SOME POSSIBLE APPLICATIONS OF SOCIAL PSYCHOLOGY
TO AN OPERATING COMPANY

by

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This report is based upon impressions garnered
during an extended visit to the Pacific Northwest Telephone
Company. During my visit, I had an opportunity to talk
with people at all levels in several departments: Plant,
Traffic, Commercial, and Accounting. Limitation to these
departments was due simply to lack of time. In addition,
I had interviews with various staff members and officers
of the company at general headquarters.

My procedure in conducting interviews was to
describe the reasons for my visit to the Pacific Northwest
Company and to indicate my interest in learning something
about how a telephone company operates. I indicated that
my interest was in the "people side of the business" rather
than in the "hardware". The interviews were unstructured
but they usually dealt with such topics as the respondent's
job, his relations to his superordinates,ordinates, and
subordinates; problems encountered in supervision, in training
in communication, in motivating people, and in introducing
changes in procedures were also discussed. Typically, an
interview took over two hours.
In no sense did I make a systematic sampling of the personnel in the departments which I visited. I have no idea of how representative or unrepresentative the people that I interviewed were. Nevertheless, let me indicate some general impressions of the people with whom I spoke. Overall, they seemed more intelligent, more competent, more responsible, more identified with the telephone company, and more willing to express their opinions frankly than I had anticipated on the basis of my experience in such other large organizations as the Armed Forces and universities. Of necessity, this report emphasizes problems rather than achievements. It is well, at the outset, to recognize that this emphasis distorts the reality of a company with substantial accomplishments to its credit.

What can social psychology contribute?

Before proceeding to an identification of a number of problems that social psychology may help in solving, a brief consideration of what social psychology has to contribute may be useful. In general, social psychology has two offerings to make to any problematic situation: research technique and a point of view.

By research technique, I refer to the whole arsenal of research designs, data collection procedures and data analysis methods. I shall not enumerate the contents of this arsenal here but shall simply assert that useful ways of
collecting relevant and reliable information about people do exist (see Research Methods in Social Relations). Research technique can be applied to provide answers to such questions as: What is the existing situation? What are the "causes" or conditions contributing to the existing situation? Which of several methods of attempting to change the situation is most effective in producing the desired results? Social psychological research technique has been widely and effectively used by many organizations to answer such questions. For example, during World War II the U.S. Treasury Department revised its War Bond program so as to make it more successful as a result of survey research, the War Dept. developed its popular point system for discharge from the Armed Forces based upon opinion research, the effectiveness of various types of indoctrination films, used by the War Dept. was systematically studied by social psychologists, economic forecasting has been considerably improved by consumer surveys, etc. It is my impression that the Bell System makes very little use of the potential of social research technique for providing the kind of information that is relevant to the formulation and assessment of policies and procedures which affect either the personnel within the System or the consumers of the services and equipment produced by the System. This is true, I believe, with regard to such specific matters as whether a given booklet

Let me illustrate some insights that follow from the point of view of the social psychologist. With regard to any social system, he will expect that any policy has potential dysfunctions as well as functions. Moreover, he will expect that if the potential dysfunctions of a policy are not anticipated and counteracted, the policy may have important dysfunctional consequences. Let us consider several general policies within telephone companies (the same sort of analysis could be made with other policies): measurement of performance ("the indices"), security of employment, standardization of procedures, and the fostering of upward striving.

1. **Measurement of performance.** In addition to its many desirable consequences, one could expect that measurement will lead to a focusing of attention and evaluation upon those aspects of a job which are measured with a relative neglect of those aspects which are not. Moreover, if detailed measurements are summarized into fewer numbers, one can anticipate that the summary figures will be attended to more than the items which underlie the summary
figures: this tendency to rely on summary figures would necessarily be greater, the higher one is in an organizational hierarchy (i.e., the more remote one is from the basic data). These tendencies, combined, would generate pressure to produce summary results that were high even if so doing interfered with or distracted from the production of optimal results for the organization. Moreover, if evaluation of job performance is largely by competitive comparison on summary results, it is evident that some individuals will be tempted to "play the numbers" with the consequence that his competitors will feel under pressure to do likewise in self-protection, etc.

