designed to serve empirical investigation has given direction to this work.

I cannot minimize the contribution which Professor Daniel Katz has made in several ways. While Professor Katz was Director of the Human Relations Program of the Survey Research Center he gave me strong encouragement to use data from one of their industrial surveys for theoretical analyses; as an instructor in the academic program he provided systematic formulations of social psychological theory; and as a member of my thesis committee (until his departure for Norway) he gave freely of his time and knowledge.

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Finally, I wish to thank the Institute for Social Research, through its director, Dr. Rensis Likert, and the Institute's Survey Research Center, through Dr. Angus Campbell, for opening the files of data to me.

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CHAPTER I

INTRODUCTION

Some Sociological Views of the Position of Industrial Foremen

In recent years social scientists have devoted thought and study to various groups of personnel in the productive units of our society. Owners, managers, workers, suppliers, and consumers--the functions and relations among all of these have undergone drastic changes through the past century with the development of a highly articulated division of labor, with the centralization of control, and with the increased interdependency of the industrial and commercial organizations of modern nations. Studies are available which examine the implications of the growing pre-eminence of the corporate manager, of the increased proportion of white-collar employees, and of the changed relationship of workers to management, manifested most strikingly in the trade union movement.

Foremen's problems as a political issue.--Within the last 15 years, another class of personnel has emerged into the focus of social scientific attention: the first line supervisors, or foremen, of industrial concerns. Coincidentally, they became the subject of considerable political interest, and their problems were matters of major social policy. Following the passage of the Wagner Act in

1935, foremen began to ask whether or not the Act provided them with the same protection to organize in industrial unions that it did non-supervisory employees. Both the National Labor Relations Board and the War Labor Board were confronted with arguments pro and con. In 1941 the Foreman's Association of America was founded, and within the period of four years over 150 local chapters were organized. Membership in foremen's unions (exclusive of rank-and-file unions which admitted supervisors) numbered 63,500 foremen in 1944. 1/ During the war years, the union struck over a dozen times in vital war industries. The question of the Wagner Act's protection of foremen was the subject of Congressional action in 1945 and again in 1947. The latter action, the Labor-Management Relations Act, upset the decisions of the United States Supreme Court earlier in the same year. The Supreme Court had sustained the ruling of the National Labor Relations Board in the Packard case, granting foremen's unions the protection of the Wagner Act for bargaining. The Congressional Act of 1947 specifically removed the obligation of employers to bargain with foremen's union.

The controversy over the foremen's right to organize in trade unions involved the vital question of whether foreman are employees of management or are part of management, itself. In earlier times the position of the foreman was that of an autonomous contractor loosely federated with other contractors in a productive organization. The foreman was responsible for wage rates, personnel policies, hiring, promoting, firing, scheduling work, supplying

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1/ George L. Wilbur, "The Unionization of Foremen as a Function of Their Changing Status," (Unpublished M. A. Dissertation, Dept. of Sociology, University of Michigan, 1946) p. 29.

material, and repairing equipment--truly managerial responsibilities. But as the production units expanded in size and complexity and demanded far greater coordination than that provided by a federation of contractors, the foreman began to lose many of his managerial functions. Special staffs relieved him of his personnel responsibilities, skilled engineers scheduled the work flow, purchasing units obtained supplies more advantageously than could the independent contractor, specialized crews repaired equipment throughout the plant. Control of these functions was lodged at a higher level than the foreman, and he lost the independence and autonomy that once belonged to him. With the advent of unionization, even more of his former responsibilities were fulfilled at a company-wide or industry-wide level. It was to the unions' advantage to negotiate contracts for all employees in a plant, or even an industry, rather than to deal individually with shop foremen. Consequently, the foreman was reduced to implementing company policy over which he had little or no control and to abiding by a union contract which he was less likely to have helped formulate than the workers who were under him. And yet, he was the agent and representative of management at the shop level. These were the conditions facing the policy-makers in answering the question, Are foremen employees or managers? If employees, they have the power of the Wagner Act to aid them in organizing, to give them greater power vis-a-vis management. If they are managers, however, they must rely on their individual economic power to induce employers to bargain.

The basis for social scientific interest in foremen's problems.--The foreman's problem was of especial interest to the sociologist, not for the political policy involved but for its manifestation of basic

dynamics in human behavior and social organization. Probably most sociologists believed the issue of unionization of foremen was only symptomatic of more fundamental disequilibria within industrial units. Industrial expansion during World War II certainly aggravated the problems confronting foremen, particularly in comparison with other employees who had recourse to unionization. A War Labor Board report summarizes the situation:

> Similar to rank-and-file workers, foremen engaged in modern industry developed a specific set of grievances. These grievances were accentuated during the war period. Among the more important were those involving wages, sick pay, establishment of grievance machinery, lack of a clearly stated company personnel policy with respect to foremen, and the lack of support given by higher management to foremen in their dealings with rank-and-file workers and with trade union leaders. 2/

As this report intimates, foremen's grievances were of long standing and were only "accentuated" by the war. This coincides with the view of many industrial sociologists writing in the field, viz., that the majority of foremen's grievances were the result of basic organizational changes in industrial units over a long period of time.

Industrial sociologists infrequently attribute the problems of first line supervisors uniquely to the great complexity of their job in modern industry. 3/ This complexity does not distinguish foremen either from other industrial personnel or from non-industrial job-holders. More knowledge and skill are required today for adequate performance of most social functions, whether in the professions, the sciences, business, or industrial organizations. These increased requirements appear to be a

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2/ Fred Witney, Wartime Experiences of the National Labor Relations Board (Urbana: University of Illinois Press, 1949) p. 168.

3/ For a dramatic description of the variety of knowledge, skill, and interpersonal relations required of contemporary foremen, see Fritz J. Roethlisberger, "The Foreman: Master and Victim of Double-talk," Human Factors in Management, ed. by S. D. Hoslett (New York: Harper & Brothers, 1946) pp. 54-57.

general condition of modern life associated with an expanding culture base and the segmentation, rationality, and formality characteristic of our civilization.

Industrial sociologists have tended to think the war conditions merely aggravated the more basic problems of foremen; and they have tended to reject the notion that the greater complexity of the foreman's job is the basis for difficulties peculiar to first line supervisors.

The interests of sociologists appear to have been attracted to the problems of foremen by two circumstances: the availability of an applicable theory of social organization and the apparent similarity between foremen's conditions and conditions familiar to sociologists in other social contexts.

Industrial sociology had developed a point of view which, at the time when foremen's unionization became a major policy issue, seemed to encompass and be able to interpret the underlying difficulties of which unionization was only a symptom. This point of view may be characterized by its conception that the local factory, restaurant, or office, etc., is the unit of analysis and is an organized system of interrelations among personnel performing differentiated functions. This "human relations" point of view in industrial sociology received initial impetus from the Western Electric studies of Elton Mayo and his associates in the late 1920's and since has gained support from a growing body of empirically-grounded theory in the behavioral sciences. To industrial sociologists, the problems of foremen had to be viewed in the context of social organization, and they were prepared to do this.

Moreover, foremen represented to sociologists not a unique social phenomenon but one which was familiar to them in other areas outside of

industry. One student, for example, has drawn attention to the foreman as the "marginal man of industry." 4/ The concept "marginal man" refers to a general phenomenon which has received much sociological consideration since the days of Simmel and Park. Specifically, it refers to the typical consequences, personal and societal, arising from the condition of persons who are exposed to the influence of two cultures. Although the concept originally was applied to personality types resulting from mass migrations and contacts between large cultural groups, it recently has been given more general application within the theoretical framework of multiple group membership. 5/ Under certain conditions of an individual's orientation to the norms of two or more groups, he can be identified as the equivalent to Park's "marginal man." Certain industrial sociologists see the first line supervisor as this familiar type of person whose problems can be interpreted by reference to the typical social processes associated with the "marginal man."

Other sociologists characterize the first line supervisor as "the man in the middle." 6/ By such a phrase as this, emphasis is placed on the foreman's position in a system of human relations rather than on the foreman as an individual, as the tendency has been among psychologically trained personnel men. This phrase serves an important function for the development of a science of organizational behavior by its implicit reference to phenomena more general than the immediate

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4/ Donald E. Wray, "Marginal Men of Industry: The Foreman," American Journal of Sociology, LVI (January, 1949) pp. 298-301.

5/ T. M. Newcomb, Social Psychology (New York: The Dryden Press, 1950).

6/ Burleigh B. Gardner and William F. Whyte, "The Man in the Middle: Position and Problems of the Foreman," Applied Anthropology, IV (Spring, 1945) pp. 1-28.

problems of the foreman. The foreman, like the Navy's chief petty officer or a large school system's principal, is a person who transmits orders to and must get cooperation from the "producing" employees and who, in turn, is held responsible for their performance. He characteristically takes no major part in the formulation of the orders he transmits and characteristically faces employees who resent the orders they receive from him. Consequently, this person is subject to conflicting pressures from two sides—from the employees on whom he depends for adequate performance and from higher levels in the organization on whom he depends for personal rewards and satisfactions. He is "in the middle" between opposing forces which presumably he cannot easily resolve.

Problems of the foreman have interested industrial sociologists for other reasons than their immediate political import, although one cannot deny that the policy issues at stake and the major social consequences of the foreman's plight have had an effect on the sociologists' interest. Their approach to an analysis of the foreman's difficulties is such that it contributes to a broad understanding of organizational behavior as well as to the pressing social problems. 1/

1/ We should note that social scientists also have been attracted to the study of foremen in industry for a somewhat different reason as well. There has been considerable interest in problems of effective supervision, the productivity of working groups, and the conditions related to these for a number of years. The worker and his productivity, or morale, or satisfactions is the center of interest in this area of research; and the supervisor or supervision is considered only as an important independent variable in understanding the worker's behavior. This line of research is outside the concern of this thesis, which will consider certain subjective aspects of the supervisor, himself, as the center of interest.

Purpose of the Thesis

Current analyses of the position of the foreman.—In reviewing the sociological literature concerning foremen's experiences of difficulty in their position, it has become evident that the writers most commonly assume that all persons who occupy the position of foreman, or at least foremen in the larger industrial enterprises, universally experience this difficulty. Wray argues that experience of difficulty does not depend upon mere size of the industrial unit but can be found among foremen in smaller concerns. 8/ In so doing, he emphasizes our point that most industrial sociologists assume that all or most foremen subjectively experience the difficulty associated with the position of foreman. (In subsequent chapters, we will review the writings of three groups of scholars who have made serious attempts to view the position of the first line supervisor in industry from a sociological point of view.) If we grant the writers their presumption that there is little if any variation among first line supervisors in any particular industrial unit with respect to their experiences of difficulty, then the writers are obliged to seek an explanation by recourse to independent variables which are absent (or present) under one type of organization in which foremen do not experience difficulty but which are present (or absent) under another type of organization in which foremen do experience difficulty in their position. Since the independent variables to which the industrial sociologists refer are more or less uniform among contemporary industrial units, the writings frequently take the form of historical analyses. The writings often argue

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8/ Wray, op. cit.

that the foreman's job was not difficult at an earlier time when the various organisational characteristics of the present industrial system were not prevalent, but the foreman's job is difficult now under the changed conditions.

This approach is adequate for certain purposes. The theoretical orientation of the sociologists is adequate to account for the broad organisational and structural conditions of the supervisor's job. Ideally, their approach permits them to draw conclusions concerning the functioning of an industrial organization as a whole or concerning the functions which foremen as a whole contribute to the organization. To the extent that these industrial sociologists restrict their conclusions to entire organisations or to the functions of foremen as a group, the level of theory to which they refer is adequate.

The industrial sociologists whom we review extrapolate beyond their conclusions concerning the structural stresses and disequilibria which result from changes in organisational structure to the subjective, psychological experiences of the human beings who happen to occupy the position of foreman. For example, Wray shows that due to a number of historical reasons supervisors no longer perform major decision-making functions for industrial organisations, and therefore foremen are troubled by their consequent feeling of being removed from the center of managerial action (see p. 80, infra). By extrapolating to the subjective experiences of individuals, Wray transcends his theoretical system. Other writers incorporate in their theories assumptions concerning the psychological processes of individuals. Gardner and Whyte, for example, assume that all industrial personnel are primarily motivated by status considerations; therefore, certain structural disequilibria in status

systems lead to anxiety on the part of the individuals concerned. But Gardner and Whyte do not consider fully the possibility that there may be differences among plant personnel with respect to the degree to which status considerations operate as a primary motivational element (see Chapter IV, infra.). Although their theory incorporates assumptions at an individual level, these assumptions are not subjected either to conceptual analysis nor to empirical demonstration.

Part of the reason that the industrial sociologists do not provide analyses of differences among plant personnel with respect to their subjective experiences of difficulty is that these writers are first of all concerned with similarities among individuals rather than differences among them. Their theoretical orientations lead them to focus their attention on the structural aspects of human organization which, as we shall point out, merely constitute conditions with a relatively high potentiality for creating subjective experiences of difficulty among individuals exposed to the conditions.

Another reason for their lack of concern with differences among personnel of an industrial unit lies, we believe, in a methodological procedure characteristic of their investigations. The writings of these sociologists tend to draw upon empirical evidence, and most commonly anecdotal evidence, as a means of illustrating rather than of testing their propositions. While this process is valuable in suggesting the initial plausibility of propositions, it makes it impossible to discover in their writings evidence which contradicts or otherwise conflicts with the author's hypotheses. More specifically, this process does not encourage writers to show the presence in modern industry of foremen who do not experience difficulty in their position.

If we phrase the argument of the industrial sociologists in terms of the social psychological paradigm, we can say that they have used for independent variables various structural conditions of industrial organization to account for the dependent variable of an individual's subjective experience of job difficulty either without consideration of relevant intervening variables or with an assumption that intervening variables are, in fact, constants. 9/ The theoretical orientation of these writers does not provide a systematic formulation of the intervening variables necessary to complete the paradigm. One of the major difficulties which a social psychologist faces in attempting to introduce the relevant intervening variables into the argument is that the independent variables used for purposes of explanation are not always couched in terms which can be translated directly into social psychological theory.

Intent of the thesis.—The primary purpose of this thesis is to suggest that the social psychological theory of roles may be used effectively to complete the social psychological paradigm referred to above. The theory incorporates concepts of a structural order, concepts of an organismic, psychological order, and concepts pointing to processes intervening between the two. It enables us to account for the conditions under which the occupants of a potentially stressful position can be expected to internalize the stress as a personal problem. In using role theory, however, we will have to interpret the authors' structural variables in terms of concepts appropriate to a role analysis.

9/ See T. M. Newcomb, Social Psychology (New York: The Dryden Press, 1950) pp. 28-33, for a discussion of this paradigm.

We are fortunate to have access to empirical data from a survey of the personnel of an industrial plant conducted by the Survey Research Center of the University of Michigan in 1948. In the course of this survey, information was obtained from supervisors concerning a particular type of job difficulty to which we alluded in the previous section--does he or does he not feel that he is "in the middle" between workers and management? Information collected systematically from nearly all of the foremen in the plant shows that approximately one-half of the first line supervisors do not feel they are in the middle. That is to say, there are in fact real differences among foremen within at least one present-day industrial unit with respect to a subjective experience which certain industrial sociologists believe to be uniformly present among all supervisors. These differences set the problem for us: what is the most adequate way to account for the differences observed among foremen with respect to their feelings of being in the middle within a single industrial unit?

In Chapter II we will describe briefly relevant characteristics of the industrial plant from which the data were obtained and the methods used in collecting them. Further, we will present evidence concerning validity and reliability of the dependent variable--foremen's feelings of being in the middle--to indicate that the observed differences among foremen are meaningful.

Chapters III, IV, and V will consider the works of industrial sociologists who have given the most serious attention to the problems associated with the position of the foreman. The authors are F. J. Roethlisberger and W. E. Moore, B. B. Gardner and W. F. Whyte, and

D. E. Wray. In addition to a review of these authors' analyses of the problems of foremen, we have submitted their propositions to empirical tests wherever the survey data provide appropriate measures. Our purpose for presenting such empirical tests is two-fold. First, we should expect the propositions found in the literature of industrial sociology to account for some of the variance among foremen despite the limitations of the authors' theoretical approaches, inasmuch as the propositions may point out structural conditions which are potentially conducive to feelings of being in the middle. Second, we would like to encourage more rigorous and operational statements of hypotheses which, up to the present, are only implicit in the analyses found in the literature. We believe we can serve this purpose by attempting to coordinate the authors' conceptual hypotheses with operational measures of them.

In the first section of Chapter VI we will develop the theory of roles in a direction which we believe can provide a systematic account of the conditions under which structural problems associated with societal positions are internalized as personal problems by individuals who occupy the positions. In the second section of this chapter, we will attempt to translate the theoretical formulations reviewed in the preceding chapters into role theory and, at the same time, to point out the conditions under which the structural difficulties these authors propose may affect the subjective experiences of the persons within the organizational structure.

Following our attempts to specify the assumptions which are implicit in the authors' formulations, we present in Chapter VII

some evidence that the assumptions are not valid at least in one industrial unit. We question first whether either the structural situations presumably leading to feelings of being in the middle or foremen's perceptions of the structural situations are sufficiently uniform within the plant to allow the industrial sociologists to reach the generalization that all, or even most, of the first line supervisors feel subjectively that they are in the middle.

In the second section of Chapter VII we question the argument implicit in the authors' writings that feelings of being in the middle among foremen are to be deplored--that they promote insecurity, discontent, or unrest and make the plight of first line supervisors an unfortunate one. The evidence from the industrial survey suggests that the large majority of those foremen who feel themselves to be in the middle between workers and management consider this situation to be a legitimate aspect of their job and <u>not</u> conducive to insecurity or discontent.

The last chapter, Chapter VIII, will summarize briefly the argument of this thesis.

Generally speaking, the purpose of the thesis is to contribute a body of theory supplementing the broad analyses of problems associated with the position of the industrial foreman which will permit us to draw conclusions concerning the psychological experiences of the particular individuals who occupy that position. In developing this body of theory we have been especially concerned with phrasing its component concepts in such a way that they lead directly to operational measures and in such a way that they are broadly applicable to social behavior not applicable uniquely to problems of industrial foremen.

CHAPTER II

THE INDUSTRIAL SURVEY AND PROCEDURES OF ANALYSIS

The Industrial Survey

Data from an extensive survey of a modern industrial unit provides us with empirical grounds for our conceptual analyses. Staff members of the Human Relations Program of the University of Michigan's Survey Research Center 1/ intensively interviewed 1400 employees of a large industrial corporation in the Mid-West. The major purpose of this study was to investigate union-management relations at the shop level in a heavy industry. The design of the study required open-ended interviews with all of the 400 foremen (at various levels), all of the 350 union stewards, and a stratified sample (one out of every 22) of workers in the corporation's productive unit. In the course of the one-to three-hour interviews, a variety of data was obtained: census characteristics of the respondent, his perceptions, motivations, attitudes, aspirations with respect to his job, the company, his peers and shop personnel (i.e., foreman, steward, workers), productivity, power relations in the shop, union-management relations in general, and the roles of foreman and steward.2/ Foremen were

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1/ At the time of the study, Professor Daniel Katz was director of the Human Relations Program; Dr. Eugene H. Jacobson was the immediate Study Director.

2/ The reader is referred to the Survey Research Center's publication, A Comparative Study of Worker, Steward and Foreman Attitudes in a Unionized Automobile Factory, (Ann Arbor, Mich.: The Survey Research Center, August, 1950) for a full description of the study.

asked, during the interview, whether they felt their job was hard because they stood between the workers and management. This question, to which only one-half of the foremen answered in the affirmative, combined with a wealth of additional date pertinent to a role analysis, provided us with a fertile material for empirical investigation.