Thus, one would anticipate certain pathological consequences from measurement unless prophylactic measures were taken. These pathological consequences are: the neglect of aspects of the job that are not directly measured ("the people side of the business" aspect of a manager's job is mostly unmeasured); the corruption of the function of measurement from a diagnostic to an evaluation function; and the undermining of the measurement process itself so that it does not accurately reflect what it was set up to measure.

One further note about measurement. I have commented about the pathologies of measurement, assuming that the measurements are reliable, valid, and relevant. It is my impression - based admittedly upon superficial observations - that there may be serious defects in the measurement process
itself, that much of the data may be unreliable, that many of
the weightings to form indices are arbitrary, and that some of
the data are not relevant to the purposes for which they are
used.

2. **Security in employment.** In addition to its
many desirable consequences (job attraction, loyalty, less
resistance to technological change, etc.), one could anticipate
that a policy which emphasizes security of employment is
likely to have the dysfunctional consequence of producing a
lot of "deadwood". The tolerance of "deadwood" as an
inevitable cost of a policy of security tends, on the one
hand, to lower standards and, on the other hand, to produce
more "deadwood". "Deadwood" tends to be assigned to
positions where the work has little direct or immediate
effect on measured performance, i.e., to certain kinds of
staff positions. These positions are either "make work"
positions, whose very existence tends to demean the general
reputation of staff positions (e.g., those associated
with training) which may have widespread, even though indirect,
effects on the functioning of an organization. "Deadwood"
also tends to produce "deadwood" by allowing supervisors
and managers to classify "problem people" this way and, thus,
to avoid the efforts involved in diagnosing the problem and
in rehabilitation attempts. It may, of course, be true that
diagnosis and rehabilitation require special professional skills that a manager cannot be expected to have and that he needs expert help in order to avoid the temptation to isolate and ignore problem people.

3. The standardization and routinization of work. Most large organizations develop standard operating procedures to increase the efficiency, reliability, productability, and accountability of the behavior of its personnel. Among the potential dysfunctions of standardization are the familiar diseases of bureaucracy: red tape, rigid and inflexible behavior, the loss of spontaneity and creativity, the Kafkaesque sense of personal insignificance, the loss of personal initiative, the sense of organizational inertia, the fear of "sticking one's neck out", the tendency for performance to be regulated by minimal acceptable standards rather than by optimal standards, the breakdown of communication between the different levels of the organization, the development of "committee-itis", etc. My impression is that the diseases of bureaucracy are as rampant in the telephone company as one would expect in a large organization. It is also my impression that the telephone company, not unlike other organizations, devotes little effort to the development of techniques of organizational hygiene which might counteract the diseases which flourish in bureaucracies.
4. The fostering of upward striving. As part of the general process of motivating and recruiting personnel for higher positions there is a tendency to evaluate higher positions more favorably than lower positions so that the people in higher positions receive more income, more prestige, etc., than people in the lower positions. Potential dysfunctions of this tendency include the devaluation of lower positions and the devaluation of the people who remain in lower positions. Thus, an upward striving person may view certain positions only as a jumping-off place for higher positions with the result that his performance in them is guided by his need for mobility rather than by the intrinsic requirements of the tasks confronting him. The people who remain in lower positions, (i.e., those whose upward strivings do not meet success) are faced with the problem of coping with a possible social and self-devaluation. There are many ways of dealing with this problem: blaming oneself (i.e., becoming depressed), blaming the system (i.e., becoming bitter and alienated), refocusing one's interests from work to outside activities (i.e., withdrawing and becoming less interested in work), emphasizing the other sources of satisfaction in work than those connected with advancement. It is my impression that the need for a more balanced age distribution in the various levels of management, the college
hire program, and the lack of the development of other modes of conferring recognition and prestige than advancement, all, have combined to make a sizeable number of "passed-over" men in lower management feel depressed, bitter, or withdrawn.