The plant, itself, is the major industry within the community, producing trucks and automobiles in the most highly competitive price range. The company's production unit is divided into six major divisions: body building, car assembly, machining and motor assembly, foundry, stamping, and truck assembly. Each division is composed of 10 to 12 functional work units—departments. Departments may contain anywhere from 10 to 1,000 rank-and-file workers. Within each department there is at least one head foreman, and he may have as many as seven assistant foremen reporting to him. The head foreman, in turn, is responsible to a general foreman in charge of a number of departments. Thus, there are three levels of positions formally referred to as "foremen." Our interest, in this thesis, will be centered on the first line supervisor, or the assistant foreman. Over two-thirds of the foremen interviewed in this study were assistant foremen.

Position of Foreman	Number Interviewed
Assistant foreman	250
Head foreman	74
General foreman	16
Others (trouble shooters) . .	13
Total interviewed . . .	353

Groupings of approximately 50 workers elect a "group steward" as their union representative at the shop level. (The groupings of workers do not necessarily correspond to departmental lines.) The group stewards, in turn, elect one of their own members to serve as "chief steward" who will represent from five to 25 group stewards within a jurisdiction. A total of 333 stewards were interviewed in the course of this study. The sample of rank-and-file workers yielded 462 interviews.

The interviewing was conducted by a group of trained persons who followed a schedule of questions and who understood the intent of each question so they could probe until the appropriate information was obtained. The interviews were held in the respondents' homes after working hours. All responses were recorded as nearly verbatim as possible, and the interviewers transcribed the material following each interview. Categorization of the responses was a separate operation, carried on by a trained staff of coders in the office of the Survey Research Center from the interview transcriptions. A systematic re-coding of a sample of responses provided an estimate of the coding reliability.

Foremen's Experience of Being in the Middle: The Dependent Variable

The conceptual definition of the variable with which some industrial sociologists have been concerned and which this thesis will consider the primary dependent variable refers to a subjective experience on the part of first line supervisors of standing "in the middle" between workers and management. More specifically, it refers to a condition of individual foremen in which (1) the individual perceives that he is subject to two conflicting forces, one of which

originates in his relationship to his subordinates (workers) and the other of which originates in his relationship to his hierarchical superiors (higher management); (2) the individual foreman is motivated to respond to each of the conflicting demands impinging upon him; and (3) the individual foreman evaluates his position as problematical in terms of the interpersonal relations required of the position (although he may not necessarily recognize the source of the problem in the conflicting demands impinging upon him).

Foremen were asked a series of questions from answers to which an operational measure of the conceptual variable was constructed. The questions follow:

> Some foremen feel their job is tough because they stand between the workers and management. How does it work out in your case?

If this question did not elicit an elaborated response, it was followed with:

> Have you ever been in a situation where you were trying to please management on the one hand and your men on the other? How did you handle this? How do you feel about the way it worked out?

The verbatim responses of the foremen, first, were dichotomized simply according to whether or not they indicated that the respondent perceived himself to be "in the middle" between workers and management. The figures below show that there is approximately a 50-50 distribution between assistant foremen who feel they are in the middle and assistant foremen who do not feel they are in the middle.

Responses of Assistant Foremen	Number	Percent of Total
Feels he is in the middle	117	47%
Does not feel he is in the middle	121	48
Not ascertained	12	5
Total	250	100%

After dichotomizing the responses, coders recategorized them according to four additional dimensions. The responses of foremen who did not perceive themselves to be in the middle were categorized on the basis of reasons for not feeling in the middle between workers and management; the responses of foremen who did feel they were in the middle were categorized according to why they felt they were, whether they accepted or rejected the situation, and how they were able to tolerate the situation. (Chapter VII discusses these categories more fully.)

Statistical validity.—Although there are no other data in the survey material which strictly correspond to our dependent variable—the subjective experience of being in the middle between workers and management—we can show a certain element of consistency between it and various other measures. One of the components of the dependent variable relates to the foreman's evaluation of his job as problematical. In the following pages we will show that those supervisors who believe their job is difficult, according to the several available measures of job difficulty, are more inclined to feel in the middle (or to reject the situation of being in the middle, in some cases) than foremen who do not believe their job is difficult.

First, foremen were asked,

> In general, would you say that the job of foreman has been getting harder or easier since you've been here?

Although responses to this question entail an evaluation of the foreman's position over a period of time—an element not included in our dependent variable—we find that foremen who reply that the job is "harder" are more inclined to evaluate their position as one of being in the middle than those who say their job is "easier." (Table 1, p = .08)

TABLE 1

ASSISTANT FOREMEN'S EXPERIENCE OF BEING IN THE MIDDLE
BY THEIR EVALUATION OF THE FOREMAN'S JOB
BECOMING HARDER OR EASIER

Evaluation of the Job	In the Middle	Not in the Middle
Foreman's job has become harder	78	71
Foreman's job has become easier	22	36
(No change, Don't know, or Not ascertained)	(17)	(14)
Number of foremen	117	121

*Chi-square = 3.48, 1 df
p = .08

*The statistical test was applied only to the non-parenthesized cells.

Following this question, foremen were asked for the reasons why they believed their job was getting harder (or easier). In their free responses, 11 foremen voluntarily replied that their job was getting harder because "the foreman is in the middle--he has to please both management and the union." Of these 11 foremen, only two replied to the subsequent question, which asked directly whether or not they believed they were in the middle, that they did not feel they were in the middle, while eight affirmed that they did feel they were in the middle. (The response of one foreman was not ascertained on the direct question.) The number of foremen involved in this test of consistency is very small.

A second estimate of consistency is based on coders' ratings (from a reading of the entire transcripts of the interviews) of the degree to which foremen like their position as a representative of the company. If a foreman is rated as disliking his position as a company representative, we may take this to indicate that he evaluates his position as problematical and, consequently, will be more inclined to report that he feels he is in the middle. Table 2a suggests that such a relationship may exist, although its statistical significance is only at the .17 level.

If a further test is carried out by comparing foremen who accept their position of being in the middle as a legitimate part of the foreman's job with foremen who reject their position of being in the middle, we find that those who dislike their position as a company representative are significantly more inclined to feel they are in the middle (Table 2b). 3/

3/ We discuss the meaning and importance of the greater association which exists between measures of job difficulty and rejection of being in the middle than between job difficulty and simply the experience of being in the middle in Chapter VII. At that point, we also will show in detail the proportions of foreman who accept and who reject their experience of being in the middle. See p.121, infra.

TABLE 2a

ASSISTANT FOREMEN'S EXPERIENCE OF BEING IN THE MIDDLE BY THEIR RATING OF LIKING OR DISLIKING THEIR POSITION AS A REPRESENTATIVE OF THE COMPANY

Likes or Dislikes Position as Company Representative	In the Middle	Not in the Middle
Likes position	49	61
Neutral or dislikes position ..	68	57
(Not ascertained)	(...)	(3)
Number of Foremen	117	121

*Chi-square = 2.27, 1 df
p = .17

TABLE 2b

ASSISTANT FOREMEN'S ACCEPTANCE OR REJECTION OF BEING IN THE MIDDLE BY THEIR RATING OF LIKING OR DISLIKING THEIR POSITION AS A REPRESENTATIVE OF THE COMPANY

Likes or Dislikes Position as Company Representative	Accepts being in the Middle	Rejects being in the Middle
Likes position	34	7
Neutral or dislikes position ..	32	21
Number of Foremen	66	28

Chi-square = 5.62, 1 df
p = .02

*The statistical test was applied only to non-parenthesized cells.

A third estimate of consistency is based on a measure of the foreman's security or self-confidence in his position of supervisor. This measure, like the previous one, is derived from coders' ratings of the responses of foremen throughout the entire interview. We assume that a foreman who is rated as lacking self-confidence, of being insecure in his position, would be more inclined to evaluate his position as "problematical." We find from Table 3a that the empirical relationship between being in the middle and lacking security and self-confidence could easily be attributed to change ($p = .45$). It is noteworthy, nevertheless, that the predicted direction of relationship does emerge.

Following the procedure used in the preceding analysis, we have compared the degree of security among foremen who accept and foremen who reject their condition of being in the middle. Table 3b suggests that foremen who are in the middle and reject this condition are more apt to be "insecure" than foremen who are in the middle but accept their condition as a legitimate aspect of the foreman's job. A chi-square test, shows that this relationship is significant at only the .19 level.

From these statistical analyses alone, we cannot say confidently that a high degree of consistency exists in the interview material. The opportunity for an unequivocal evaluation of validity does not exist in the survey data. We can use only criteria which measure one component of our conceptual definition, and those criteria are not uniformly pure measures of even that one component. Despite this limitation, each test of consistency showed the expected direction of relationship. Since each of these tests is empirically independent, including the sub-tests of the criteria of liking the position of

TABLE 3a

ASSISTANT FOREMEN'S EXPERIENCE OF BEING IN THE MIDDLE BY THEIR RATING OF BEING SECURE IN THEIR SUPERVISORY POSITION

Security in Position	In the Middle	Not in the Middle
Secure	95	102
Insecure	22	18
(Not ascertained)	(...)	(1)
Number of foremen ...	117	121

*Chi-square = .61, 1 df
p = .45

TABLE 3b

ASSISTANT FOREMEN'S ACCEPTANCE OR REJECTION OF BEING IN THE MIDDLE BY THEIR RATING OF BEING SECURE IN THEIR SUPERVISORY POSITION

Security in Position	Accepts being in the Middle	Rejects being in the Middle
Secure	55	20
Insecure	11	8
Number of foremen ...	66	28

Chi-square = 1.73, 1 df
p = .19

*The statistical test was applied only to non-parenthesized cells.

company representative and of self-confidence in the position of supervisor, we can obtain an estimate of the probability of finding five tests of consistency at their respective levels of probability.

Criterion	Probability
Job harder or easier	.08
Likes or dislikes position	.17
Likes or dislikes position (sub-test)	.02
Security in position	.45
Security in position (sub-test)	.19

$-2 \ln p = 21.340$

21.340 evaluated by chi-square with 10 df: $p = .02$

Using the formula for combining independent probabilities, we find that the measures of consistency are significant at the .02 level.

Face validity.—We can demonstrate an element of face validity in our dependent variable by referring to the verbatim transcripts of foremen's responses to the questions asked of them. The questions apparently were meaningful to the foremen. Responses of only 12 of the 250 foremen could not be ascertained for coding purposes. (The survey data provide no further clarification for the reasons for which the responses could not be ascertained—whether they were due to the respondents' lack of comprehension of the question or to the interviewers' failure to ask the question or transcribe the responses legibly.) The following four responses are from foremen who were coded as feeling they are in the middle between workers and management.

It is a tough job because you've got to argue between the men and the company. We know the men are hired to get the work out. If anything comes up between me and the men it has to go to higher management. The foreman's job is a tough job. It's quite a lot like a teacher's job. It all goes with producing work. Management wants you to produce so much work, and the men don't want to do it. . . . You have to fight management and the men to get things moving.

Yes, the foreman does stand exactly there. A foreman's job is tougher because of that. If he had the authority to discharge a man without being misquoted and all the red tape, it would be better. The average foreman can not get close to the men as formerly, for the steward, if he is on his toes, will always be between the foremen and the men. But it is a tough position all right. I would say that the stewards have grievances that originate in their own minds rather than in the other men's minds.

That's the worst element we have. Stand between the two. We don't have the authority to hire and fire. That's the way it used to be, now the men can go to sleep and can't be fired. Management is changing its mind now. Previous to last year they leaned over backwards but its better now.

There is no question that supervision is tougher than it ever was. If management stood behind supervision there would be less trouble. If a man could say no and have someone stand behind him he would only have to say no once or twice, and they would appreciate that he meant business and that would be that. There are so many times here that supervisors have the props knocked out from under them. He says no to a decision that he thinks is unfair, and it goes over his head and they get it anyway and after awhile he gives up fighting.

The next three responses of foremen are examples of those coded "not in the middle."

No, I don't feel that way. When I worked for the union I did everything I could for them so long as it didn't conflict with the contract and with the company rules. Well, I work for the company now and I figure I owe them the same allegiance; I try to maintain the contract and the rules. As long as I do that, I don't see that either side can have any kick coming.

I don't think so. If you go about it in the right way, management and the union are working with you. I work with both of

> them and if I am wrong I'll change but I never have trouble that way. No trouble with the union, management, or men.
>
> I don't think my job is tough. If a foreman has trouble, it is his own fault. I get along with the men and I also am pleasing the management by getting my work out. Some foremen are so much against the union that they cause themselves trouble.

The content of these responses indicate, on the surface at least, that there are real differences among foremen--differences which correspond to the absence or presence of the variable described as a subjective experience of being in the middle between workers and management. If we add this evidence of face validity to the evidence concerning the consistency within the interview responses, we have reason to feel that the responses of foremen, particularly with reference to our dependent variable, are valid measures of their feelings.

Coding reliability.--As we mentioned previously, a systematic check-coding of the interview material was carried out by the Survey Research Center staff during the coding process. In the early phase of the coding process, three interviews out of ten were selected at random for independent re-coding; in subsequent phases of analysis, the rate of check-coding was reduced to two out of ten and finally to one out of every ten protocols. Any difference between coder and check-coder in the 46 re-coded protocols was tabulated as an indication of unreliability.

The most serious sources of unreliability, as far as this thesis is concerned, are those cases in which the coder and check-coder disagreed as to whether a response indicated that a foreman did or did not feel he was in the middle. Fifteen per cent of the 46 re-coded protocols manifested this disagreement. Other less serious

sources of disagreement are those in which one coder believed the foreman's response indicated he felt he was in the middle and the other coder believed the foreman's response could not be ascertained (4 per cent disagreement) and those in which one coder categorized the foreman as not feeling in the middle while the other coder categorized his response as not ascertainable (6 per cent disagreement). Thus, one-quarter (25%) of the sample of re-coded protocols contained one of these three types of disagreement. We should emphasize that this figure very likely underestimates the coding reliability since the protocols were over-sampled during the earlier, and presumably more inaccurate, phases of the coding process. Whatever the exact coefficient of coding reliability may be, the effect of unreliability is to reduce the possibility of finding true empirical relationships which may exist in our subsequent analyses; it will increase the likli-hood of error in accepting false null hypotheses.

Statistical Tests in the Empirical Analyses

In the following three chapters and in Chapter VII of this thesis we will present empirical tests of a series of hypotheses. In most cases the tabulations will be exhibited in frequency tables, although the data occasionally will be rendered in proportions for ease of comparison. In all analyses in which statistical tests of significance are appropriate we have used the chi-square test of significance, evaluated by the appropriate degrees of freedom to show a level of probability. The level of probability describes the confidence with which we may reject the null hypothesis that differences found in the cells of the tables can be accounted for by chance. Although we have accepted a

probability level of .10 or less as the criterion of statistical significance for our analyses, we will exhibit the approximate level of probability (by linear interpolation) for each table.

CHAPTER III

ROETHLISBERGER: DISJUNCTION OF THE FORMAL AND THE INFORMAL ORGANIZATIONS

Preliminary Considerations

In this chapter and the following two chapters we will review the writings of five industrial sociologists who devote their attention to the problems of the first line supervisor. Furthermore, we will summarize the data available among the industrial survey materials which bear on the propositions suggested by these authors. Each chapter will consider a major theoretical approach: Chapter III, that of Fritz J. Roethlisberger and Wilbert E. Moore; Chapter IV, that of Burleigh B. Gardner and William F. Whyte; and Chapter V, that of Donald E. Wray. The chapters will be organized in three sections: (1) a description of the general theoretical orientation of the authors to the structure and functions of industrial units, (2) a review of their specific formulations of the position of foremen within the units and the problems associated with the foreman's position, and (3) a compilation of the evidence with respect to their formulations of the foreman's problems which is available in the survey material.

We should note that the theoretical orientations of the writers overlap to a certain extent, particularly between Roethlisberger, on the one hand, and Gardner and Whyte on the other. The

approaches differ considerably with respect to the variables which are presumed to account for the foreman's difficulties. We must warn the reader that our concern with the different emphases of the authors tends to disguise the similarities among them. The writers whom we review are inclined to be eclectic in their approaches at the expense, we believe, of a systematization of theory. Since one of the objectives of this thesis is to suggest a systematic theory by which we can account for foremen's interiorization of structural difficulties, we feel justified in focussing our attention upon the skeletal arguments of the authors.

Before beginning our review of the works of industrial sociologists, we would like to comment on a limitation involved in our empirical tests of propositions found in the literature. The independent variables by which the writers hypothetically account for the foreman's feeling of being in the middle will be tested under very limiting conditions. Some of the hypotheses imply a change in organizational structure over a period of time; but the data from the survey are cross-sectional for a single period of time. To overcome this, we have relied upon differences within the organization of the single plant (or even among foremen's perceptions of the organizational structure) to provide us with the necessary conditions for empirical tests. For example, Wray suggests that the gradual removal from the decision-making functions of the industrial unit over a period of time has left the foreman discontent with his job. Since our data provide us with no indication of the foreman's decision-making nor his job satisfaction in earlier years, we must compare the satisfactions of

contemporary foremen who feel they do not participate in decision-making with those who feel they do participate in decision-making. There can be no doubt that the plant supervisors, on the whole, do not participate in as many crucial decisions concerning their work as their forerunners did. Consequently, we have to rely on relatively minor differences in such structural variables as the foreman's part in decision-making in order to test many of the hypotheses suggested in the literature. With this limitation in mind, we can proceed with our review of Roethlisberger's approach.

General Orientation

The theoretical orientation by which Roethlisberger approaches the problem of the industrial foremen is elaborated most fully in Management and the Worker.1/ In this work, however, he does not concentrate particular attention on the difficulties of the first line supervisor; references to the foreman are scattered throughout the volume and are incidental to his central concern with the position of workers in the human organization of the plant. In his more recent paper, Roethlisberger brings his theoretical approach to bear on the unique problems of foremen.2/

The essence of Roethlisberger's approach is his conception that the social organization of a factory consists of two systems, a formal organization and an informal organization. Each of these systems has associated with it a particular type of ideological

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1/ Fritz J. Roethlisberger and W. J. Dickson, (Cambridge, Mass.: Harvard University Business Research Studies, XXI, No. 9, 1939)

2/ Fritz J. Roethlisberger, "The Foreman: Master and Victim of Doubletalk," op. cit.

organisation: the central ideology of the formal organisation is expressed in "the logic of cost" and "the logic of efficiency"; while the central ideology of the informal system is "the logic of sentiments." These distinctions are expanded by Roethlisberger:

> In business, as in any organized human activity, there are two sets of social processes going on:
>
> (1) There are those social processes which are directly related to the achievement of purpose and which result in "formal organization." In business, for example, formal organization leads to such things as practices established by legal enactment or policy, specifications, standard methods, standard procedures, standards of time, output, quality, cost, and so on. They are concerned with those means most appropriate to achieve certain ends. And as such they can be changed rapidly.
>
> It should be noted that these manifestations of formal organization are essentially logical in character. Through formal organization man expresses his logical capacities; in fact, it is one of the chief outlets for the expression of man's logical capacities. . . .
>
> (2) There are those spontaneous social processes going on in any organized human activity which have no specific, conscious common purpose and which result in "informal organization." Informal organization leads to such things as customs, mores, folkway, tradition, social norms, and ideals. In business, for example, it expresses itself at the work level in such things as what constitutes fair wages, decent conditions of work, fair treatment, a fair day's work, and traditions of the craft. It takes the form of different status systems: e.g., oldtimers should get preferential treatment; supervisors should get more money than their subordinates; and office workers are superior to shop workers. These are attitudes and understandings based on feeling and sentiment. They are manifestations of "belonging," and they do not change rapidly.
>
> It should be especially noted that these manifestations of informal organization are not logical in character. They are concerned with values, ways of life, and ends in themselves—those aspects of social life which people strive to protect and preserve and for which at times they are willing to fight and even die..3/

3/ Ibid., pp. 61-63.

In Roethlisberger's theory, rank-and-file workers constitute the informal organization and are governed primarily by the "logic of sentiments." Management, which embodies the formal organization, is governed primarily by the "logic of cost" and the "logic of efficiency." Roethlisberger characterizes the top management as follows:

> In their evaluation of the workers' behavior [they] assume that the major inducement they can offer to people to cooperate is financial (i.e., that they are merely providing a livlihood, rather than a way of life); that informal organization is either "bad" or not "present"; and that authority comes from the top, so that no attention has to be given to that authority which is a matter of individual decision and comes from the bottom. This group's whole explicit theory of human cooperation--but not necessarily the practice of it--dates back to the eighteenth century; (a) society is composed of a rabble of unorganized individuals; (b) these individuals are only interested in the pursuit of profit and pleasure; and (c) in the pursuit of these ends the individual is essentially logical. 4/

In addition to his conception of different ideological systems associated with formal and informal organization and his identification of management with formal organization and workers with informal organization, Roethlisberger conceives a differential rate of change within the two kinds of organization. The formal organization, which conforms only to the logics of cost and of efficiency, may be changed rapidly; but the informal organization, in which the values and ways of life are based on sentiment, is highly resistant to change. Resistance of the informal organization is incurred by management when "technical changes are introduced without any attention to what is happening to the members of these groups in terms of their group associations." 5/

4/ Ibid., p. 65.

5/ Ibid., p. 63.

The Position of the Foreman

The critical position of the foreman stems from the fact that he is the point at which the formal and informal organizations contact one another. It is through the first line supervisor that management introduced changes in the informal organization whose members, in resisting the changes, conflict with the supervisor. He "is the key man of management in administering technological changes. He often has the impossible task of taking plans made by specialists without thought of the realities of human situations and relating them to just such situations." 6/ The first line supervisor is responsible for enforcing the standards, the regulations, and maintaining the control of departmental functions required by the logic of the formal organization which are alien to the logic (or non-logic) of the workers' informal organization.

Why is this situation of conflict so commonly internalised by the first line supervisor? In his discussion of the foreman's motivation, Roethlisberger provides an answer. In Management and the Worker, Roethlisberger and Dickson assert that assistant foremen, more than personnel at any other level of management, are concerned with their own advancement. 7/ Their success, in the eyes of management, depends upon their ability to maintain a high level of production. Ability to show a high level of production, in turn, depends upon the cooperation they are able to command from their subordinate workers. Consequently, foremen must maintain satisfactory working relations

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6/ Ibid, p. 64.

7/ Roethlisberger and Dickson, op. cit., p. 369.

with the workers, and yet they are responsible for supervising their department in such a way that these working relations are severely strained.

The management side of these conflicting forces is strengthened by the assistant foremen's peculiar relation to their head foremen. Roethlisberger states that the most important relationship among any personnel in the factory is the "man-boss" relation. Speaking of the foreman in particular,

> He feels a constant need to adjust himself to the demands of his superior and to seek the approval of this superior. Everything that he does he tries to evaluate in terms of his superior's reaction. Everything that his superior does he tries to evaluate in terms of what it means or implies about his superior's relation to him. Everything that his subordinates and workers do he immediately tries to evaluate in terms of the criticism it may call forth from his superior. In some cases this preoccupation with what the boss thinks becomes so acute that it accounts for virtually everything the foreman says or does and all his thinking about what goes on around him. . . .
>
> Thus the foreman, like each individual in the modern industrial structure, is in effect painfully tutored to focus his attention upward to his immediate superiors and the logics of evaluation they represent, rather than downward to his subordinates and the feelings they have. So rigid does the conditioning of supervisors and executives in the industrial structure become in this respect that it is almost impossible for them to pay attention to the concrete human situations below them, rich in sentiments and feelings. 8/

The difficulty of the foreman's position is modified, Roethlisberger says, when the superiors of the foreman are "men of good will"--i.e., persons who, themselves, are not preoccupied with their own superiors or the logic of cost and efficiency and who are skillful in securing cooperative effort from their subordinates. These "men of good will," appearing at all levels in the administrative structure,

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8/ Roethlisberger, op. cit., pp. 57-59.

are not bound by the formally prescribed organization. They are "more interested in getting their human relationships straight than in getting their words and logic straight, more interested in being 'friendly' to their fellow men than in being abstractly 'fair,' and never allow their 'paper work' to interfere with this process of friendliness.9/ By implication, foremen who have "men of good will" as their superiors will not be obliged to maintain formally correct relations with their own subordinates and thus will not be in the difficult position of intermediary between two conflicting social systems.

Empirical Tests

While there are some parts of this analysis of the foreman's position in industry which we cannot evaluate by the survey data, there are other parts which we can examine empirically.

We can test Roethlisberger's suggestion that top management, by virtue of its ideology of cost and efficiency, assumes that workers are motivated primarily by economic considerations, whereas workers actually are motivated by considerations of feeling and sentiment. During the interview, workers were asked,

> As far as you're concerned, what is a good job—what makes a job good?

At the same time, foremen were asked,

> As far as you can tell, what do most of the men in your shop want out of their jobs—what do they look for in their jobs mainly?

The responses of both workers and foremen can be categorized according to economic and non-economic considerations which workers look for in

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9/ Ibid., p. 68.

a job or which foremen (at all levels of supervision) believe workers look for in a job. Table 4 clearly shows that foremen predominately believe that workers are economically motivated with respect to their jobs, whereas only one-fifth of the workers indicate they are economically motivated; most workers are concerned with the non-economic aspects of a job. 10/

Since foremen were asked about the motivation of the men in their own shops and not about the motivation of workers throughout the entire plant, our presentation in Table 4 may exaggerate the amount of inaccuracy on the part of foremen. It is possible that some of the 65% of foremen who believe the workers are economically motivated supervise departments in which the workers are among the 24% who are in fact economically motivated. Further analysis demonstrated that this is not the case--that the workers who are economically motivated with respect to a job are distributed quite evenly throughout all departments in the plant. In 70 of the 72 departments the non-economically motivated workers are in the majority, so that nearly all of the foremen who believe their workers are economically motivated are, in fact, inaccurate.

10/ This material was adapted from A Comparative Study of Worker, Steward and Foreman Attitudes in a Unionized Automobile Factory, op. cit., Table II:12, p. 45. The categories, "Security" and "Material Satisfactions" constitute our category of "Economic Motivation" while the remainder of the categories constitute our "Non-economic Motivation."

It is instructive to note, in the original table, that the "non-economic" motivations of "Job Performance Satisfactions," "Satisfaction with Personal Relationships," and "Satisfaction with Supervision" are mentioned by 36% of the workers as important characteristics of a job, while only 5% of the foremen believe workers consider these important.

TABLE 4

PERCENTAGE DISTRIBUTIONS OF WORKER'S REPORTS OF THEIR MOTIVATIONS WITH RESPECT TO A JOB AND OF FOREMEN'S PERCEPTIONS OF WORKERS' MOTIVATIONS

Kind of Motivation	Worker's Report of What They Look for in a Job	Foreman's Perception of What Workers Look for in a Job
Economic	24%	65%
Non-economic	62	26
Not ascertained	14	9
Total	100%	100%
(Number of cases) ..	(462)	(353)

*Chi-square = 139.52, 2 df
p = .001

*The statistical test was computed on the basis of the raw frequencies.

If we can use this particular question about what workers look for in a job to represent differences in ideology of workers and management and if we can use the responses of foremen at all levels of supervision to represent the management ideology, we have reason to accept Roethlisberger's suggestion that the workers' ideology is relatively close to the "logic of sentiment" and that management, because of its ideology based on the logic of cost and efficiency, misconstrues the true motivations of workers.

Unfortunately, the uniformity of workers throughout the plant with respect to their non-economic motivation does not allow us to discover whether or not foremen of departments in which workers are predominantly motivated economically experience little or no conflict in their position. We have compared the foreman's experience of being in the middle in departments where a relatively high proportion of workers are economically motivated with departments where a relatively low proportion of workers are economically motivated. Table 5 shows that there is no significant difference between assistant foremen of these slightly varying departments with respect to being in the middle.

While there is little variation among working groups with respect to the proportions of economically motivated workers in them, we have shown greater variation in the assistant foremen's perceptions of their workers' motivation. How does the foreman's awareness that workers are not economically motivated affect their feelings of being in the middle? (In the following analysis we have recategorized the responses of assistant foremen into three groups rather than two—foremen who perceive workers' motivations as entirely economic, entirely

TABLE 5

EXPERIENCE OF BEING IN THE MIDDLE AMONG ASSISTANT FOREMEN OF DEPARTMENTS IN WHICH A HIGHER PROPORTION OF WORKERS ARE ECONOMICALLY MOTIVATED AND ASSISTANT FOREMEN OF DEPARTMENTS IN WHICH A LOWER PROPORTION OF WORKERS ARE ECONOMICALLY MOTIVATED

Characteristic of Workers in the Departments	In the Middle	Not in the Middle
Economically motivated	22	18
Non-economically motivated	87	89
Number of foremen	109	107

Chi-square = .40, 1 df
p = .54

non-economic, or mixed, i.e., a combination of economic and non-economic. Since most departments include a few economically motivated workers, the foreman who replies that the motivation of his workers is "mixed" can be considered the most accurate in his response.) Table 6 suggests that when an assistant foreman is aware of the non-economic or the mixed character of his workers' motivations he is more apt to feel that he is in the middle between the workers and management, but the differences do not depart significantly from a chance distribution.

The survey data also allow us to investigate Roethlisberger's hypothesis that an assistant foreman who has as his immediate superior a "man of good will" does not experience conflict in his position. We will consider a superior "of good will" to be a head foreman who perceives workers to be either non-economically motivated or to be non-economically and economically motivated, in combination. Table 7, based upon 108 assistant foremen who work directly under head foremen who either perceive workers' motivations to be economic or to be non-economic and mixed, does not demonstrate the anticipated differences.

Roethlisberger's additional formulation.—In his article on the foreman, Roethlisberger incorporates an additional analysis of the difficulties associated with the foreman's position which has different components than the analysis we described above. One source of the foreman's difficulties, Roethlisberger asserts, is the discrepancy between what his position "ought to be" and what his position "is." Roethlisberger writes, " . . . it is clear that from the point of view of the individual foreman the discrepancy between what he should

TABLE 6

PERCENTAGE DISTRIBUTION OF ASSISTANT FOREMEN'S PERCEPTIONS OF THEIR WORKERS' MOTIVATIONS BY THEIR EXPERIENCES OF BEING IN THE MIDDLE

Experience of Being in the Middle	Economic Motivation	Non-economic Motivation	Mixed Motivation
In the middle	44%	54%	56%
Not in the middle	56	46	44
Total	100%	100%	100%
Number of foremen ...	(93)	(39)	(84)

*Chi-square = 2.69, 2 df
p = .28

*The statistical test was computed on the basis of the raw frequencies.

TABLE 7

ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR HEAD FOREMEN'S PERCEPTION OF WORKERS' MOTIVATIONS

Head Foremen's Perception of Workers' Motivation	In the Middle	Not in the Middle
Economic	22	25
Non-economic	32	29
	—	—
Number of assistant foremen	54	54

Chi-square = .34, 1 df
p = .40

be and what he is cannot fail to be disconcerting."11/ What the foreman "ought to be" is what management asserts foremen are:

"arms of management";

"grass-roots level of management";

"key men in production";

"front-line personnel men".

These are management phreases. Roethlisberger contrasts them with the foremen's own phrases concerning what they "are":

"go-betweeners";

"the forgotten men";

"the stepchildren of industry".

Although Roethlisberger does not extend his analysis beyond this point, he implies that foremen persist in entertaining a misconception about the job they fill. Further, his analysis implies that the source of this misconception lies either in the fact that in the memory of many foremen their job once represented the ideal of being the "arms of management" and that the conditions of the job changed but the memory did not, or in the fact that the misconception is induced contemporaneously by top management.

The survey data yield no clues to the existence of contemporary forces operating on foremen which would raise their expectations of their position to a level higher than their day-to-day job experiences warrant. There is reason to believe, on the contrary that foremen, at least, either do not experience being in the middle or accept this condition as the natural or even ideal characteristic of the foremen's job. (See Chapter VII.)

11/ Roethlisberger, op. cit., p. 53.

Furthermore, the data do not provide bases for an historical analysis which would test Roethlisberger's implication that foremen's job expectations based on their early experiences in the position are applied today to a radically different job situation. Our closest approximation to a test is a comparison between those foremen who have held their position for a long period of time, i.e., who have experienced the foreman's job under more "ideal" conditions, with those who have not been foremen for a long time. For former group should feel more in the middle if Roethlisberger's implied hypothesis is true. Table 8 shows a consistent relationship between the length of time a man has been a foreman and his feeling of being in the middle. (In order to augment the number of cases in the cells of the table, especially those cells showing the longer periods of time, it was necessary to compute the table for all foremen, regardless of level of supervision.)

Wilbert E. Moore: Conflicting Loyalties

Before leaving our discussion of Roethlisberger's approach to the problems of the first line supervisor, we shall consider a brief section on the foreman in W. E. Moore's Industrial Relations and the Social Order.12/ Moore closely follows Roethlisberger's conceptualization which locates the source of foremen's difficulties in the disjunction between the formal and the informal organization of the plant, but he adds a further element to the question of why foremen internalize the conflict between the two types of organization. The loyalties of foremen, Moore says, are subject to contradictory claims. On the one hand,

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12/ (New York: The MacMillan Company, 1948) p. 162.

TABLE 8

PERCENTAGE DISTRIBUTION OF FOREMEN, CLASSIFIED BY THE LENGTH OF TIME THEY HAVE HELD THEIR POSITION OF FOREMAN BY THEIR EXPERIENCES OF BEING IN THE MIDDLE

Experience of Being in the Middle	Less than 1 Year	1 to 5 Years	6 to 10 Years	11 to 20 Years	More than 20 Years
In the middle	14%	49%	48%	51%	60%
Not in the middle ..	86	51	52	49	40
Total	100%	100%	100%	100%	100%
Number of foremen ..	(14)	(98)	(83)	(76)	(45)

*Chi-square = 9.28, 4 df
p = .05

*The statistical test was computed on the basis of the raw frequencies.

foremen represent management, interpret managerial orders, and see that they are carried out. But, on the other hand, foremen frequently are promoted from the ranks of labor, and because of their training in the attitudes of workers plus their understanding of concrete difficulties in translating orders into action, they are likely to represent workers as well.

Empirical test.—We can hypothesize, then, that foremen who owe allegiance both to the workers and to the company will feel in the middle more frequently than foremen who owe allegiance strictly to the company or, if there are such foremen, who are loyal strictly to the workers. We can test this hypothesis in the survey data by using the two codings of foremen's responses which were designed to show the degree of foremen's "identification" with the company and the degree of their "identification" with the workers. These categorizations were made by coders from responses to the entire interview. Coders were asked, first, to read over the protocol of a foreman and to judge to what extent he seemed to be concerned with the interests of the company; they were asked to repeat the process and to judge to what extent he seemed to be concerned with the interests of the men. The degree of concern shown by the foreman for the company and for the men each was described by a three point scale, from "frequently concerned" to "never concerned." (Only one assistant foreman was categorized as "never concerned" with the interests of the company, so in our analysis this dimension was treated as a two point scale.)

We have cross-tabulated the two dimensions to isolate foremen who are highly concerned with both the interests of the men and the

interests of the company in contrast to foremen who are concerned only with the company's interests, only with the workers' interests, or with neither. When the foremen with conflicting loyalties were isolated, we compared them with the remainder of the foremen with respect to their feelings of being in the middle between workers and management. In Table 9 we can see that the data fall in the predicted pattern—those assistant foremen who are loyal both to the company and to the workers are more inclined to feel in the middle than assistant foremen who do not manifest divided loyalties.

Summary of Empirical Tests

Following Roethlisberger's analysis, we have used the striking misinterpretations of the motivations of rank-and-file workers on the part of management personnel to demonstrate the existence of conflicting ideologies of the formal and the informal organizations within the industrial plant. Such uniformity of motivations among groups of workers throughout the plant makes it impossible to locate groups in which the ideology of the informal organization is clearly absent. The position of the foreman would be less difficult under this condition if Roethlisberger's analysis holds. When we divided assistant foremen into two finely distinguished groups—those who supervised a "relatively high" proportion of economically motivated workers and those who supervised a "relatively low" proportion of economically motivated workers—we found no significant difference between them in their feelings of being in the middle. Whether or not foreman are aware of the non-economic motivations of their workers appears to make little difference in their experiences of being in the middle. Similarly, assistant foremen who

TABLE 9

ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR LOYALTIES TO THE COMPANY AND THE WORKERS

Assistant Foreman's Loyalties	In the Middle	Not in the Middle
Loyal to both company and workers	69	58
Loyal only to company or to workers, or loyal to neither	48	63
Number of foremen	117	121

Chi-square = 2.89, 1 df
p = .10

serve under "men of good will"—i.e., under head foremen who are aware of the non-economic motivations of the workers—are equally inclined to feel they are in the middle as assistant foremen who do not serve under "men of good will."

In order to test Roethlisberger's assertion that one source of foremen's difficulties is in the discrepancy between what his job is and what it ought to be, we have drawn two implications: that this discrepancy in foremen's job expectations arises (1) from their memory of the job as it once was but no longer is or (2) from a difference between expectations induced by management and their first-hand knowledge of the job. We have shown indirect evidence supporting the first implication; the longer the foremen have held their position with the company the more they are inclined to feel in the middle. We cannot test the second implication directly, but evidence which we will exhibit in Chapter VII indicates that a high proportion of foremen actually expect their job to be one of mediating conflict between management and workers.

Finally, we have shown evidence consistent with the hypothesis of W. E. Moore that the reason foremen internalize the structural conflicts between the formal and the informal organizations is that they are loyal both to management and to the workers. Although only about one-half of the plant foremen manifest divided loyalties (as we measured them), those who do are significantly more inclined to feel they are in the middle than those who do not have divided loyalties.

CHAPTER IV

GARDNER AND WHYTE: STATUS, AUTHORITY AND COMMUNICATION

The theoretical orientation of Gardner and Whyte with respect to the difficulties of the first line supervisor incorporates many of the features of Roethlisberger's approach, described in the last chapter. But Gardner and Whyte do not rely on the disjunction between the ideologies of management and of the workers *per se* to account for foreman's feelings of being in the middle. They prefer to see the factory as composed of systems of communication and status, certain properties of which create problems for the foremen. Gardner and Whyte develop more fully than Roethlisberger conceptions of the motivational forces operating among plant personnel. Chapter II in Industry and Society and Chapters I and II in Human Relations in Industry provide accounts of the general orientations of Gardner and Whyte; their article, "The Man in the Middle: Position and Problems of the Foreman" and parts of Chapter II and V in Human Relations in Industry focus on the difficulties faced by foremen. 1/

1/ B. B. Gardner, "The Factory as a Social System," Industry and Society, ed. by W. F. Whyte (New York: McGraw-Hill Book Company, Inc., 1946) chap. ii; B. B. Gardner, Human Relations in Industry (Chicago: Richard D. Irwin, Inc., 1947); B. B. Gardner and W. F. Whyte, "The Man in the Middle: Position and Problems of the Foreman," op. cit.