In the past several pages, I have outlined some of the normal pathologies of organization that a social psychologist's training would alert him to. These are problems which are taken for granted because they are so typical. In many instances, there are no obvious solutions to these problems. However, unless the problems are clearly recognized and specifically identified, it seems unlikely that their solutions will be found.

In addition to these typical problems of organization, as a psychologist listening with "a third ear" as I talked with people, I was struck by an incipient or developing malaise. It was expressed variously as a growing cynicism and disillusionment, a feeling of loyalty given but not returned, a mood of harassment and futility, a sense that the telephone company is not as good a place to work for as it used to be, a feeling that the maintenance of equipment is considered to be more important than the maintenance of people, envy of someone who could afford to quit, a sense that upper and lower levels of the organization were not being heard by each other, an observation that many of the
older, lower management men were mildly depressed. This malaise is not simply the griping of misfits; it was expressed at all levels by men and women who were judged to be excellent people by their superordinates. I should note that, in my opinion, the malaise is not specific to the Pacific Northwest Company. I suspect it is system-wide; the Pacific Northwest Company may not suffer from it as much as other less youthful and less fortunately situated companies.

Some Specific Suggestions

In this section, I shall describe several specific projects which would be feasible for an applied social research unit to undertake and which would, in all likelihood, be useful for the operating companies. In describing these projects, I shall necessarily be sketchy. It must be remembered that most of my visit at the Pacific Northwest Company was spent getting an orientation to how a telephone company operates and acquiring some perspective on the variety of problems that are encountered in the "management of people" in an operating company. Relatively little time was spent in doing the kind of preliminary work that is necessary to an adequate and detailed formulation of a specific study.
1. The development of procedures to provide management with the information it needs in order to do an effective job of managing people. It is my impression that management largely operates in an information-vacuum with regard to whether or not it is accomplishing what it wishes to accomplish in relation to the people it manages. It gets no systematic feedback about how well it is doing in providing effective leadership and in creating the kinds of work situations which evoke desired attitudes and behavior. For example, there is no systematic way of noting whether a committee is being poorly run or not, whether a supervisor is effectively utilizing the training he received in "human relations", whether a technological change has been introduced in such a way as to minimize resistance, whether a manager maintains adequate communication with his subordinates, whether the measurement system is being utilized as intended, whether a work situation is unnecessarily stressful for the people in it. Because there is no systematic procedure for noticing these things, they often go unnoticed and, even when noticed, they are frequently not responded to. Not only does systematic noticing produce more information but it also tends to make one more aware that such information is relevant to one's job and to have the additional effect of suggesting that steps should be taken to improve a situation which is noticeably bad.
What should be noticed systematically? How often should it be noticed? By what methods should it be noticed? Who should notice? How can one determine whether the noticing has desired effects? These are, all, important questions but without a good deal of exploratory pilot research detailed answers cannot be given. Here, I shall sketch some tentative answers.

A. What should be noticed? I suggest that the most direct information about the kind of job an individual is doing in managing people is obtainable by studying the effects of his behavior upon his subordinates, coordinates, and superordinates. Less direct, but nevertheless valuable, information is obtainable by studying the supervisor's or manager's ideology, beliefs, and evaluations with regard to his own behavior. (We make no assumption here that these data will speak for themselves, rather they will have to be interpreted. For example, in some circumstances, one might expect that an effective supervisor might stimulate certain types of discontent among his subordinates.)

Al. Data from subordinates. Two types of data might be obtained here: data centering about the subordinate's view of how the supervisor does his job (the administrative-organizational aspects as well as the human relations aspects of his job) and data centering about the subordinate's beliefs and attitudes (beliefs about various company policies, pride in his work group, satisfaction with his work, identification with the company, etc., etc.). No attempt will be made here
to list the various dimensions of the work situation which would provide the focus of inquiry nor the specific questions that might be utilized to develop measures along a given dimension. There is a fairly sizeable body of relevant social psychological research which could be drawn upon (including the research on the AT&T Co. attitude surveys) for this purpose,

A2. **Data from coordinates.** So far as I know there is little formal use in industry of the opinions of coordinates in assessing a supervisor's performance. Yet the few studies employing this kind of data (studies done in the Armed Forces and in schools) suggest that ratings by coordinates often provide better predictions than ratings by superordinates. This source of data warrants considerable further research to determine its usefulness in an industrial setting.

A3. **Data from the supervisor's superordinate.** The traditional method of appraising a supervisor's performance relies primarily on his superordinate's judgment. The superordinate's direct contacts with the supervisor provide him with valuable information but this information is, of course, from a limited or special perspective. How effectively a supervisor relates to his superordinate, whether he gives his superordinate a clear picture of what he needs to know about
what's going on under his jurisdiction, whether he asks for too much or too little guidance, the supervisor's effectiveness in conferences, etc. are, all, matters which may be most clearly observed by a superordinate. However, it is not always the case that a supervisor has similar effects on his superordinates, coordinates, and subordinates; the superordinate often has no basis for knowing of these divergent reactions.

A4. **Data from the supervisor himself.** It is evident that the beliefs and attitudes that a supervisor has about supervision, about his subordinates, about his superordinates, about the company and its policies, etc. may play an important role in determining his behavior as a supervisor. Thus, data obtained directly from the supervisor himself may be crucial to the understanding of the factors underlying his performance as a supervisor.

B. **How often should it be noticed?** The kinds of data described above should be collected at time intervals which are long enough apart so that significant changes in the state of affairs may be detected but, also, which are sufficiently close together that, on the one hand, corrective action may be instituted in a deteriorating situation, and, on the other hand, continuing support and recognition is given to good situations. I would guess that a semiannual
appraisal would serve these functions with regard to the routine, everyday aspects of "managing people." For non-routine or more specialized activities - e.g., special task forces, interdepartmental committees, staff meetings - one would have to devise special data collection procedures and would have to time the data collection so that they were appropriate to the activity being studied.

C. By what methods should it be noticed? The method of data collection would basically involve simple, objective-type, questionnaire to be filled out anonymously. Undoubtedly, it will be necessary to supplement the questionnaire data with occasional interviews that would attempt to clarify some of the questionnaire results.

D. Who should notice? Initially, the applied social research unit would process, summarize, and interpret the obtained data. Then, with the assistance of the applied social research unit, personnel staff would develop policies and recommendations for utilizing the results. Staff personnel would be trained to assist management in the utilization of the results. Management, with staff assistance, would discuss the obtained results for his subordinates (who are supervisors) with his immediate subordinates, individually.

E. How can one tell whether the noticing has the desired effects? A well-planned experimental design, of course, would provide some basis for assessing the independent effects of the measurement process itself, the effects of
changes introduced as a result of the initial measurements, etc.
on the variables being measured. However, it would be useful
to attempt to obtain independent indicators of the validity
of the measurement process by relating the measurements to
such things as "work productivity," "turnover," "absenteeism,"
etc. "Productivity," "turnover," and "absenteeism," are, of
course, complexly determined and would only be partially
determined by a supervisor's performance in his job.

The program of research which I have outlined above
is a large-scale, long-range program which would require a
staff of several senior research personnel, with supporting
junior personnel, to implement fully. However, it need not be
implemented fully or all in one swoop. It would be possible
to begin by focusing on one kind of activity alone - e.g., on
the way meetings of various sorts (group meetings, staff
conferences, committee meetings, training sessions, lectures,
etc.) are conducted. Probably it would be wisest to start
the large-scale research program with a relatively simple
self-contained study of this sort. A study to develop
measuring procedures for assessing the conduct of meetings
of various kinds would take a senior investigator, with the
help of a research assistant, about a year.
2. The development of policies and practices to reduce the turnover rate among service representatives in the Commercial Department. Three facts suggest the importance of this problem: it costs a considerable amount of money to train a service representative (I have heard estimates varying from $1000 to $3000 for the first year of employment); there is a very high turnover rate (a 50-100 per cent annual turnover rate is not unusual); and there are many service representatives employed throughout the Bell System. There are two obvious ways of reducing the costs associated with this position: reduce the costs of training and/or reduce the turnover rate. I did not have the opportunity to observe the training or to assess what might be done to reduce its costs. My observations and interviews (which were limited to two days in a business office) centered more on the people in the position, the nature of their activities, and the kind of supervision.