General Orientation

One of the basic elements of an industrial unit, as these authors conceive it, is the coordination process which enables a number of individuals performing a multiplicity of functions to accomplish a common purpose. This process is manifested in communication and authority, as described by Gardner in the following passage:

> Now this complex organism we call a "factory" requires a high degree of coordination between its various parts if it is to operate smoothly and effectively. And to a large extent proper coordination depends upon communication between individuals, between all levels, and between different segments. It is the rare department that can function effectively if it is isolated and out of touch with the rest of the organization.
>
> Of extreme importance are the processes of communication vertically in the structure. To a large extent top management is the center of control and direction and it is constantly communicating downward through the structure. At the same time there is a constant flow of information upward to it. Now the line of authority provides one of the most important channels for this flow; down it, step by step are transmitted orders, often of a very general nature, which are assimilated at each level and translated into more specific orders to be applied to each organization. Thus what starts out at the top as a general directive ends up as a very specific for individuals at the bottom. In the same way information, starting as a mass of specific details at the bottom, is condensed and organized at each level until it reaches the top as a simple set of figures or a report on the desk of the top executive. 2/

There are other channels of communication in addition to the regular line of authority. One of these is "the grapevine," which is the process of passing information on from one friend to another without regard to the formal lines of authority. The grievance machinery institutionalized by trade unions in many contemporary industrial organizations constitutes another channel of communication, although it most commonly processes only "upward" communication.

2/ Gardner, "The Factory as a Social System," op. cit., pp. 12-13.

In addition to the channels of communication, industrial plants comprise a number of "status systems," of which the supervisory hierarchy (the line of authority) is one, according to Gardner and Whyte. An organization chart shows the series of status levels of the supervisory hierarchy from worker to company president.

> In this system each person at one level outranks those in the levels below. He is somehow superior, his ideas carry more weight, and he is deferred to by those below. Each in turn gives deference to those above so that throughout the system we see people acting toward others in ways expressive of their relative positions. 3/

The supervisory status system is referred to by the authors as the formal status system and is roughly equivalent to the formal organization as conceived by Roethlisberger.

The other status systems which Gardner and Whyte describe are similar to Roethlisberger's informal organization in the fact that they are customary and traditional rather than logical, and they are not based on conscious, common purposes. Examples of such systems of status differentiation are sex, wages, seniority, and type of work (especially in the distinction between office and shop work).

Going beyond the structural components of the factory, Gardner and Whyte assume that the personnel of the factory are motivated by two basic considerations: status and authority. Individuals desire "to be recognized as a superior group" and struggle to maintain or enhance this status; and individuals are intolerant of the situation in which the various status systems which impinge upon a person are not uniform (as, for example, when the oldest male employee does not

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3/ Ibid., p. 8.

have the highest pay and top position or when a supervisor is not paid in accordance with his rank). 4/ Individuals also are motivated to maintain and increase their authority and scope of action and decision. This motivation is most manifest among supervisory personnel, according to Gardner and Whyte, and changes in the plant which threaten to reduce persons' authority (or status) are resisted by them. 5/

The desire of personnel to enhance their status, especially with respect to the supervisory hierarchy, creates an interesting problem for the communication process in the formal line of authority. In a way similar to Roethlisberger, Gardner and Whyte consider the "man-boss" relationship one of the most important in the factory, at least as far as the "man" is concerned. "The opportunities for advancement largely depend upon the relationship with the boss; he is the one who rewards and punishes; he determines who will get a chance at a better job, or a raise in pay, or other recognition." 6/ In the downward communication process the great concern with the boss encourages over-reaction to his commands or misinterpretations of unimportant comments. In the upward communication process distortion of information similarly occurs, as Gardner writes in the following passage:

> Thus we see each individual in the line acting as a filter who sorts over the information coming to him and carefully selects what he will pass on to his boss. The boss always responds most favorably to good news, so there is a tendency for good news to go up the line quite easily and rapidly. . . . On the other hand, bad news meets certain barriers; everyone is reluctant to communicate his mistakes or failures. The what-will-the-boss-think-of-me feeling acts as a brake upon full and rapid reporting of

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4/ Ibid., pp. 10 and 15.

5/ Ibid., pp. 15-17.

6/ Ibid., p. 11.

things which go wrong. It encourages delays, it fosters alibis, it develops skill in the tactful presentation of bad news. 7/

The importance of "the boss" to the plans of subordinates to rise in the supervisory hierarchy leads Gardner to characterise plant personnel as "looking upward along the line of authority." He continues,

> Attention is directed toward those above rather than toward those below. Each is more alert to the actions, attitudes, and expectations of his superior than to those of his subordinates. Each lies awake worrying over how his superiors judge him but gives only passing thought to how his subordinates feel about him, and, therefore, each is apt to feel cut off from his superiors and to feel that the boss has little time or interest for him. 8/

The Position of the Foreman

Gardner and Whyte's general orientation differs importantly from that of Roethlisberger in that the former conceive the factory's informal status systems to affect the behavior of plant personnel at all levels. Roethlisberger identifies the informal organisation and its ideology strictly with the rank-and-file workers and asserts that the ideology of the formal organisation alone influences the behavior of management personnel. The disjunction between the two organisations creates problems unique to first line supervisors. While Gardner and Whyte incorporate this formulation in their writings, it does not hold a central place in their own theorisation. 9/ Instead, they trace the problems of the foreman to dysfunctions of the communication processes

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7/ Gardner, Human Relations in Industry, op. cit., pp. 28-29.

8/ Gardner, "The Factory as a Social System," op. cit., p. 12.

9/ For Gardner's comments on the foreman's job as the meeting point between management and workers, see Human Relations in Industry, op. cit., pp. 40-51 and "The Factory as a Social System," op. cit., p. 7.

or to changes in industrial organization, either of which may threaten the status or scope of authority of supervisors. Gardner and Whyte believe that certain conditions in present-day industry have made foremen feel they are no longer part of management and no longer have the scope of authority requisite for the control of their own success. These conditions represent threats to both the status and authority desires of foremen and lead foremen to feel they are "in between" management and workers.

Foremen feel apart from management.---One of the most poignant conditions which results in the feeling among foremen of being separated from management and which seriously threatens their advancement to a full-fledged management position is that of inadequate communication with their bosses. According to Gardner and Whyte the superiors, themselves, are "looking upward along the line of authority" and are little concerned with their subordinates.

> Foremen ask, "How can the boss judge us when he seldom sees us?" And this complaint becomes stronger in the larger companies with many levels of authority where "your own boss may know but it's his boss that makes the decision." 10/

An additional condition of contemporary industrial plants which leads to the feeling of being in the middle among foremen is the restricted opportunities for advancement in the supervisory hierarchy. Gardner writes,

> With the increasing size of organizations, [the foreman] has become more and more cut off from the top and in many firms his superiors are now engineers and technicians, often brought in from outside the organization. He often feels that the former channels of advancement are now blocked. Thus he feels more and more that he is only a small cog in a big machine and that

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10/ Gardner and Whyte, op. cit., p. 25.

> he is not really part of management but only a tool to be used as management sees fit. 11/

Restriction of opportunities for advancement is a particularly severe condition for untrained supervisors in contemporary industry. Gardner and Whyte point to two classes of supervisors who are especially prone to feelings of being in the middle: the "old-timers" who have had little formal training and no experience in other industries, and the untrained "newcomers" whose "chief source of strength is aptitude and ambition." 12/ Trained personnel, on the other hand, are less inclined to feel apart from management.

A third condition in present-day industrial concerns which Gardner and Whyte believe contributes to foremen's feelings of being in the middle is the discrepancy between the pay which foremen receive, which commonly is not much higher than the workers whom they supervise, and their position in the supervisory hierarchy. This condition "lessens the prestige of the job and makes them wonder where they stand with management." 13/ (From the authors' analysis referred to earlier, we could expect this condition to be intolerable also by virtue of the fact that two systems of status evaluation in which foremen participate--pay and rank--are not coordinate with one another.)

Foremen have lost authority.--Gardner and Whyte enumerate a number of conditions in industrial organization which make foremen believe they have lost control over the factors on which enhancement of their status depends. One such condition which the authors believe

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11/ Gardner, "The Factory as a Social System," op. cit., p. 19.

12/ Gardner and Whyte, op. cit., p. 24.

13/ Gardner, "The Factory as a Social System," op. cit., p. 48.

is particularly critical is "short-circuiting the line" of formal communication. In unionized plants the shop steward can go over the foreman's head with workers' grievances, grievances which frequently arise out of the foreman's own actions and decisions as the immediate supervisor of the workers. The foreman

> is forced to think in terms of satisfying both his superiors and his subordinates. He has to give attention to the workers as well as the work, and neglect of either may bring criticism from above. Thus he is, in a way, caught in the middle between his superiors and his subordinates. This situation often gives a foreman feelings of great insecurity; he feels that he is losing his authority and control. 14/

The union plays a large part in the decimation of the foreman's authority, in the view of Gardner and Whyte. The supervisor's freedom of action becomes limited as unions grow in power; he must take precautions lest he offend his subordinates.

> And what is often the bitterest pill is the fact that through the union the workers can get a hearing when he who is part of management is ignored. Thus he is caught between the pressures from above and below. 15/

The union is not the only source of the foreman's loss of authority. Gardner and Whyte point out that contemporary industrial organization has removed powers and rights of foremen—most significantly, the power to hire and fire—to other locations in the company structure. The power to hire and fire was "thought indispensable to the foreman if he were to maintain his authority and prestige with his work force." 16/ But this important power has been lost to foremen by management's establishment and extension of plant-wide employment and personnel procedures.

14/ Gardner, Human Relations in Industry, op. cit., p. 105.

15/ Gardner, "The Factory as a Social System," op. cit., p. 2[illegible].

16/ Gardner and Whyte, op. cit., pp. 20-21.

As a consequence of the foreman's loss of authority, he is apt to feel that control over conditions leading to the maintenance or enhancement of his status lies with his subordinates as well as with persons in higher supervisory positions. He faces the necessity of getting his subordinates to do a good job, and yet his freedom of action is restricted. Gardner writes, "Thus they feel that their own success is at the mercy of those below and that all too often they are blamed for the failure of their subordinates."17/

Empirical Tests

The survey data allow us to ask the direct question, Do foremen, in fact, feel apart from management? According to Gardner and Whyte's analysis, foremen do feel separated from management and this feeling leads to their experience of being in the middle between workers and management. Generally speaking, first line supervisors in the plant feel they are a group distinct from management. From their responses throughout the interview, assistant foremen were coded according to whether they feel as though they are part of higher management or whether they feel they are part of a differentiated group. Eighty-two per cent of the 221 assistant foremen whose interview protocols could be coded were judged to feel as though they are part of a differentiated group; only 18 percent feel they are part of higher management.

Following through Gardner and Whyte's analysis, we could expect that those foremen who believe they are part of higher management will infrequently feel they are in the middle between workers

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17/ Gardner, "The Factory as a Social System," op. cit., p. 12.

and management. Table 10 shows precisely the converse. It is those foremen who believe they are part of a differentiated group who are least inclined to feel they are in the middle, and those who believe they are part of higher management more often feel they are in the middle. We will consider this finding further in Chapter VII.

As we mentioned in the preceding section, Gardner and Whyte postulate that one of the conditions which may lead to a feeling on the part of foremen of being in the middle is that of inadequate communication between the foreman and his immediate superior. There is evidence in the survey material to support the hypothesis that those assistant foremen who report that their superior is relatively inaccessible to them are more inclined to feel they are in the middle than foremen who report that their superior is readily accessible. Foremen were asked,

> Can you get to him /the man you work under/ when you have problems or is he a hard man to reach?

Although practically all of the assistant foremen (92%) felt that their superior was available, responses were categorized so that a discrimination could be made between foremen who felt that "his boss was easily available—he could get to him anytime he needs to—the boss was never too busy" and other foremen who merely replied that "his boss was available." When assistant foremen are dichotomized according to those who feel their superior is "readily available" and those who feel he is "relatively unavailable," we see that the former are less inclined to be in the middle "table 11), as predicted by Gardner and Whyte.

We can show some further empirical tests bearing on Gardner and Whyte's hypotheses concerning differences among foremen according

TABLE 10

PERCENTAGE DISTRIBUTION OF ASSISTANT FOREMEN'S STATUS WITH RESPECT TO MANAGEMENT BY THEIR EXPERIENCES OF BEING IN THE MIDDLE

Experience of Being in the Middle	Part of a Differentiated Group	Part of Higher Management
In the middle	30%	55%
Not in the middle	70	45
Total	100%	100%
Number of foremen	(40)	(181)

*Chi-square = 8.36, 1 df
p = .005

*The statistical test was computed on the basis of the raw frequencies.

TABLE 11

ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR PERCEPTIONS OF THE AVAILABILITY OF THEIR SUPERIORS

Availability of Superior	In the Middle	Not in the Middle
Boss is readily available	57	74
Boss is relatively unavailable ..	55	43
Number of foremen	112	117

Chi-square = 3.57, 1 df
p = .06

to their amount of training and level of experience and the effects of these on their feelings of being in the middle. According to the authors, old-timers (1) "whose experience has been confided to one industry" and (2) "whose formal training has been very slight" are more inclinedto feel insecure than old-timers with broader experience and greater training. Simiarly, relative newcomers with little formal training are more apt to feel in the middle than newcomers with formal training. The survey data provide information concerning (1) length of time a foreman has been with the company, (2) whether or not he has ever had experience in another industry, and (3) whether or not he is skilled. On the basis of this information, we have isolated the "old-timers" who have been with the company over 25 years, who are skilled mechanics, and who report that they have worked for other companies besides the present one. In Table 12a we have compared their evaluations of being in the middle with "old-timers" who neither are skilled nor have worked elsewhere, but the difference between them is not significant. (In order to increase the number of cases, we have included head foremen in this analysis.)

A similar comparison between skilled and unskilled "relative newcomers" (who have been with the company 15 years or less) indicates that there are no differences between their feelings of being in the middle which could not be attributed to sampling error (Table 12b). Consequently, our data fail to support these two hypotheses.

Another condition in present-day industry which Gardner and Whyte cite as contributing to foremen's feelings of being distinct

TABLE 12a

"OLD-TIMER" ASSISTANT AND HEAD FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR LEVEL OF TRAINING AND EXPERIENCE IN OTHER INDUSTRIES

Level of Training and Breadth of Experience	In the Middle	Not in the Middle
Skilled mechanics with experience in another industry	25	28
Non-skilled without experience in another industry	3	8
Number of foremen	28	36

Chi-square (corrected for continuity) = .77, 1 df
p = .42

TABLE 12b

"NEWCOMER" HEAD AND ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR LEVEL OF TRAINING

Level of Training	In the Middle	Not in the Middle
Skilled mechanics	9	18
Non-skilled	8	11
Number of foremen	17	29

Chi-square = .37, 1 df
p = .57

from management and consequently to their experience of being in the middle is the lack of differentiation between their salary and the pay of the workers whom they supervise. The survey data show a wide overlap in the ranges of pay received by assistant foremen and by workers, although assistant foremen on the average receive a higher wage than workers. About one-half of the workers (53 per cent) receive between $375 and $425 per month while only 39 per cent of the assistant foremen receive $425 or more monthly.

In order to investigate the effect on the foremen of supervising workers whose pay is not highly differentiated from the foreman's own pay, we proceeded in the following way. We separated departments in which most of the assistant foremen who receive less than $425 per month feel they are in the middle from departments in which most of the foremen who receive less than $425 per month feel they are not in the middle. Then we compared the proportions of workers in these two groups of departments whose wages are not highly differentiated from the pay of the foremen—i.e., proportions of workers who earn $320 or more per month. We would expect to find on the basis of Gardner and Whyte's hypothesis, that there is a higher proportion of highly paid workers in departments in which foremen are predominantly in the middle than in departments in which foremen are not in the middle. Table 13 shows that this is the case.

We are ready to consider tests of the propositions that the foreman's lack of authority in the work situation and consequently, his loss of power to control his own success results in a feeling on his part of being in the middle between workers and management. The

TABLE 13

PERCENTAGE DISTRIBUTIONS OF WORKERS IN DEPARTMENTS IN WHICH ASSISTANT FOREMEN WHO EARN LESS THAN $425 MONTHLY ARE PREDOMINANTLY IN THE MIDDLE OR ARE PREDOMINANTLY NOT IN THE MIDDLE BY WAGES OF WORKERS IN THEIR DEPARTMENTS

Workers' Wages	*Departments in which Assistant Foremen are Predominantly...	
	In the Middle	Not in the Middle
$320 or more monthly	74%	47%
Less than $320 monthly	26	53
Total	100%	100%
Number of workers	(88)	(58)

Chi-square = 11.19, 1 df
p = .001

*Number of departments for the two groups is 23 and 19, respectively; the number of assistant foremen is 10 and 11, respectively.

most direct test of this proposition is suggested by Gardner and Whyte's statement that foremen believe their "success is at the mercy of those below"—i.e., the workers whom they supervise—and that they are apt to be blamed for the shortcomings of the workers. We have combined two kinds of information from foremen for our test. First, foremen were asked,

What are the toughest problems you have to meet as a foreman?

Can you give me an example of what you mean?

We categorized the problems which the foremen mentioned according to those which seemed to stem from the workers and those which did not. Examples of problems which were considered to stem from the workers are:

Motivating men to work;

Seeing that men observe plant rules;

Efficiency in operation, keeping down waste.

Examples of problems foremen mentioned which were not considered to stem from workers are:

Maintaining equipment in good condition;

Planning or organising production;

Poor materials; insufficient supply of material and tools.

We assume that foremen who say their toughest problems are those which involve their relations with workers are more likely to believe their success is "at the mercy of those below," while those foremen who say their toughest problems are of another sort are less inclined to believe they are dependent upon their workers for success.

Second, we have a means of measuring the opportunity for foremen to be blamed for the workers' failures, although it is not a necessary indication that they are blamed. Foremen were asked,

> In general, how satisfied is management with the production it is getting in your shop?

We assume that there is greater opportunity for foremen to be blamed for workers' failures if the foreman believes that management is dissatisfied than if he thinks that management is satisfied with the production in his shop.

Taking these two sets of data together, we have compared assistant foremen who see their major problems as stemming from the workers and who believe that management is dissatisfied with production with assistant foremen at the other extreme who do not see their toughest problems as coming from the workers and who feel management is satisfied with production in their shop. In conformity with Gardner and Whyte's analysis, foremen who believe their "success is at the mercy" of their subordinates are significantly more inclined to feel they are in the middle than foremen who do not believe their success depends upon their subordinates (Table 14).

The survey data provide us with no way of comparing foremen who have lost the scope of authority they once had with foremen who still retain their broad scope of authority.