My impression, based upon admittedly scant observation, is that the high turnover rate is due to three major factors which operate to compound one another in a vicious cycle. These factors are: (1) the kind of people who are hired for this position; (2) the over-pressured, harassed nature of the work; and (3) the closeness of the supervision. The people who are hired for the job are likely to have a
high turnover rate, apart from the nature of the job or of the supervision (these other factors, undoubtedly, contribute to the rapidity of turnover). They are young women who are relatively intelligent, socially poised, and well-spoken. They are likely to be mobile for any of a number of reasons: (a) they are attractive as marriage partners and are likely to get married, if not already married; (b) if married, they are likely to be married to educated, status-mobile men whose careers (e.g., as they finish college) may lead them to different localities; (c) if married, they are likely to become pregnant soon since this is the social norm for their age group; (d) they are attractive to other potential employers and, thus, can readily find other work which provides comparable or better opportunities; and (e), generally, they have not as yet settled into a stable life-plan which results in some degree of commitment to a place of residence, to a career, to a given marital status, etc.

The work seems harassed, over-pressured, and over routinized. The harassment seems to result partially from the fact that many details and many procedures have to be learned in order to give the approved response to a customer. Until these are learned thoroughly, there is a feeling that one may be doing something wrong (and the supervisor may be listening). I was struck by the fact that there were too many
ways in which a girl could be prevented from making a response to a customer in the required time-allowance by things outside of her control (e.g., by a poor system for filing and finding records). The harassment also reflects a feeling that one can never catch up with one's work; it accumulates at a faster rate that it can be disposed of. (This may reflect a shortage of service representatives, which may in turn reflect the high turnover rate.) There is a sense of over-pressure: pressure from the Company to sell and to take on an unaccustomed aggressive role in relation to men and older people; pressure from the customers which seems to mount if the service representative has many customer contacts during the day; pressure from the supervisors to follow approved routines; and pressure from the indices. The sense of over-routinization is associated with the feeling that once the standard routines are learned, there is no challenge to the job because the service representative is not allowed much room for using her own judgment. Thus, if the service representative does not leave the company during the difficult period when she is trying to master the routines and standard procedures, she may leave it because the work may lose its interest after they have been mastered.

The large turnover results in the fact that many of the service representatives are inexperienced which, in turn, seems to have resulted in supervisors having fewer
service representatives to supervise. This, in turn, means that a supervisor may have abundant time to monitor the customer contacts of each girl. The unwitting result of this chain of circumstance is that the service representative may sometimes become either excessively dependent on the supervisor or may feel over-supervised. In the former instance, she may feel that she cannot do without the supervisor and, in the latter instance, she may feel that she cannot do with the supervisor.

In the last several paragraphs, I have given my impressions of the factors causing the difficulties associated with the service representative position. These impressions are based upon hasty observations. The magnitude of the costs associated with the turnover in this position warrants more systematic research. I would suggest research in two phases: systematic diagnostic research to be followed by field experiences.