We are limited in our attempts to test Gardner and Whyte's hypothesis concerning the effects of the foreman's gradual loss of authority and control by the lack of appropriate historical data among the research material. Two questions asked of foremen yield "quasi-historical" data on the point in the sense that they were asked

TABLE 14

ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR PERCEPTIONS OF THE SOURCE OF THEIR "TOUGHEST" PROBLEMS AND THEIR PERCEPTIONS OF MANAGEMENT'S SATISFACTION WITH PRODUCTION IN THEIR SHOP

Perceptions of Problem Source and Management's Satisfaction with Production	In the Middle	Not in the Middle
Problems stem from workers and company not satisfied with production	21	13
Problems do not stem from workers and company satisfied with production	13	23
Remainder	52	56
Number of foremen	86	92

Chi-square = 4.60, 2 df
p = .10

whether or not they had observed changes in their jobs over a period of time. While the observations of foremen do not necessarily indicate changes in the structural conditions of their jobs, their beliefs that changes have occurred may actually be more significant.

As we have described in Chapter II, foremen were asked,

> In general, would you say the job of foreman has been getting harder or easier since you have been here? Why is that?

On the basis of the reasons foremen gave (either for the job getting harder or getting easier), we isolated these reasons which indicate that foremen perceived their control has diminished or that they now shared responsibility with others. For example, two reasons why the job has become harder which indicate that the foreman has lost control are,

> Foreman has lost authority to the stewards (or union)--has lost control of the men;
>
> Seniority rules govern--can't put competent men in right jobs.

Two sample reasons why the job has become easier which show that the foreman now shares responsibility are,

> Steward helps keep men in line, help run department;
>
> With seniority, layoff is almost automatic.

When we compare assistant foremen who mention loss of control and sharing of responsibility with assistant foremen who fail to mention either of these, we find no significant differences between them in their experiences of being in the middle. (Since foremen commonly gave two reasons why they felt the job was getting harder, we have shown the first and second reasons they mentioned separately in Table 15.)

TABLE 15

ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THE REASONS THEY GIVE FOR FEELING THEIR JOB IS HARDER (OR EASIER)

First Reasons Job is Harder (Easier)	In the Middle	Not in the Middle
Loss of control, sharing of responsibility	41	38
Other reasons	65	65
Number of foremen	106	103
Second Reasons Job is Harder (Easier)		
Loss of control, sharing of responsibility	20	16
Other reasons	22	23
Number of foremen	42	39

First reasons: Chi-square = .07, 1 df
p = .80

Second reasons: Chi-square = .36, 1 df
p = .57

Another question of a similar nature which was asked of foremen is,

How has the job of steward changed since you have known it? Responses were categorized as "they have more power, authority" and "unchanged" and "they have less power, authority." We assume that foremen who reply that stewards have more authority believe that the increase in authority is at the expense of the foreman's authority. Table 16 shows that there are no significant differences between assistant foremen who believe the steward's authority has increased and those who believe it has not increased with respect to their feelings of being in the middle.

Summary of empirical tests.--Gardner and Whyte propose a number of conditions in contemporary industrial plants which lead foremen to feel (1) that they no longer are part of management and (2) that they have lost the scope of authority requisite to control their own success. These feelings on the part of foremen result in their subjective experiences of being in the middle between workers and management, according to Gardner and Whyte's formulation.

Our direct test of the relationship between foremen's feeling of being part of a differentiated group and their experience of being in the middle exhibited a negative correlation; that is to say, foremen who felt they were part of higher management were the ones most inclined to feel they were in the middle. Two of the conditions which Gardner and Whyte proposed as leading to a feeling of being separate from management--unavailability of the foreman's superior and lack of differentiation between the pay of the foreman and of his workers--are significantly related to foremen's feelings of being in the middle.

TABLE 16

ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR PERCEPTIONS OF CHANGE IN STEWARD'S AUTHORITY

Perceptions of Steward's Authority	In the Middle	Not in the Middle
Stewards have more authority	32	43
Stewards' authority is unchanged or less	49	48
Number of foremen	81	91

Chi-square = 1.05, 1 df
p = .31

We found no relationship between the feeling of being in the middle among trained and untrained foremen, as had been hypothesized by the authors.

In our direct test of the hypothesized relationship between the belief of foremen that their subordinates hold one key to the foremen's own success and their feeling of being in the middle we found confirming evidence. The "quasi-historical" data from foremen concerning their general loss of authority and specifically their loss of authority to the union steward exhibited no significant relationships with their feelings of being in the middle.

CHAPTER V

WRAY: THE REDISTRIBUTION OF MANAGERIAL FUNCTIONS

The primary purpose to which Wray addresses himself in his doctoral dissertation is to describe and to account for the redistribution of the foreman's managerial functions in industrial organization which has occurred in recent years. 1/ In a later article Wray directs his attention more closely to the difficulties which the change in the foreman's functions has brought to occupants of the position. 2/

General Orientation

Wray views a factory essentially in terms of the various focal points in the organization at which action is originated for the participating personnel. He conceives of the origination of action as a process of decision-making. That decision-making which concerns the technical operations within the plant is distributed on two dimensions, a horizontal and a vertical dimension.

The horizontal dimension of industrial units, which has developed most strikingly since the turn of the century, is composed of specialized functional divisions within the plant "to control particular

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1/ Donald E. Wray, "The Foreman and Managerial Functions," (Unpublished Ph.D. dissertation, University of Illinois, 1948).

2/ Wray, "Marginal Men of Industry: The Foremen," op. cit.

aspects of factory activity by the application of technical knowledge in such fields as engineering, cost accounting, production control, etc." 3/ The technically trained personnel of the specialized divisions have not only advisory capacities but also have power to implement their own decisions--to initiate changes and control conditions in the production process. Wray regards the functional groups as semi-autonomous centers for the origination of action toward other divisions of the factory.

The vertical dimension of the plant is the (familiar) form of social organization composed of a number of supervisory levels extending from the top executive down to the lowest supervisor, the number of ranks depending upon organization size and the variety of activities involved. "The highest ranks in this hierarchy are 'top management'; they constitute the center of decision making in the whole system." 4/ Wray's description of the vertical dimension of the plant is identical to Gardner and Whyte's characterization of the supervisory hierarchy with the exception that Wray emphasizes the decision-making processes while Gardner and Whyte emphasize the status evaluations associated with the hierarchy.

A focal point for the origination of action which lies outside of the horizontal and vertical extensions of the industrial unit is in the union organization characteristic of most present-day plants. According to Wray, introduction of the union has led to the creation of special functional divisions <u>within</u> management in which decision-making power with respect to employer-employee relations is concentrated.

3/ "The Foreman and Managerial Functions," <u>op. cit.</u>, p. 18.

4/ <u>Ibid.</u>, p. 17.

The Position of the Foreman

Wray believes that two developments of the last fifty years have redistributed the decision-making functions in the industrial unit. Before the advent of "scientific management" and the growth of trade unions foremen had important responsibilities in originating action in both the areas of technical operations and of employer-employee relations.

> In an earlier period, both worker and foreman were presumed to have the personal knowledge and training necessary to perform their respective jobs, and they were relatively free to perform their functions as they saw fit. Before the introduction of time and motion study, job classifications and wage structures, performance tests, scheduling, etc., the worker was free to decide how to do his job and had a degree of freedom within his own work situation. The foreman in the past ran his shop according to his own experience and on the basis of his personal knowledge. 5/

With the development of "scientific management"—i.e., the introduction of systems of specialized functional controls—the major decision-making powers with respect to the technical operations of production have moved from foremen to the various functional divisions of management. Today the foreman "must operate within a framework of rules which have been imposed by a higher level of management without his own consent or participation." 6/ In a similar manner, the introduction of the union caused the former decision-making powers of foremen with respect to employer-employee relations to be redistributed between special divisions of management and the union organization.

But the first line supervisor is left with the highly important functions of communication and coordination between the shop and higher

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5/ Ibid., p. 195.

6/ Loc. cit.

management, Wray maintains. "The foremen appear to have developed toward a kind of administrative and coordinating function which is quite different from the traditional definition of their position." 7/

If the foreman's job merely has undergone redefinition, why is it that foremen find their job peculiarly precarious? Wray answers this question in a manner very similar to the formulation of Roethlisberger which we discussed in Chapter III. Wray believes that management holds an incorrect assumption of the position of first line supervisors within the plant, based upon the once valid but no longer applicable conception of the foreman as the "key man of management," "the firing line in union-management relations," and "the most important link between management and the worker." 8/

> This concept, variously expressed, rests on the assumption of a unitary system of control and two-way communication; it is at once an ideal and an assumed norm of industrial organization. It minimizes or ignores the impact of managerial specialization and worker unionization. 9/

The divergence between managerial expectations growing out of the traditional conception of foremanship and the realities of the foreman's position has, according to Wray, "created widespread anxiety among first line supervisors." 10/ He expands this statement in his article by drawing on the concept of "marginality."

7/ Ibid., p. 200.

8/ "Marginal Men of Industry: The Foremen," op. cit., p. 298.

9/ Loc. cit.

10/ "The Foreman and Managerial Functions," op. cit., p. 203.

> In short, the position of foreman has some of the characteristics of management positions but lacks other crucial ones. Such marginal positions are common in society, and there is reason to believe that they are especially difficult to occupy effectively and with peace of mind. With respect to management, the foreman's position is peripheral rather than in the middle. . . .
>
> It is characteristic of such marginal positions that the people who occupy them consider that they are special victims of the disparity between social norms and social reality. Foremen express this in the phrase, "They say we are part of management, but they don't treat us that way." The implication is that they feel pressed to live up to the role of members of management, without being given the reward of full participation. This is a common feeling of people in "minority" or "marginal" positions. It presents them with a dilemma which results in a good deal of personal conflict. 11/

This formulation of Wray's places Roethlisberger's conception of the discrepancy between "what is" and "what ought to be" in a broader framework of social theory; and it indicates that a conflict between real and ideal expectations can be the source of discomfort or even anxiety among the subjects of conflicting expectations.

Wray mentions in passing another reason why the redefinition of the foreman's job represents a problem for the supervisors who are involved. He says without further elaboration that the foremen in his studies "had uniformly experienced a reduction in their decision-making powers and a concomitant reaction of being distinct and separate from the real center of managerial action." 12/ This unelaborated analysis is similar to the formulation of Gardner and Whyte discussed in the previous chapter in which they account for foremen's feelings of being in the middle by the existence of conditions which make foremen feel apart from management and devoid of authority.

11/ "Marginal Men of Industry: The Foremen," op. cit., p. 301.

12/ "The Foreman and Managerial Functions," op. cit., p. 199.

Empirical Tests

While the survey materials do not provide the information necessary for testing Wray's hypothesis concerning the effects of the gradual relocation of decision-making powers over a period of time, they do indicate that first line supervisors contemporaneously differ in the extent to which they participate in shop decisions. The magnitude of the differences probably is relatively small compared to the difference between contemporary foremen and foremen of the early 1900's. For example, foremen in the surveyed plant at the present time are expected by management to settle only minor grievances involving a minimum of expenditure which are brought up by their workers and shop stewards; more important matters, such as standards, wages, or number of men working in a group, are to be referred to senior company officers. Decision-making powers of these foremen today undoubtedly are considerably less than those powers of their antecedents. Despite this, the fact that there are differences among foremen with respect to their participation in running their department permits us to test Wray's hypothesis that removal from participation in decisions is associated with subjective experiences of difficulty in the foreman's job.

Foremen were asked in the interviews,

> Does the man you work under call you in when he has to make decisions about the work or does he like to make most of the decisions himself?

From responses to this question we have categorized each assistant foreman as "feeling he participates" and "feeling he does not participate." In accordance with Wray's hypothesis, we find in comparing these two groups of foremen that those who feel they do not participate

in shop decisions are significantly more inclined to feel they are in the middle between workers and management than those who feel they do participate (Table 17).

Wray also accounts for the causes which lie behind the relocation of decision-making in industry by referring to the development of "scientific management" and the growth of trade unions. The survey data do not permit us to test the adequacy of his reasoning on this point.

Wray's formulation of the disparity between management's expectations of foremen and the realities of the foreman's job as another source of foremen's experiences of conflict can be tested by the same analysis which we have applied to Roethlisberger's similar hypothesis in Chapter III (p. 46, above). To obtain that test we assumed that foremen can be affected by the "unrealistic" norms of management in two ways—by internalizing management's norms which they learn from such cues as statements made by top management personnel or by continuing to accept the norms which once were "realistic" but which no longer are. Our sole test of the proposition was based upon the latter assumption; we showed that persons who have held the job of foreman for a long time are more inclinedto feel they are in the middle than persons who have held the foreman's job only a short time and, presumably, have had no opportunity to experience the job under "more favorable" circumstances.

Summary of empirical tests.—While the survey materials provide us with only one new set of data to test Wray's approach to the problems of foremen, the hypothesis which we can test is a critical

TABLE 17

ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR FEELING OF PARTICIPATION WITH THEIR SUPERIOR IN SHOP DECISIONS

Participation in Shop Decisions	In the Middle	Not in the Middle
Feeling he participates	64	84
Feeling he does not participate	44	33
Number of foremen	108	117

Chi-square = 3.92, 1 df
p = .05

one in his theory. Our analysis supports his contention that the removal of foremen from participation in the decision-making functions in the production process is related to their subjective experiences of being in the middle between management and the workers.

CHAPTER VI

A THEORY OF ROLES

In the first section of this chapter we will develop a social psychological theory of roles with which it is possible systematically to account for the conditions under which certain structural difficulties associated with a position come to be internalized as psychological problems for the persons who occupy the position. Our theoretical development will be guided by our particular interest in the problem of role conflict which, as we will discuss in the second section of this chapter and in Chapter VII, appears to be a fruitful way of conceptualizing the situation of industrial foremen, of the men who are "in the middle" between workers and management. Despite the fact that our immediate interest is in the position of the industrial foreman, the theory is intended to be sufficiently general to apply to an analysis of difficulties associated with positions in any social system whether in industry or outside of industry. Moreover, we will attempt to formulate our theory in a way that will implement empirical investigation; although we will not provide operational definitions in this chapter, our conceptual definitions are designed to facilitate the derivation of operational measures.

In the second section of this chapter we will show how certain aspects of the analyses of foremen's difficulties, described in the

preceding three chapters, may be reformulated in terms of role theory in order to throw more light on the conditions under which individual foremen may or may not feel subjectively that they are in the middle. It is important for the reader to recognise that our formulation is not intended to replace the more comprehensive theories of institutional functioning and change which have guided the analyses of the various authors. Underlying the analyses of Roethlisberger and Gardner and Whyte is the conception that formal and informal organizations within a social system are dynamically related to one another and that the social system, as a whole, tends toward a state of equilibrium with respect to its environment. 1/ A theory of this order is designed to account for changes in organisational structure in general; role theory is presented here to account for the behavior of individual persons within the structural framework. In this sense role theory is complementary to theories of institutional functioning rather than an alternative to them.

Role Concepts

Role theory is valuable as a system of concepts which "bridges" two orders of analysis—the structural (or cultural) and the behavioral. In this thesis we will develop the theory in order to answer the question, How can structural phenomena affect the behavior of an individual person? Had we asked the reverse of this question, How can the behavior

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1/ For a recent attempt to formulate a theory of social systems at this level, see George C. Homans, The Human Group (New York: Harcourt, Brace and Company, 1950). Homans illustrates his thesis with case material drawn from the writings of Roethlisberger and Dickson and Whyte.

of an individual affect structural conditions? we would have emphasized different aspects of role theory than those we will present here. 2/

Our theory of roles is comprised of two kinds of concepts (corresponding to the structural and the behavioral orders of analyses): concepts which refer to the properties of groups and must be measured by observing the interactions of group members or the group products of the interactions, and concepts which refer to the properties of individuals and must be measured by observing the overt behaviors of these individuals. Following is a list of the more important of the two types of concepts which we will discuss in this section:

Structural Concepts	Behavioral Concepts
Role	Role behavior
Position	Motivation
Social role	Perception
Interpersonal role	Conformity-deviation
Role conflict	

The role behavior of an individual more or less conforms to the expectations of his behavior--his role--by virtue of a complex process involving motivation, perception, maturation, and ability--summed up in the concept of "role-taking" which was initially described by G. H. Mead. 3/ Role-taking is the connecting link between the structural analyses and the behavioral analyses. Since the process has been described fully in other places and since we are primarily interested

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2/ We have depended heavily on the contributions of T. M. Newcomb for our basic approach to the theory of roles. See especially Chapters VIII, IX, XII, and XIII in his Social Psychology, op. cit. In some instances, particularly concerning the structural properties of role theory, we have drawn distinctions which are not found in his writings.

3/ Mind, Self, and Society, Charles W. Morris, ed. (Chicago: University of Chicago Press, 1934).

in the structural conditions which create difficulties for an individual in conforming to his role, we will discuss only those aspects of role-taking pertinent to an understanding of the structural problems.

Role concepts in the literature.--The distinction between the structural and behavioral orders of role concepts has not been made consistently in the social science literature. In fact, the concept of role itself has been used to refer to either order of analysis depending upon the usage of the particular author. We will show below the way in which various authors define role. The first list includes definitions which refer to role as an individual phenomenon; the second includes definitions which describe role as a structural (or cultural) phenomenon.

Definitions referring to individual behavior:

> The manner in which an individual carries out the requirements of his position. (Kingsley Davis) 4/
>
> A comprehensive and coherent organization in behavior of functionally related, interlocking attitudes and responses. (Norman Cameron) 5/
>
> A pattern or type of social behavior which seems situationally appropriate to the individual in terms of the demands and expectations of those in his group. (S. S. Sargent) 6/

Definitions referring to societal prescriptions:

> The sum total of the culture patterns associated with a particular status. Includes the attitudes, values, and

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4/ "A Conceptual Analysis of Stratification," American Sociological Review, VII (June, 1942) p. 309.

5/ The Psychology of Behavior Disorders (Boston: Houghton Mifflin Company, 1947) p. 90.

6/ Social Psychology (New York: The Ronald Press Company, 1950) p. 279.

> behavior ascribed by the society to any and all persons occupying this status. (Ralph Linton) 7/
>
> What society expects of a person occupying a given status. (John Bennett and Melvin Tumin) 8/
>
> Socially standardized patterns of behavior required of a person occupying any type of social position. (Emile Benoit-Smullyan) 9/

Certain authors, in keeping with our own approach, have provided two or more concepts which have behavioral referents and structural referents. Thus, L. S. Cottrell, Jr., distinguished between "cultural role" and "unique role" in the following way:

> Cultural role: a modal system of responses which constitutes the culturally expected behavior.
>
> Unique role: an internally consistent series of conditioned responses by one member of a social situation which represents the stimulus pattern for a similarly internally consistent series of conditioned responses of the other(s) in that situation. 10/

Newcomb defined role and role behavior as follows:

> Role: the ways of behaving which are expected of any individual who occupies a certain position.
>
> Role behavior: a motive pattern on the part of a specific individual as he takes a role. 11/

7/ The Cultural Background of Personality (New York: D. Appleton Century Company, 1945) p. 77.

8/ Social Life: Structure and Function (New York: Alfred A. Knopf, Inc., 1948) ch. vi.

9/ "Status, Status Types, and Status Interrelations," American Sociological Review, IX (April, 1944) pp. 151 ff.

10/ "The Adjustment of the Individual to His Age and Sex Roles," American Sociological Review, VII (October, 1942) p. 617.

11/ Social Psychology, op. cit., pp. 280, 330.

Roland L. Warren presented three role concepts:

> Cultural role: a fairly clearly defined interaction pattern prescribed by the culture.
>
> Situational role: a short-term interaction pattern worked out within a single, specific situation.
>
> Personal role: personal adjustment to role patterns. 12/

Both orders of definitions--behavioral and structural--are valuable in that each points to a particular kind of regularity of human behavior. The behavioral definitions describe regularities of an individual's responses as he interacts with different persons and under different circumstances, while the structural definitions describe regularities in the expectations which groups of persons share with respect to the behavior of an individual under different circumstances.