A. Systematic Diagnostic Research

One would start by analyzing the existing statistical information to see what characterizes service representatives who stay versus those who leave, what characterizes supervisors with high versus low turnover rates, and what characterizes business offices with high versus low turnover rates. Then, one would do an interview study of a selected sample of service representatives who were at different stages
of their career (e.g., after being hired, during training, after training, after 1 year of employment, after 2 years and after 5 years of employment) in a number of business offices which are selected systematically according to certain criteria (e.g., rate of turnover, type of location, size of office). The service representatives would be chosen also to sample certain known characteristics of supervisors (e.g., turnover rate among their subordinates, number of subordinates supervised) and interviews of the supervisors would also be conducted. A second round of interviews would be conducted after a year to trace the subsequent career of the girls initially interviewed. The design of the study would attempt to control for the effects of the interview itself upon the careers of the girls being studied. A study of this sort would take about two to two and a half years and could be conducted by a senior research investigator and a research assistant with the help of a small corps of interviewers (e.g., graduate students).

E. Field Experiments

As a substitute for or as a follow-up of the diagnostic study, one could study experimentally the effects of introducing specific changes in the type of person recruited for the service representative position, changes in the structure of the job of the service representative, and changes in
the nature of the supervision. I believe it might be possible to skip much of the diagnostic research study with, of course, some risk of missing crucial variables. (My feeling is that there are clear-cut actions which might significantly reduce turnover and have other desirable effects.)

More information than I have would be necessary to design a good field experiment. However, to illustrate what I have in mind, let me sketch out such a study. One would attempt to find, say, 24 business offices with roughly comparable, high turnover rates and with roughly comparable operations. In one group of 12 offices, the current procedures of recruitment and selection of service representatives would be continued; in the other 12 offices, married women whose children were in school would be recruited for full or part-time work (they would be screened, of course, in terms of intelligence and other relevant characteristics). In half of each of the two groups of business offices, one would maintain a relatively high ratio of supervisors to service representatives and a close supervision of customer contacts; in the other six business offices in each of the two groups, one would reduce the ratio of supervisors to service representatives and have less continuous monitoring of customer contacts. In half of each of the six offices in the sub-groups formed by the previous partitioning, one would maintain
the present structure of the service representative job; in the other 3 offices, one would introduce some structural changes based upon the suggestions of the representatives.

After the experimental changes had been instituted for a period of six months, the experiment would continue for 3 years to study over this extended period the effects of the changes upon various aspects of productivity, costs, and turnover. All told, then, the field experiment would take about five years: one year to plan and arrange the experiment, six months to institute the experimental variables, three years to observe their effects, and about 6 months to make a final analysis of the total experimental results. The personnel requirements of the research staff would vary from time to time: two senior and four junior investigators working full-time during the first year and a half and part-time during the next three years would be required.

3. The development of techniques to stimulate, tap, and utilize creative innovations in work. It is my impression that little of the creative potential of nonsupervisory employees and of lower level supervision is utilized to make the kinds of work improvements which might lower costs, raise productivity, and/or increase job satisfaction. I refer here to the kinds of improvements which do not involve major technological innovations (i.e., not the kinds of innovations deriving from research at the Laboratories) but rather to
the minor, relatively nontechnical suggestions that emerge from a detailed knowledge of local, specific situations. Although a "suggestion system" does exist, my impression is that it is not very alive; it is too formal, remote, and provides little stimulus and incentive for initiating suggestions.

My proposal here is for research which is aimed at developing more adequate procedures for stimulating and communicating work innovations. Further investigation is required before one could sketch out the procedures which might be involved. However, I would suggest that whatever the procedures are, they must accomplish the following sub-objectives: (1) stimulate and encourage suggestions, and also the identification of problems needing suggestions; (2) provide assistance and facilities for developing and elaborating the suggestions; (3) recognize and reward useful good suggestions; (4) encourage the communication of useful suggestions to other places where they might be profitably employed. I have the impression that some relatively simple procedural innovations might do much to accomplish the above objectives. Thus, the institution of periodic "work innovation" meetings of selected craftsmen (clerks, telephone operators, service representatives, etc.) of selected first level supervisors, and of selected second
level supervisors, who are doing similar work in different districts might do much to stimulate a continuing awareness of the importance of new ideas to improve work. These meetings would, initially, be conducted by discussion-leaders who have been given special training in leading a meeting of this sort. Similarly, from anecdotal reports in interviews with people (service representatives, telephone operators, craftsmen) who have worked in other telephone companies, I get the impression that brief rotational assignments of selected non-supervisory personnel and of lower level supervision might be an excellent method of stimulating the awareness of possibilities of work improvement. It could also be a useful method for communicating new ideas across company lines. The development of a work tip journal for each craft, which would solicit and publish suggestions for work improvement regularly on an intercompany basis, might also stimulate the interchange of useful ideas. Procedures for giving appropriate recognition and reward to people who make useful contributions also require development: these procedures might well be responsive to the findings of opinion research regarding the preferences of the potential recipients of such recognition or reward.