Definition of role.--In our theory we define role as the set of expectations shared by members of a group concerning the behavior of persons who occupy a position. This definition is essentially structural: it implies that the role associated with a particular position in the group or in the society is described by observing the expectations shared by members of a group or, as we shall refer to them, by a criterion population. We need to expand upon certain elements of our definition, the key concepts of expectations, position, and criterion population. We will discuss more fully the expectation process.

Expectations of behavior.--The expectations of the behavior of another individual which persons hold may be viewed as predictions

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12/ "Social Disorganization and the Interrelationship of Cultural Roles," American Sociological Review, XIV (February, 1949) p. 83.

of the behavior of this individual. Regardless of whether the time lag between prediction of behavior and behavior itself is relatively long or almost instantaneous we assume that the process of arriving at a prediction may be described by the following model: the predicting person (1) has a priori systems by which to classify individuals and situations and (2) each classification incorporates expectations of how the class of individuals will behave. To arrive at a prediction of behavior the predicting person (3) assigns the concrete individual to that classification which seems most appropriate from the information he has about him and (4) deduces what behavior to expect from him.

This model overdraws the rationality and the static nature of the prediction process as applied to expectations of behavior. The systems of classifications and their associated expectations interact upon one another and both are subject to modification as the predicting person confronts the individual whose behavior he is attempting to predict. Nevertheless, there are certain social circumstances which introduce constancy in the process and protect it from being indeterminant. One of these circumstances is the fact that the expectations of the predicting person actually constrain the other individual to behave according to the expectations of him. Another circumstance is the fact that the predicting person may take advantage of systems of classification and associated expectations which are commonly shared throughout the group or the society; the systems of classifications incorporate our concept of position, and the associated expectations correspond to our concept of role.

Position.--Position is a contextual concept in the sense that it is meaningless outside of a system of positions; i.e., one position automatically presumes one or more other positions to which it is related. To be more concrete, we can view a number of persons whose activities are interrelated as occupying differentiated positions. This can be seen most clearly among groups of persons who are organized for the attainment of a purpose as, for example, in an industrial organization. Where the division of labor necessary for efficient attainment of purpose is great and the functions are complex, an intricate system of positions may be created to which personnel are assigned and in which are expected to perform the appropriate functions. Each position in the system is related to the others (to some more immediately than to others) by virtue of the interdependencies of the functions which the occupants are expected to perform toward the attainment of purpose.

Although the system of positions is usually not so clearly described among groups of persons without manifest common purposes, as in the limiting case of two persons casually interacting, it is theoretically possible to identify a system of positions between the two. For example, one person may approach another person on the street and ask directions to the city hall. The first person will select the individual to whom he addressed the inquiry on the basis of certain cues which establishes the addressee as a "native"; as a result of the interrogation and perhaps additional cues concerning the first person's dress and demeanor, the addressee will categorize him as a "stranger." If the initial categorizations of the other persons

prove to be correct, the two will interact on the basis of expectations which they associate with the positions. A more stable system of positions may develop among a few individuals who interact over a longer period of time, as in the case of bowling team members. One person may characteristically occupy the position of "scape-goat," another may be the "athlete," a third the "idea-man," a fourth the "poor loser," and so forth. The positions are interrelated within the group by virtue of the implied interactions.

Social and interpersonal role.--We have intentionally selected extreme illustrations of the concept of position, for it is on the basis of the differences between systems of positions that we make our distinction between social and interpersonal role. At one extreme are those systems of positions and their associated expectations of behavior which are highly independent of the persons who occupy them. Only under very unusual circumstances can the role behavior of the occupants redefine the position and related expectations; roughly speaking, the occupant must conform to the expectations or forfeit his job. Those shared expectations of behavior which are associated with a position, irrespective of the particular behaviors of the individuals who occupy the position, are referred to as social role.

Interpersonal role refers to shared expectations which are associated with the particular behavior of the individual who occupies the position rather than with the position itself. This definition refers to the other extreme of the continuum in which the systems of positions are, in effect created by the behavior of an individual. In this case expectations of an individual's behavior develop around

the characteristic role behavior which he manifests in interaction with group members and he is established in the position of "athlete" or "scape-goat." The expectations of group members and the position of the individual are highly dependent upon the particular behavior which the person exhibits in interaction with the others. A turnover in personnel of the group creates a different system of positions and expectations at this extreme of the continuum; turnover in personnel at the other extreme has little or no effect upon the positions and expectations of the group involved.

Although both social and interpersonal role are structural concepts by virtue of the fact that their definitions require that the component expectations be shared among members of a group, they differ considerably with respect to their reliance upon psychological phenomena. Social role refers essentially to a cultural phenomenon in the larger sense and has been used extensively as an analytical concept by anthropologists and sociologists, although their definitions of it may vary somewhat from ours. Interpersonal role, by definition, is highly dependent upon the attributes of the individual involved and relates closely to personality determinants of behavior. For this reason the concept designates phenomena in which psychologists and social psychologists have been interested in recent years.

As we have defined them, social and interpersonal role are conceptual abstractions representing the poles of a continuum of positions and expectations. There probably are few concrete cases of roles which are purely social or purely interpersonal without elements of the other. Social roles rarely are so meticulously defined for a position occupant that he does not have an opportunity

to express some aspects of individuality without overstepping the bounds of the expectations associated with his position. Such a situation may be approached in the case of titular figures who are isolated from most interaction with other persons and that interaction into which he does enter is formally ritualistic.

At the other extreme interpersonal roles seldom are entirely unique to the interactors; within any society the range of behavioral differences are not so great that types of persons do not recurr in the experiences of individuals. Thus, most persons have known or have heard about "athletes," "red heads," or "introverts" and entertain common stereotypes associated with these types, even though the role behavior of these concrete individuals does not conform entirely to the stereotype. 13/ The process of "sizing up" another person, i.e., categorizing him in such a way that one can draw upon familiar stereotyped expectations of him, proceeds very rapidly and as Kelley has shown may begin before actual observations of his behavior are made on the basis of rather minimal cues. 14/

While few if any concrete cases correspond to the ideal types, empirical measurement describes the degree to which the concrete case approximates social role or interpersonal role.

Before leaving this discussion of the two kinds of role, we would like to point out the first of a series of a structural condition

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13/ Gustav Ichheiser shows the distortions of interpersonal perception which arises from the strong need for persons to perceive others as constant and relatively unchanging, as concrete exemplifications of a familiar type of person. See his "Misunderstandings in Human Relations: A Study in False Social Perception," American Journal of Sociology, LV, Part 2 (September, 1949).

14/ Harold H. Kelley, "The Warm-Cold Variable in First Impressions of Persons," Journal of Personality, XVIII, pp. 431-439.

which we will refer to as situations of role conflict--situations which are potential sources of difficulty for persons who are exposed to them. It is possible for an individual to occupy simultaneously two or more positions with regard to other persons with whom he interacts. If two positions which the individual occupies are in different systems of positions--one of which incorporates expectations of the nature of social role and the other of which incorporates conflicting expectations of an interpersonal variety, the situation represents one type of role conflict. An illustration of this situation is found in an experiment by Stouffer in which he analyzed students' resolutions of the conflict between being in the position of proctor of an examination and being in the position of close friend of a person caught cheating during the examination. 15/ The expectations concerning what a "proctor" would do and what a "friend" would do to the cheater are conflicting.

The moral component of role.--Expectations which others share of the behavior of a position occupant may vary according to the degree to which the expectations carry an imperative component. Up to this point in our discussion of role, we have been concerned with what we will call the anticipation component--i.e., expectations and predictions of how an occupant of a position will behave. The moral component introduces the dimension of how the occupant ought to behave.

We believe that all expectations of behavior carry a certain amount of the moral component, as we will elaborate later. Nevertheless, the degree of compunction involved in expectations varies considerably,

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15/ Samuel A. Stouffer, "An Analysis of Conflicting Norms," American Sociological Review, XIV (December, 1949) pp. 707-717.

and as it varies so does the effect of expectations upon role behavior. More drastic (and perhaps different) social forces are implied in the statement, "I expect Foreman X will act superior to me and I believe he should," than the statement, "I expect Foreman X will act superior to me, but it does not matter whether or not he does."

The moral component of role draws into expectations of behavior the expectors' motivations, attitudes, and values. Only in reference to these can an expector judge behavior as desirable or undesirable. In the particular case of expectations associated with various positions in a group organized for pursuit of a common goal, the moral component frequently will be phrased in terms of the organizational ends and the contribution of the occupant of the position to these ends. In the case of expectations more in the nature of interpersonal role, the moral component frequently is phrased in terms of the expectors' own attitudes or in terms of the more pervasive values current in the society.

The moral component may be closely related at an empirical level with the anticipation component. Predictions of how an individual will behave often are distorted by a high degree of feeling on the part of the expectors as to how he ought to behave, but the individual whose behavior is the object of the predictions may not be able to discern the difference between the two components—he will guide his behavior according to his perception of the others' expectations as a unit.

Despite the intermingling of the two components of role on the empirical level, it appears to be necessary to distinguish between them for analytical purposes. In terms of measurement it makes a considerable

difference whether prediction of behavior is described or whether desired behavior is described. Our distinction has some similarity to Linton's distinction between "real" and "ideal" culture patterns, although Linton describes "real" culture patterns as ranges of behavioral responses seen from the standpoint of a scientific observer rather than from the standpoint of an indigenous group of expectors. 16/ There have been no attempts to separate the moral component of role from the anticipation component in the social science literature which we have reviewed. It is to the moral component that certain writers have referred in their classifications of role in terms of "prescribed," "permitted," or "forbidden" behaviors 17/ and, similarly, in terms of "required," "allowed," or "prohibited" behaviors. 18/ These classifications of role, strictly speaking, describe two degrees of the moral component associated with expectations--a high degree in the cases of "prescribed" and "forbidden" behaviors and a low degree in the case of "permitted" behaviors. We believe that the empirical use of role concepts will be facilitated if the moral component is recognized as distinct from the anticipation component of role.

We can derive at least two additional types of role conflict from our preceding discussion. The first is the situation in which group members hold anticipations of the behavior of a position occupant which are in conflict with their moral feelings of how the occupant should behave. This conflict may be compounded into such statements

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16/ Ralph Linton, op. cit., pp. 45-54.

17/ T. M. Newcomb, op. cit., pp. 281-282.

18/ John Bennett and Melvin Tumin, loc. cit.

as, "Unmarried office girls should be chaste, but I know good and well that they are not." An office girl confronted by persons who expect her to act in one way but feel she should act in a very different way is exposed to a structural situation of role conflict.

The second type of role conflict is that which results from conflicts within the moral component, itself. This conflict is clearly illustrated in Gunnar Myrdal's "The American Dilemma, in which he interprets the "Negro problem" in America as a problem of inconsistencies within the ideologies of the majority peoples.19/

Criterion populations.—Up to this point we have referred to the groups or the criterion populations whose members share expectations without specifying precisely to what groups we refer. As a matter of fact, the role of a particular occupant of a position could be ascertained in any group in which the position occupant is sufficiently meaningful for the group members to respond at all. The role of the foreman, for example, could be investigated among members of the community Parent-Teachers's Association or among members of the local country club. But if our purpose for describing the role of the foreman is to analyze the conditions under which a foreman is exposed to a structural situation which has a high potentiality for inducing a psychological experience of conflict, we may restrict our study of role to certain relevant groups.

The designation of relevant criterion populations is guided by three restrictions: the group must be one (1) whose members interact with the position occupant, including the person's fellow occupants,

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19/ (New York: Happer & Brothers, 1944).

(2) which controls in important ways the occupant's access to goals which he desires or which has the power to deprive him of desired goals or values, or (3) with which the occupant identifies himself. The theoretical bases for the designation of relevant criterion populations will become clearer when we discuss the motivational elements of role behavior.

By virtue of the multiplicity of groups in contemporary society which have a variety of ideologies and many interdependent relationships, the possibility is comparatively high that two or more groups with conflicting expectations will be relevant to an individual who occupies a position. In the industrial plant it is possible to examine the following groups among which conflicting expectations of the behavior of foremen may exist: assistant foremen themselves; workers; shop stewards; head foremen and general foremen (management); all plant personnel; and the immediate work group of the assistant foremen. Other groupings are also possible, such as groups along departmental lines. Empirical investigation is required to determine if the expectations of foremen are relatively homogeneous within the various groups and, if they are homogeneous, whether the expectations are conflicting among the groups.

From this discussion of criterion populations we have derived a further type of role conflict, viz., conflicts between relevant groups with respect to the behaviors of the occupant of a position. The criterion populations may be in conflict with respect to (1) social role, (2) interpersonal role, or (3) the moral component.

Role behavior.—In the succeeding paragraphs we will describe briefly certain concepts of role at a behavioral level which will help us understand the way in which the structural order of phenomena, such

as role conflict, affect the pattern of behavior exhibited by an individual as an occupant of a position--i.e., affect his role behavior.

It would be impossible within the scope of our present task to give a full account of the processes through which individual members of society learn to channel their behavior more or less in accord with the expectations associated with the various positions which they occupy. Such an account would require a review of the works of G. H. Mead, Piaget, and writers in the field of child development; an adequate summary of the extensive theory is available in Newcomb's Social Psychology. 20/ In this thesis we are most concerned with the processes at the behavioral level which may account for the conditions under which a structural situation of role conflict is incorporated as a psychological experience of conflict by a position occupant. For this purpose we will discuss some important aspects of motivational and perceptual processes of individuals and will show how variations in the processes determine role behavior (on a conformity-deviation dimension) and experiences of conflict.

Motivational processes.--We can describe an individual's conformity to the expectations concerning him primarily as an instrumental means of attaining values and goals which are important to him. This is not to deny that conformity occasionally becomes an end in itself, as Max Weber has suggested in connection with the Calvinist ethic or as Merton discusses in connection with the dysfunctions of bureaucracies. In these and similar instances, an individual's self-ideal may be such that it requires him to pattern his role behaviors in accord with the

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20/ Op. cit., especially ch. IX.

anticipations and, especially, the imperatives associated with his position. (By phrasing the situation in which conformity becomes an end in itself in terms of the concept of self-ideal, such situations can be investigated empirically; the datum concerning an individual's self-ideal is relatively accessible to an investigator.) Generally speaking, though, conformity to expectations is a means by which an individual gains access to other goals and values which he desires.

If we postulate that conformity to expectations is either an end in itself or an instrumental means of attaining ends, we can understand how expectations of behavior shared by group members exerts a force tending to modify role behavior. According to social psychological theory, this force is manifested in the process of interaction in the following way.

When two persons interact, each engages in covert "anticipatory" role behavior. That is to say, each person acts out his behavior in his imagination, estimating imaginarily the response his behavior would draw from the other person. If the imagined response of the other persons is not satisfactory to him, he will continue the imaginative process until he "finds" a behavior he can perform which he believes will draw a satisfactory response from the other. At this point he acts overtly. The other person then goes through the same anticipatory phases before responding overtly in a way he thinks will draw a response from the first person which is satisfactory for his own purposes. These anticipatory phases involve predictions of the other person's behavior in response to one's own behavior; in order to enhance the accuracy of prediction it is necessary to view oneself through the eyes of the

other person (to take the role of the other, in Mead's phrase) and to estimate one's own effect upon him. Thus, an objective view of oneself enters into the anticipatory phase of interaction as a fundamental element in predicting the other person's behavior. Accurate prediction requires accurate estimation of how oneself is perceived by other persons. In the course of interaction with various persons who share similar expectations of him, the individual's concept of self tends to approach an accord with the expectations which the others have of him. This enables him to modify his behavior to meet the expectations of the others and, at the same time, to derive from the interaction responses from others which tend to satisfy his own desires. (It is relevant to note, at this point, that the interaction process and the concurrent development of the self concept of the individual may modify his motivations as well as his role behavior.)

The ability of group members to predict the behaviors of the persons with whom they interact is so important for the attainment of their goals that a premium is placed upon conformity to expectations. The complete absence of predictable behavior among a group of persons with whom an individual interacts would represent an intolerable situation for him if the interaction were the key to certain goals which he desires. Consequently, we can postulate that there is a positive (although small) amount of moral component associated with all expectations of behavior.

When an individual's role behavior deviates from the common expectations of his behavior various social pressures may be exerted to encourage his conformity. The stronger the moral component of the

expectations, hypothetically speaking, the greater will be the social pressures which are applied to the deviating individual. And the greater the deviation, up to a point, the greater will be the social pressures on him. 21/ The particular pressures which may be successful in encouraging conformity of a deviating individual depend upon the satisfactions which the deviant realizes from group interaction. If these satisfactions are subject to the control of group members, conformity may be encouraged by withholding the deviating individual's access to them until he revises his behavior in conformity with the shared expectations.

A significant question which this discussion raises is, Under what conditions do the expectations of a person's behavior fail to modify his behavior? One answer is found in the person's motivation for his interaction with the expecters. If the interaction is not instrumental to the individual for attaining goals and values which he considers especially desirable, or if group members have no control over his access to his goals and values, then there is neither reason for him to behave in a predictable manner nor is there a basis for the group to exert pressure on him to conform.

The converse of this statement provides us with a lead in selecting criterion populations appropriate for the investigation of the individual's role. These groups of persons with whom interaction is instrumental to the individual for satisfactions or who

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21/ Support for this hypothesis is found in Leon Festinger's experiment involving communication pressures exerted on opinion deviants in small groups. See his article, "Informal Communications in Small Groups," in Harold Guetzkow, ed., Groups, Leadership, and Men (Pittsburg: Carnegie Press, 1951).

can control his access to satisfactions are relevant criterion populations. Such a group is described by the term "reference group." 22/ It is conceivable that a group in which an individual has membership and which an investigator ordinarily would assume to be an appropriate criterion population for establishing his role actually exerts little influence over the individual's behavior. It is the individual's reference groups which are the relevant groups in which to measure his role.

Perceptual processes.—Even in the event that an individual finds it important to conform to the expectations which a group of persons share with respect to his behavior, he will be seriously handicapped if he does not have a relatively accurate perception of what the expectations are. Ordinarily he can learn their expectations in the course of interaction with them and from the pressures which are exerted on him if he deviates from the expectations. Moreover, he may learn the expectations other people have of him (especially with respect to the moral component) through surrogates of the culture. Under some circumstances an individual may be isolated from the requisite kind of interaction with group members or may be unable to take advantage of cues provided him even though he is not isolated from interaction. Or else he may not have had sufficient or proper communication with the cultural surrogates.

22/ Cf. T. M. Newcomb, op. cit., pp. 225-227. Newcomb defines reference group in the following way: "If a person's attitudes are influenced by a set of norms which he assumes that he shares with other individuals, those individuals constitute for him a reference group.

If an individual misperceives the expectations which others hold of his behavior, he cannot conform to the expectations (except by chance) no matter how good are his intentions.

The conformity paradigm.--Bringing together several elements of theory which we have discussed in connection with the conformity or lack of conformity of role behavior to the role, we can construct a paradigm to account for certain conditions under which an individual's role behavior can be expected to correspond to his role as described by members of a criterion population.