In the preceding paragraphs, I have listed some relatively minor organizational innovations which, collectively, might result in a large return of useful suggestions for work
improvement. The proposals are obviously not well-developed nor adequately thought-through. However, I am suggesting that the insights of social psychology into the factors relevant to the establishment of a group norm, into the conditions promotive of inter-communication, into the kinds of leadership which relate to productive group discussions are all relevant to developing an effective suggestion system. My impression is that it would not be difficult to develop a system which is considerably more effective than the present system. Without more exploratory study, it would be inappropriate to guess how long such a developmental study would take. However, three to six months of exploratory investigation might enable a social researcher to get some notions of what might be involved in an adequate developmental study.

4. Miscellaneous studies. There are a host of miscellaneous studies for which the social psychologist's training gives him a uniquely valuable background. This is true for the varied studies which require information about people's beliefs, opinions, preferences, values, past actions, plans, expectations, personal characteristics, etc. Public relations activities, marketing, advertising, employee recruiting, employee compensation programs, employee benefit programs, etc. are all based upon some conception of the beliefs, preferences, etc. of the audience towards whom the activity or
policy is directed. Some research related to these kinds of activities is conducted, some of it within the Bell System and some of it by contract. My superficial impression is that this research is of quite varied quality, that unwillingly the Bell System often settles for research which is inferior and not very pertinent to the operating problems which initiated the research. I have no way of assessing the amount of money which is spent on such research. It might be useful to make a census of the kind of research-like studies that are made to determine how much is done, how much the studies cost, and how worthwhile they are. Such a census would not only help to uncover what is done poorly but, also, what is not done at all.

Some suggestions for doing social psychological research in the companies

In this report, so far, I have made a number of suggestions concerning what might be done in the way of social psychological research. It is useful also to consider how it might be done.

It is self-evident that applied social psychological research in the Companies will not get done unless there is someone to do it. We need someone who is well-trained in social psychological research, interested in industrial applications, sufficiently socially poised and personable to be effective in establishing good working relations with upper
management, knowledgeable in the social sciences generally, and interested in the work of the people in Dept. 122. It will be difficult but not impossible to find such a person; it should be apparent that such a person would be a senior person who would expect to receive compensation not much below the earnings of a reasonably successful, consulting psychologist.

Organizationally, I believe it would make sense to attach such a person to Dept. 122. Doing this would probably be attractive to him, have desirable effects on Dept. 122, be most effective in relation to the operating companies, and be most facilitative for his research. However, I would guess that dual physical location would be necessary: an office at Murray Hill and an office in some receptive, convenient operating company.

My picture of how he might work, after a six month period of getting acquainted with a telephone company, suggests that he would need two aides: a junior social psychologist as an all-around research assistant and a young, sophisticated personnel man who knows his way about the complex, subtle maze of a telephone company. Specific research studies may require additional personnel to carry them out. Depending upon the nature of the specific study, this may entail contracting with university social scientists
to do a carefully laid out specific study, hiring temporary personnel (i.e., graduate students) to work as interviewers, or utilizing temporarily-assigned company personnel.

Over a period of ten years, one might anticipate that the demands for applied social psychological research in the Companies would grow substantially. The increased demand might be anticipated by planning for the development of an applied social research unit with a gradually enlarging staff and by the encouragement of the development of some local expertise in the operating companies (i.e., hiring their own psychologists, contracting out to universities, etc.) The possibility of an enlarging applied social research unit will pose a variety of problems: political problems with the personnel research group at AT&T; administrative problems for Dept. 122; problems of encouraging universities to motivate and train good graduate students for this kind of work.