In order for an individual's role behavior to correspond to the expectations of a criterion population (except by chance), he must have a correct perception of the position he is assumed to be occupying at a given moment and a correct perception of the role associated with this position. In addition, the individual must be motivated to occupy this position, and he must be motivated to conform to the associated role as he perceives it. A discrepancy between role and role behavior may be accounted for by the absence of any one or more of the requirements--by inappropriate perceptions or motivations with respect either to position or role. 23/

Role conflict.--A complicating factor enters the paradigm described above when an individual is motivated to conform to the expectations of two different criterion populations whose expectations are conflicting. As we pointed out earlier the groups may be in conflict with respect to

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23/ Several authors have proposed an additional condition to account for discrepancies between role and role behavior--individuals' lack of aptitude for role-taking. See, for example, Theodore R. Sarbin, "Contributions to Role-taking Theory: I. Hypnotic Behavior," Psychological Review, LVII (September, 1950) pp. 255-270.

social role, interpersonal role, or the moral component of role. If the expectations of the criterion populations are such that an individual in conforming to one set of expectations deviates from the other set of expectations and vice versa, he will find himself in the situation of exposing himself to social pressures and deprivation of certain satisfactions whichever set of expectations he conforms to. The situation leads to a type of psychological experience of conflict which Newcomb describes as "multiple appeals with threats." 24/ The individual is confronted with two or more courses of action, "any one of which carries both appeal and threat." Newcomb asserts that the individual will resolve the psychological conflict according to the way "in which he strikes a balance between the threats and appeals in each possible course of action."

If the individual is not motivated to conform to the expectations of one of the criterion populations--that is to say, if there is neither an appeal for him to conform nor a threat to him if he does not conform--then the structural situation of role conflict will not be internalized by him as a psychological experience of conflict. From a phenomenological point of view, the role conflict does not exist for him.

Beyond this, it is possible that an individual will perceive inaccurately the expectations of either or both of the criterion populations even though he is motivated to conform to the expectations of both. His inaccurate perceptions may be such that he believes there is no conflict where, in fact, there is.

24/ T. M. Newcomb, op. cit., p. 363.

The other types of role conflict which we have pointed out in the course of this chapter raise similar complications in the paradigm. These types are structural conflicts which exist within a single criterion population between social role and interpersonal role, between the anticipation component and the moral component, and within the moral component. In the event that an individual who is exposed to these structural conflicts either does not perceive them as conflicting or is not motivated to conform to both sets of expectations in the various pairs, he will not experience psychological conflict.

Role Theory and the Problems of Foremen

We are now prepared to re-examine the theoretical approaches of Roethlisberger, Gardner and Whyte, and Wray on the basis of our development of role theory. Our purpose in this section is to translate the authors' analyses of foremen's problems into role concepts in order to illuminate their contestable assumptions.

Roethlisberger and Moore.--Roethlisberger asserts that the problems of foremen arise from their peculiar position between two types of social organization with conflicting ideologies or, in terms of role theory, with conflicting expectations of foremen's behavior. Management demands that foremen behave according to the logic of cost and efficiency while the foremen's subordinates demand that they behave according to the logic of sentiments.

If there are, in fact, conflicting expectations of foremen's behavior between management and the workers in any given situation, this does not lead automatically to a subjective experience of role conflict on the part of all foremen. Roethlisberger and Moore

anticipate this in their discussions of foremen's motivations and loyalties. Roethlisberger states that first line supervisors are seriously concerned with advancement, and since advancement is controlled by management (and especially the foremen's immediate superiors), the expectations of management are of considerable importance to them. That is to say, foremen are motivated to conform to the expectations of their superiors in management.

Advancement also depends upon the level of production the foremen are able to maintain in their shops, a condition which is controlled by the amount of cooperation their subordinates afford them. Thus, foremen are motivated to conform to the expectations of the workers if for no other reason than conformity's instrumental importance for their advancement. But Moore proposes that by virtue of foremen's past experience as workers and their close acquaintance with workers and their problems, foremen feel loyal to the workers as well as to management. That is to say, both workers and management represent reference groups for foremen.

If we do not grant Roethlisberger's assumptions that <u>all</u> foremen are concerned with their advancement or that <u>all</u> foremen recognize the control which workers exercise over their opportunities for advancement (if, in fact, they do in all cases), or if we do not grant Moore's assumption that workers constitute a reference group for <u>all</u> foremen, we are able to understand cases of foremen who do not experience role conflict despite the fact that they are in a situation of potential conflict. In addition, we cannot uncritically assume that foremen

are aware of the conflicting nature of the management's and the workers' expectations of their behavior. If the perceptions of some foremen are inaccurate with respect to the expectations of either group, even in the event that the expectations actually conflict, they will not experience conflict.

Roethlisberger suggests an additional formulation of the causes of foremen's difficulties by positing a discrepancy between what the foreman's position "is" and what it "ought to be." As he develops it, the analysis corresponds to a type of role conflict within management between the moral component and the anticipation component of expectations of foremen--between management's idealization of the foreman's role and the real structure within which management expects the foremen to behave.

It is possible that some foremen, at least, are totally unaware of the ideal expectations of management with respect to their behavior. We have a feeling from reading Roethlisberger and Wray (who suggests a formulation similar to Roethlisberger's) that management's idealization is more obvious to the authors than to industrial foremen themselves--that this idealization is expressed primarily in writings on industrial management which foremen are unlikely to read. But even if foremen perceive the conflicting expectations, they may be motivated neither to perform the behaviors idealized by management nor to avoid performing the real functions of the job.

Gardner and Whyte.--The formulation which Gardner and Whyte present is based on an important assumption concerning the motivations of personnel of industrial units--that all personnel (including first line supervisors) are highly motivated to maintain and enhance their

status. The authors describe various conditions in contemporary industry which, on the basis of this assumption, confront foremen with considerable difficulty in their position.

One such condition discussed by Gardner and Whyte is the peculiarity of the social structure in which personnel are more concerned with their superiors than with their subordinates, with the result that communication between foremen and their superiors is inadequate. In terms of role theory, lack of communication restricts the foremen's opportunity accurately to perceive the expectations of behavior held by persons upon whom they depend for satisfactions (in this case, for advancement in the supervisory hierarchy). The absence of cues increases the possibility that the foremen may not conform to expectations in a situation in which conformity is instrumental to their attainment of an important goal.

Three postulates are involved in this analysis: (1) that foremen are primarily concerned with enhancement of status (or some similar motivation over which superiors have control), (2) that foremen uniformly perceive their superiors to exercise control over access to their goals, and (3) that foremen have no adequate means of learning about their superiors' expectations of them outside of direct communication. If any of these postulates fail to hold for particular foremen, we cannot predict that the structural situation of inadequate communication with their superiors will be a problem for them.

Other structural conditions which Gardner and Whyte assert lead to difficulties for foremen--limited opportunities for advancement and lack of a pay differential between foremen and workers, for example--involve similar postulates concerning the motivations and perceptions of foremen. If we can show that the dominant motivation of foremen is

not uniformly directed toward enhancement of status and if we can show that foremen's perception of such conditions as the limited advancement opportunities and the lack of pay differentials vary from one foreman to another, a way is opened to account for the absence of difficulty which certain foremen experience in their job.

Finally, Gardner and Whyte propose that foremen in present-day industry have lost control over the factors on which enhancement of their status depends, especially those factors which now can be controlled by foremen's subordinates. The authors phrase this in terms of foremen's loss of authority. For the most part Gardner and Whyte's formulation is identical to one of Roethlisberger's and we need not repeat our analysis of it in terms of role theory (see pp. 108-109, above).

Wray.—One formulation of Wray's concerning the conditions underlying the problems confronting foremen is similar to Roethlisberger's account of the "ought to be" and "is" of the foreman's role which we have also analyzed in a previous passage (see p. 110, above). Wray suggests that foremen are troubled by the disparity between social norms and social reality or, in the words of foremen, the disparity between "what management says we are and the way we are treated." We translated this into role concepts as a conflict between the moral and the anticipation components of expectations held by the management criterion population. We will not repeat our analysis of the conditions under which this role conflict may or may not result in psychological conflict for foremen.

But Wray also proposes that foremen's problems stem from the fact that changes in industrial organization have redefined the functio

of foremen, and in the course of these changes they have lost most of their former decision-making powers. Wray presumes that foremen universally are motivated to take a large part in the decision-making functions of industrial concerns. If, however, there are variations among foremen in the extent to which the power to make decisions constitutes a major desideratum or in the extent to which they are aware of their loss of decision-making power, we can expect variations in the degree to which foremen feel at a psychological level that their position is difficult.

Conclusion

In the first section of this chapter we outlined a theory of roles permitting an articulation between structural and behavioral orders of phenomena. We were most concerned with discovering in what way structural situations of role conflict become internalized by individuals as psychological conflict. In the second section, we re-examined various formulations which have been presented as accounting for foremen's psychological experience of difficulty in their position. Our purpose was to point out, from the standpoint of role theory, the assumptions which must be made if the authors wish to extrapolate findings on the structural level to conclusions concerning the psychological experiences of the occupants of the foreman's position. These assumptions must be regarded as hypotheses subject to empirical investigation if we are to account for the role behavior or psychological reactions of the foremen.

We do not necessarily doubt all of the assumptions which we have pointed out in the writings of the authors. Certain of them

almost certainly are valid. For example, it is quite unlikely that there would be much variation among foremen in the extent to which they perceive management as one controlling factor in their chances for advancement. But we are confronted in the industrial plant with the stubborn fact that only about one-half of the foremen actually believe they are "in the middle" between workers and management. If all foremen felt they were in the middle, we would not be confronted so critically with the necessity of examing the assumptions underlying the authors' analyses. We believe that role theory provides us with a systematic way of isolating the assumptions and of ordering them for empirical investigation.

CHAPTER VII

CONSEQUENCES OF ROLE CONFLICT AMONG INDUSTRIAL FOREMEN

The students of industrial sociology whose writings we have reviewed in this thesis all follow essentially the same line of argument. First, they assert that there are uniformities among present-day industrial organizations and their personnel as a function of which there is a uniformity among first line supervisors in industry with respect to their feeling that they are in the middle between workers and management. Second, they imply, and occasionally state explicitly, that the supervisors' feelings of being in the middle create insecurity, discontent, and unrest among them which provide the psychological foundation supporting the social movement of foremen's unionization. The work of these writers is directed primarily toward accounting for the uniformities of present-day industrial organizations which lead to psychological experiences of being in the middle as compared with the structure of industrial concerns in earlier periods. The remainder of their arguments rest for the most part upon assumptions: that the motivational and perceptual characteristics of foremen are constant, that the structural uniformities interact with the constant characteristics of the personnel to create feelings of being in the middle, and that the resulting uniformity of feeling in the middle among foremen leads automatically to insecurity and discontent.

We are in no position to contest on an empirical basis the conclusions reached by the authors. The data which we use are drawn from a survey of only one industry which may well be atypical in the American scene, but we can raise questions concerning the reasoning from which the conclusions stem.

We have presented in the preceding chapter certain theoretical considerations relating to the inadequacy of assuming that structural situations of role conflict necessarily result in psychological experiences of conflict among individuals exposed to the situations. Only when the proper motivational and perceptual processes exist among the individuals may we expect them to internalize the conflicts. The authors partly anticipate this objection to their arguments by postulating certain uniformities of motivation among the personnel as, for example, the desire to enhance status (the desire for advancement), or the desire for a greater scope of authority (the desire to take part in major decision-making functions). But they neglect to consider the possibility that the structural situations of conflict may be "inaccurately" perceived—that the personnal are unaware of the incongruities of the structure in which they perform their jobs.

We can show empirical evidence from the analyses presented in Chapters III, IV, and V indicating that neither the structural conditions nor assistant foremen's perceptions of the structural situations are constant within the plant, despite what the writings of the authors might lead us to believe. We concern ourselves with this evidence in the first section of the present chapter.

Beyond this, we can present empirical data from the industrial study indicating that the subjective experience of being in the middle

does not necessarily entail feelings of insecurity, discontent, or unrest among the first line supervisors. The evidence which we have at hand suggests that only a small proportion of those foremen who report that they feel in the middle object strongly to their situation. On the whole the conflict seems to be taken as a matter of course. A discussion of this point will constitute the second section of this chapter.

Variations within the Plant

We can refer to the data presented in Chapters III, IV, and V to demonstrate that there are variations among assistant foremen within the plant not only with respect to the structural situations to which they are exposed, but more importantly, with respect to the foremen's perceptions of these structural situations.

The survey materials have provided us with few opportunities to measure directly the structural situations which the authors assert lead to feelings of being in the middle among the foremen. There are, in fact, only three such tests. For each of these tests we have computed the proportion of all assistant foremen who are <u>not</u> exposed to the presumably difficult situation:

- 19% do not have subordinates who are non-economically motivated (Table 5);
- 56% do not have superiors who are economically motivated (Table 7);
- 54% of the workers serving under low-salaried foremen do receive a rate of pay highly differentiated from their foremen (Table 13).

(Only in the last of these tests did we find significant support for the authors' proposition that those persons who are exposed to the

structural situation are more inclined to feel they are in the middle.) These computations of marginal frequencies indicate that there are some variations of structural situations within the plant.

Most of our tests of the propositions set forth by the industrial sociologists have had to be based upon foremen's perceptions of the situations which they face rather than objective measures of the situations. This is due to the fact that the industrial study was concerned primarily with attitudinal, motivational, and perceptual data obtained through interviews with the personnel. Here again we can show sizable proportions of assistant foremen who do not perceive themselves to be exposed to the situations which the authors postulate as being difficult:

43% perceive workers to be economically motivated (Table 6);

82% perceive themselves to be part of higher management (Table 10);

57% perceive their bosses to be readily available to them (Table 11);

81% do not perceive their problems to stem from their workers and do perceive the company to be satisfied with production in their shops (Table 14);

62% do not perceive that the job has become harder (or easier) because they have lost control or must share responsibility; 56% on second reasons (Table 15);

56% do not perceive that shop stewards have more authority (Table 16);

66% perceive that they participate with their superiors in making shop decisions (Table 17).

While we cannot consider foremen's perceptions to be an accurate account of the structural conditions they face, the perceptions are the more significant data for drawing conclusions concerning the effects of the structural conditions upon the foremen's feelings or behavior. We see from this computation that over half of the foremen in all

but one of our tests do not perceive themselves to be exposed to the situations which the authors have proposed as being the cause of foremen's experience of being in the middle.

Each of the authors assumes a constancy of motivation among industrial foremen; but the only test which we have been able to apply here is with respect to Moore's assertion that the loyalties of foremen are subject to conflicting claims. In our test (Table 9) we find that there is a relatively large proportion of assistant foremen, 47 per cent, who give no indication that their loyalties <u>are</u> divided between workers and management.

We must exercise some caution in interpreting the percentage figures supplied above. They are, of course, derived only from one industrial concern at one point in time. Further, they incorporate rather arbitrary cutting-points which, in a few cases, discriminate only between shadings of differences. Finally, we have tested only those hypotheses for which we could find variations in structural situations or in perceptions since complete uniformity would have given us no chance to test their relationships to foremen's feelings of being in the middle. Despite these restrictions, the variations are large and they exist in hypotheses which are crucial to the authors' formulations of the problems associated with the position of the foreman.

Foremen's Acceptance of Their Being in the Middle

At this point we can raise the question of how serious an effect feelings of being in the middle has upon first line supervisors'

satisfactions with their job. Do these feelings necessarily lead to insecurity or discontent? The evidence from interviews with foremen suggests that they do not.

Replies of foremen to the questions concerning their experiences of being in the middle indicate that a majority of those who do feel they are in the middle recognize the situation as a legitimate aspect of the foreman's position. The replies of those assistant foremen who feel they are in the middle were coded according to their "acceptance" or "rejection" of the situation (as we mentioned in Chapter II), and we see that 57 per cent accept the situation as the way the foreman's job "is" or even as the way the job "ought to be" (Table 18). Only 23 per cent of those whose responses could be coded reject the situation; and if we consider this figure in relation to all of the 250 first line supervisors who were interviewed (whether or not they felt in the middle) the proportion of assistant foremen who reject their situation of being in the middle amounts to only 11 per cent. This does not provide a very substantial support in the one industrial unit, at least, for a social movement, if we follow the argument of the industrial sociologists to which we referred at the beginning of this chapter.

The differences between the foremen who accept and those who reject their situation of being in the middle are attested to by data which we have presented in Chapter II in connection with the validity of the dependent variable. In several analyses showing relationships between measures of job difficulty on the one hand and the "in the middle-not in the middle" as compared with "rejection of middle-acceptance of middle" on the other hand we can see a greater correlation between

TABLE 18

PERCENTAGE DISTRIBUTION OF ASSISTANT FOREMEN WHO FEEL THEY ARE IN THE MIDDLE BY THEIR ACCEPTANCE OR REJECTION OF THEIR SITUATION

Acceptance or Rejection	Assistant Foremen
Accepts situation—that is the way foreman's job should be	15%
Accepts situation—that is the way foreman's job is	42
Rejects situation	23
Not ascertained	20
Total	100%
Number of foremen in the middle	(117)

the first and third measures than between the first and second measures. That is to say, evidence that a foreman feels he is in the middle and rejects the situation is more highly related to disliking his position, insecurity in his position, and his feeling that the job is getting harder than is the simple evidence that the foreman feels he is in the middle. Measured by the contingency coefficient, the differences in correlation between the two sets of data are shown in Table 19.1/

We can add one item of evidence to this material which shows that foremen's feelings of being in the middle are not effective agents in destroying their general satisfaction with their work for the company. From responses to the question, "In general, how do you like working for _____?", assistant foremen appear generally to have a high level of satisfaction. No foreman indicated either that he was "more dissatisfied than satisfied" nor that he was "very dissatisfied"; only one per cent of the foremen were coded as "neutral, pro-con." Supervisors were distributed rather equally on the satisfied side of a five-point scale between "likes the company very much, enthusiastic" and "more satisfied than dissatisfied."

When we compare assistant foremen who feel they are in the middle with those who feel they are not in the middle we find nearly

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1/ The contingency coefficients presented in Table 19 are based on Tables 1, 2a, 2b, 3a, and 3b in Chapter II. Since we did not show the cross-tabulation between acceptance-rejection of being in the middle and evaluations of the job becoming harder-easier in Chapter II, it is presented here as Table 20. It indicates that assistant foremen who reject their situation of being in the middle are more inclined to report that their job is becoming harder than assistant foremen who accept their situation of being in the middle.

TABLE 19

DEGREE OF ASSOCIATION BETWEEN MEASURES OF JOB DIFFICULTY AND FEELINGS OF BEING IN THE MIDDLE OR REJECTION OF SITUATION OF BEING IN THE MIDDLE: ASSISTANT FOREMEN

(Contingency Coefficients)

Measures of Job Difficulty	In the Middle	Rejects Being in the Middle
Job is becoming harder (Tables 1 and 20)	.13	.30
Dislikes position as company representative (Tables 2a and 2b)	.10	.24
Insecure in position (Tables 3a and 3b)	.05	.14
Dislikes company (Tables 21a and 21b)	.00	.20

TABLE 20

ASSISTANT FOREMEN'S EVALUATIONS OF THEIR JOB BECOMING HARDER OR EASIER BY THEIR ACCEPTANCE OR REJECTION OF BEING IN THE MIDDLE

Evaluation of the Job	Accepts Being in the Middle	Rejects Being in the Middle
Foreman's job has become harder	37	26
Foreman's job has become easier	17	1
Number of foremen	54	27

Chi-square = 8.04, 1 df
p = .005

identical distributions (Table 21a). Those who feel they are in the middle are no less enthusiastic about their work with the company than foremen who do not feel they are in the middle.

But a significant relationship appears when we compare satisfactions with the company among foremen who reject the situation of being in the middle with foremen who accept their situation (Table 21b). In this case, as before, we find that foremen who reject being in the middle are significantly more inclined to be unenthusiastic about their work for the company than foremen who accept their situation as a legitimate aspect of their job. The difference in the degree of asociation between the two sets of data is also shown in Table 19.

From these data which we have summarized it appears that the critical factor which leads to insecurity among these foremen, at least, is not merely the psychological experience of role conflict but the rejection of the conflict as a legitimate aspect of the job A substantial proportion of those supervisors who believe they are in the middle between workers and management apparently have adjusted to the conflict or perhaps find other satisfactions in the job which outweigh the disadvantages of feelings of conflict.

Information is available in the interview responses of foremen which provides some indication of the way in which they cope with their situation of being in the middle. Foremen who replied that they felt in the middle were asked further, "How does it work out in your case?" or "How did you handle this situation of pleasing men and management?" Table 22 shows the classification of the responses of foremen who initially reported that they felt they were in the middle. The highes

TABLE 21a

PERCENTAGE DISTRIBUTION OF ASSISTANT FOREMEN'S EXPERIENCES OF BEING IN THE MIDDLE BY THEIR LEVELS OF SATISFACTION WITH THE COMPANY

Satisfaction	In the Middle	Not in the Middle
Likes company very much, enthusiastic	58%	56%
More satisfied than dissatisfied, neutral, pro-con	42	44
Total	100%	100%
Number of foremen	(93)	(121)

*Chi-square = .01, 1 df
p = .90

TABLE 21b

PERCENTAGE DISTRIBUTION OF ASSISTANT FOREMEN'S ACCEPTANCE OR REJECTION OF BEING IN THE MIDDLE BY THEIR LEVELS OF SATISFACTION WITH THE COMPANY

Satisfaction	Accepts Being in the Middle	Rejects Being in the Middle
Likes company very much, enthusiastic	64%	43%
More satisfied than dissatisfied, neutral, pro-con	36	57
Total	100%	100%
Number of foremen	(66)	(28)

*Chi-square = 3.80, 1 df
p = .05

*The statistical tests were computed on the basis of the raw frequencies.

TABLE 22

PERCENTAGE DISTRIBUTION OF ASSISTANT FOREMEN WHO FEEL THEY ARE IN THE MIDDLE BY THEIR MANNER OF COPING WITH THE SITUATION

Manner of Coping with Situation	Assistant Foremen
Has enough power to handle situation--own adjustment	21%
A compromise can be worked out	17
Men and stewards are willing to help him work things out	13
Management helps him work things out	5
Situation is getting better	3
Lets superior handle it	3
No evidence of adjusting to the situation	38
Total	100%
Number of foremen in the middle	(117)

proportion of assistant foremen who give evidence of adjusting to the situation indicate that they draw upon their own resources, that they have enough power to handle it, while the next highest proportion feel that it is possible to work out a compromise between workers and management. Generally speaking, the majority seems to believe that the demands of workers and management are not so polarized nor so irrevocable that an adjustment cannot be made.

If we compare foremen who accept the situation as a legitimate aspect of their job with foremen who reject their situation, we find that a much larger proportion of foremen who reject the situation give no evidence of having made an adjustment to it (Table 23).

Why is it that there are so few assistant foremen among those who feel they are in the middle between workers and management that find their position a difficult one to occupy? We can only propose here, without conclusive evidence, that many individuals in the industrial plant who are willing to occupy the position of foreman have an unusual tolerance for role conflict.

Nearly all of the foremen were promoted to their position from the ranks of the workers (or stewards) and consequently had full opportunity to learn about the difficulties of the position before they accepted promotion. If information from the contemporary workers and stewards is any guide, we see that very few of them want to be foremen. During the interviews, workers and stewards were asked if they would like to be a foreman; approximately three-quarters of them said no. The reasons they gave for not wanting the job centered around such things as "do not like to handle people," "too much

TABLE 23

PERCENTAGE DISTRIBUTION OF FOREMEN'S ACCEPTANCE OR REJECTION OF BEING IN THE MIDDLE BY EVIDENCE OF THEIR ADJUSTMENT TO THE SITUATION

Adjustment to the Situation	Accepts Being in the Middle	Rejects Being in the Middle
Evidence of adjustment	79%	36%
No evidence of adjustment	21	64
Total	100%	100%
Number of foremen in the middle	(66)	(28)

*Chi-square = 16.24, 1 df
p = .001

*The statistical test was computed on the basis of the raw frequencies.

responsibility—grief, problems," "difficult to satisfy management," "men hard to get along with," and "have to please both men and management—criticized by both." Thus, workers and stewards seem to recognize the pressures which are associated with the foreman's position, and in the event that one of them is promoted to a foremanship he must feel capable of adapting himself comfortably to the pressures and conflicts. In other words, there may well be a selective process operating in the plant by which individuals who can tolerate role conflict are promoted to and remain in the position of the foreman.

Summary

In the course of this chapter we have cast doubt upon certain assumptions that the previously reviewed industrial sociologists posit so that they may extrapolate from their investigations concerning the changing structure of industrial organization to conclusions relating to the effects of the organizational structure upon the psychological conditions of the personnel involved. We have been restricted to data drawn from a survey of only one industrial firm among many in the U.S., but our empirical analysis is supported by theoretical considerations which lead us to doubt these assumptions (see Chapter VI).

The writers assume that there is a uniformity of structural conditions within present-day industrial plants which lead necessarily to experiences of being in the middle between workers and management among first line supervisors exposed to these situations. We have indicated that there may not be the degree of uniformity either in the structural conditions or foremen's perceptions of these structural

conditions which the authors believe to exist. Although our evidence is slight, there is some reason to believe that there is not the uniformity of motivations among foremen that the writers postulate in order to draw conclusions about the psychological experiences of foremen under conditions of role conflict.

The tone of the writings of Roethlisberger, Moore, Gardner and Whyte, and Wray implies that foremen's feelings of being in the middle represent unfortunate "social problems," that they lead to insecurity and anxiety among the first line supervisors of industry. The survey data cast considerable doubt on this conclusion by suggesting that the feeling of being in the middle is accepted by a substantial proportion of foremen as a legitimate if not a desirable aspect of the foreman's job. With few exceptions the first line supervisors in the plant either failed to see the conflicts involved in their job or had ways of adjusting to the conflicts while accepting them as part of their job.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

The attention of social scientists has been drawn to the problems confronting first line supervisors in American industry within the last 15 years. This has been due, in part, to the emergence of these problems as a major political issue; but the problems also have been attractive to social scientists, and particularly industrial sociologists, because of the clues they provide to basic processes in human organization and the relationship between organizational structure and human behavior.

Industrial sociologists have directed their studies of the foreman's position toward an understanding of the changes in managerial structure over the last fifty years which have culminated in feelings among foremen that they are caught between pressures from management and workers. In the course of their analyses, certain sociologists (whose works we reviewed in Chapters III, IV, and V) make a number of assumptions concerning the relationship between organizational structure and the behavior of individuals within the structure. Generally speaking, they assume that most if not all industrial foremen do, in fact, feel they are in the middle between workers and management. They explain this presumed fact by an analysis of the structural

conditions of industrial concerns coupled with assumptions relating to the existing motivations of the first line supervisors.

In this thesis we have been able to draw upon data collected by the Survey Research Center of the University of Michigan to examine the adequacy of the authors' assumptions in one large, contemporary industrial unit. The most immediate fact which we observed from responses to systematic interviews with first line supervisors is that they did not uniformly feel they were in the middle between workers and management. Only one-half of them replied in the affirmative when they were asked if they ever had the experience of standing between the workers and management. (In Chapter II we presented evidence indicating that the interview responses of foremen are valid measures of their feelings and that the reliability of the coding process to which the interview protocols were subjected is relatively high.)

We have also shown evidence (in Chapter VI) suggesting that there is not the uniformity in the structural situations of the organization nor the uniformity of foremen's perceptions of these situations which would permit the authors to reach the unequivocal conclusion from their arguments that all foremen in present-day industry are affected by these conflict-inducing situations.

The fact that there are variations within the industrial plant with respect to both the dependent variable (foremen's subjective experiences of being in the middle) and the various independent variables proposed by the authors allows us to test the degree to which the hypothesized independent variables actually account for

the variance of the dependent variable. Using the liberal probability level of .10 as a criterion of statistical significance, we find that seven of the fourteen empirical tests support the authors' hypotheses while the other seven tests provide no support for the hypotheses.

It must be noted that in over half of our tests (eight of fourteen) we have had to use measures based on foremen's perceptions of the situations to which they are exposed rather than to objective descriptions of the situations due to the nature of the survey materials. The propositions which we have tested universally hypothesize relationships between the structural situations and foremen's subjective feelings without incorporating the intervening variable of foremen's perceptions of the situation. Our use of perceptual variables should increase the possibility of finding supporting evidence for the authors' propositions if the propositions are valid; the reasoning behind this assertion is found in our development of a theory of social roles (Chapter VI).

We developed a system of role concepts which we believe will allow us to designate the conditions under which difficulties in structural situations, such as situations of role conflict, will be internalized by the persons exposed to them and experienced subjectively as difficulties. One of these conditions is that the persons must have an accurate perception of the situation--must accurately perceive the conflicting expectations of two groups if the situation is one of role conflict.

Another condition is that the persons must be motivated to conform to the expectations of both groups whose expectations are in

conflict. The authors take account of this condition in their formulations of the underlying causes of foremen's experiences of being in the middle. But they do so by postulating that foremen, without any major exceptions, are motivated primarily to advance in the supervisory hierarchy and that this motivation and/or related motivations leads them to relate themselves strongly to the expectations of their superiors and their subordinates. Although our empirical evidence is small, it supports our contention that there is less uniformity in the basic motivations among industrial foremen than implied by the authors; and it is upon the basis of these supposed uniformities of motivation that the authors rest their conclusions concerning the prevalence of feelings of conflict among first line supervisors.

But even if we accept the implication of the industrial sociologists that most if not all first line supervisors in the large, industrial organizations of contemporary society feel they are in the middle, the data from the industrial plant make us wonder how serious such feelings are in making the foremen generally insecure and discontent. We have presented evidence in Chapter VII which indicates that the majority of those foremen who do feel they are in the middle accept this situation as a legitimate component of the supervisor's job and that only a relatively small proportion of foremen have not been able to cope with the situation. This proportion is in the neighborhood of ten per cent of all first line supervisors in the plant--a rather small number to support any implications that the foreman's plight in industry is to be deplored.

We do not pretend that we can discredit the conclusions of industrial sociologists on the basis of a survey of one industrial

unit. Our purpose has been something else. We have attempted to uncover the assumptions on which their conclusions are based. Our exhibits of empirical data, systematically collected from industrial personnel, contribute to this end by demonstrating the need for analyses at a more microsopic level than those of the industrial sociologists whom we have discussed. By making use of a social psychological theory of roles we have attempted to isolate certain critical assumptions which the sociologists must posit in order to draw conclusions about the psychological experiences of individuals from observations of the organizational structures in which they are found. We believe that the theory of roles which we have developed here is a fruitful way of turning the assumptions into testable hypotheses which may be put to empirical investigation for a more complete understanding of the problems confronting first line supervisors in industrial organizations.

APPENDIX

SURVEY RESEARCH CENTER
UNIVERSITY OF MICHIGAN

May 1948
Study 23

FOREMAN QUESTIONNAIRE

1. About how long have you been foreman here at _____?

2. What is your job called -- are you head foreman or assistant foreman or is your job called something else?

3. What do you do on your job?

4. About how many men work under you?

5. What kind of work do most of the men under you do?

6. In general, how do you like working for _____?

   6a. What is there about it that you like?

   6b. What is there about it that you don't like?

7. How many assistants do you have to help you?

8. What would you say are the most important things you as a foreman have to do on your job?

   8a. About what percent of your time do you spend on things that have to do with people getting along together and what percent on strictly production matters?

9. Of the foremen you know, what kind of person makes the best foreman?

10. In general, would you say that the job of foreman has been getting harder or easier since you have been there?

    10a. Why is that?

11. How about the men who work under you? Do they come to you with their questions or do they go to somebody else?

    11a. What kind of questions do they bring to you?

    11b. What kind of questions do they bring to the stewards?

    11c. Do you have the men help you make decisions about the shop?

    11d. Can you give an example of what you mean?

12. Does the man you work under spend much time working with you or are you pretty much on your own?

    12a. What do you yourself do?

12a. How does that work out?

12b. Can you get to him when you have problems or is he a hard man to reach?

12c. Does the man you work under call you in when he has to make decisions about the work or does he like to make most of the decisions himself?

12d. How does that work out?

12e. How much would you say that your boss is interested in helping you with your problems?

13. In your department, when you have contacts with the union, who is it usually with - a group steward or chief steward or a divisional?

14. In some departments stewards are easy to get along with and in others they are hard to get along with. How is it in your department?

14a. How do you mean?

15. In some departments foremen have most to say about what goes on and in others the stewards do. How is it in your department?

15a. How do you mean?

16. What would you say are the most important things that a steward does as a steward?

16a. How has the job of steward changed since you have known it?

16b. What do you think the job of steward should be?

17. Of the stewards you know, what kind of a person makes the best steward?

17a. What are the things you judge a steward on?

17b. As far as you can tell, what are the things the union judges a steward on?

17c. How do you mean?

17d. In general, what do you think of the stewards in your department?

18. As far as you can tell, what do the men think of a steward who becomes a foreman?

18a. What do you yourself think?

19. As far as you can remember, when was the last time you had any dealings with the union - about how long ago?

19a. What kind of things were talked about?

19b. Did you settle it in your shop or did it go higher?

19c. Were you satisfied with the way it came out?

19d. Is that the way things usually work out in your shop?

19e. (If no), How do things usually work out?

20. Some foremen feel their job is tough because they stand between the workers and management. How does it work out in your case?

20a. (If R says things work out all right), Have you ever been in a situation where you were trying to please management on one hand and your men on the other?

20b. How did you handle this?

21. In general, what do you think of the way that union and top management get along here at _____?

21a. Who do you think of when you say "top management"?

21b. Do you think the way that union and top management get along here is any different from what happens in other plants?

21c. (If yes), How is it different?

21d. As far as you can tell, have there been any changes lately in the way that union and management get along here at _____?

21e. (If yes), What are the changes?

21f. (If yes), What do you think of the changes?

21g. Do you think there will be any changes in the next couple of months?

21h. (If yes), What do you think will happen?

21i. (If yes), How will this affect you?

22. Some things the company does can either help or hurt the union. Do you think the company cares how what it does affects the union?

22a. How do you mean?

23. Some things the union does can either help or hurt the company. Do you think the union cares how what it does affects the company?

23a. How do you mean?

24. In general, would you say that union and management here at _____ are usually pulling together for the same kinds of things or are they working for different kinds of things?

24a. What are the things that management wants most?

24b. What are the things that the union wants most?

24c. Do you think that both union and management can get what they want without getting in each other's way?

25. As far as you can tell, what do most of the men in your shop want out of their jobs — what do they look for in their jobs mainly?

25a. How do you think most of them feel about their jobs — are they getting what they want from their jobs?

25b. How do you mean?

26. How are most of the men in your department paid? On group piece or individual piece or straight time or what?

26a. What do you think the best way of having your men paid would be?

26b. Why is that?

27. Would you say that your department has mainly high seniority men or low seniority men or what?

27a. In general, what do you think of the seniority system?

27b. What do you mean?

28. Now, how about production schedules. In general, do the men in your shop have to work under much pressure to meet production schedules?

29. In general, how satisfied is management with the production it is getting in your shop?

30. How about the men? Do you think the men in your shop feel they are turning out about the right amount of work?

30a. What do you think is the best way to get the right amount of production in your shop?

31. Now, getting back to your job. (Refer to Q. 3), In general, how do you like your job?

31a. Why is that?

31b. How do your wages compare with those of most of the people you know?

31c. How much do you think you should be making?

31d. Is there any other job in the plant you would rather have?

31e. (If other), What would you rather be doing?

31f. (If other), Why would you rather do that?

31g. (If other), What do you think your chances are of getting work like that?

32. In general, what are your plans? Would you like to stay on the job you have or do you have other plans?

32a. (If other), What are your plans?

33. If you had to advise a young fellow who was planning what to do, would you tell him to go to work for _____?

33a. Why is that?

34. As far as you can tell, how do things look in the next couple of years? Are we going to have good times or bad times or what?

35. How about _____? What do you think is going to happen here in the next couple of years?

35a. Why is that?

36. If _____ got into a bad position, what do you think you or the men could do to help out?

36a. Do you think you would do this?

36b. Do you think the men would do this?

37. What are the toughest problems you have to meet as a foreman?

37a. Can you give an example of what you mean?

37b. How did you handle this?

38. Are there any other things about your job that we haven't talked about that should be covered?

SURVEY RESEARCH CENTER
UNIVERSITY OF MICHIGAN

Study 23
May 1948

BACKGROUND INFORMATION SHEET: (FOREMAN)

1. About how old are you? _____ years

2. About how many years schooling do you have? _____ years

3. (If "more than 9") Did you graduate from high school?
_____Yes _____No

4. (If "graduated from high school"), How much college training have you? _____ years

5. Are you married or single or divorced or separated or widowed? _____

6. (If anything but "single"), How many children have you? _____

7. How many people depend on you for support? _____

8. Do you have any relatives who work for _____ now? _____Yes _____No

9. (If yes), How many relatives do you have who work for _____ now? _____

10. (If yes), Who are the relatives - are they your father or brother or sister or what?

11. Do you have any relatives who worked for _____ in the past?
_____Yes _____No

12. Do you own your own home? _____Yes _____No

13. Are you a veteran of World War I or World War II? _____Yes _____No

14. (If yes), Which war? _____I _____II

15. What is your religious preference? _____

16. Do you work days or do you work nights? _____Days _____Nights

17. (If days), Have you ever worked nights? _____No _____Yes
_____Yes, short time _____Yes, long time

18. Do you have a trade? Are you a skilled mechanic? _____Yes _____No

19. (If yes), What is your trade? _____

20. Have you every worked for any company besides _____?
_____Yes _____No

21. (If yes), Were you a foreman there? _____Yes _____No

SURVEY RESEARCH CENTER
UNIVERSITY OF MICHIGAN

Study 23
May 1948

Background Information Sheet: (Foreman)

22. (If yes), How long have you worked other places besides _____ _____yrs.

23. Have you ever been laid off here at _____?

24. (If yes), How many times have you been laid off? _____

25. (If yes), What was the longest time you were laid off? _____

26. (If yes), Were you laid off during the depression? _____

27. Have you ever changed jobs here at _____ from one department to another? _____Yes _____No

28. (If yes), How many times have you changed departments? _____

29. Have you ever been a foreman in another department? _____Yes _____No

30. What is your salary now? _____per_____(gross) _____per_____ (take home)

31. What was it when you first started with the company? _____(Gross) _____(take home)

32. What year did you start with the company? _____

33. How long were you with the company before you were made a foreman? _____yrs.

34. What was your job before you became a foreman? _____

35. Have you ever been a steward? _____Yes _____No

36. (If yes), Was that here at _____?

37. (If yes), How long were you a steward? _____yrs.

38. What is your department number? _____ (NOT CLOCK NUMBER)

39. (If respondent doesn't live in _____), How far do you travel to get to work? _____miles

40. Race: White _____ Negro _____ Other (What) _____

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