There will, in addition, be the need to recruit and train personnel in the operating companies to understand and use intelligently the results of applied social research. This latter problem may present great obstacles with regard to the utilization of applied social research. There are few people in the operating companies who are conversant with the strange ways and the strange language of social scientists. While it is obvious that social scientists will
have to learn to express themselves in ways which are familiar to company personnel, it is also true that effective utilization of applied research will require some understanding of the methodology and concepts underlying the research. Possibly, members of the personnel staff will have to acquire some up-to-date training in the fundamentals of social science research.

There are, of course, additional difficulties (apart from the lack of company personnel with sophistication in the social sciences) with regard to both the doing of research and the application of research in the companies. I hasten to say that these difficulties are surmountable but, nevertheless, they do require some thought to surmount. One basic difficulty has to do with the inherent conservatism and inertia of a large organization: management people are reluctant to stick their neck out unless they feel that they have a sure winner and unless they feel it will not have any short-term adverse effects on their indicés. Field experiments, which involve some modification of customary practices for experimental purposes, are likely to run into a considerable amount of resistance. Resistance from management can be overcome by a combination of persuasion from the researchers and by high-level support from AT&T. However, the danger of high-level support is that it makes the research "important"
and places a heavy burden upon the research: the burden of being "successful." While, obviously, it would make political sense to select the initial research projects so as to build up the goodwill that comes from success, it also is evident that research "failures" can be anticipated. Hence, it would be desirable to have the kind of high-level support which encourages management to facilitate research but which sets modest expectations for its immediate utility.

The reaction of non-supervisory personnel to social research may also present certain problems. Thus, one has to anticipate that the local unions will be concerned and will have to be adequately informed and prepared for the research: otherwise, the research may easily be sabotaged. Procedures for insuring the anonymity of the respondents, for insuring the integrity of the research process, for guaranteeing that there is no illicit access to the research data will have to be worked out with utmost care. Unless the researchers are trusted and unless the research is seen as not being inimical to their interests, one can expect, at best, only a pro forma cooperation. However, if the researchers are trusted, a somewhat different problem may be anticipated. This problem, which has implications for research design as well as for management, is the problem which has come to be known as the "Hawthorne effect" (after the researches done at the Hawthorne plant of Western Electric by Roethlisberger, et al).
The interest and attention shown by the researchers may make many of the employees feel better about their jobs and about the Company and may lead to many specific suggestions for work improvement. (My own experience in interviewing indicated that many people felt extremely grateful that somebody in the telephone company was interested enough to listen attentively to their impressions and opinions.) That is, the research itself may, in all likelihood, have important incidental effects upon the employees apart from the specific experimental manipulations which are the object of investigation. It will require careful research design and astute collaboration with management to prevent the side-effects of the research from masking its main results.

In addition to the general problems of doing research which are described in the preceding paragraphs, one could, of course, anticipate specific problems arising in connection with specific studies. Thus, for example, one could expect specific problems to arise in connection with the proposal for research directed at providing management with information regarding whether or not it is accomplishing what it wishes to accomplish in relation to the people it manages. Such research might be perceived as threatening and might lead to defensive resistance unless specific precautions were taken to minimize anxiety... The central point is that
social research within the companies will be an innovation and that one can expect the various forms of resistance and the various kinds of problems that are usually associated with changes that affect people. However, social research, itself, has demonstrated that by anticipating the difficulties and by appropriate planning to cope with them one can do much to reduce this harmful consequence.

In closing this report, let me summarize. My impression is that the research tool-kit and the point-of-view of social psychology can be usefully applied to many, significant problems within the telephone companies. The difficulty which would confront the social researcher is not that of finding a problem that it would be useful to work on but, rather, to select among the many problems that are susceptible to research. I have indicated several problems toward which social research might be directed: a fuller characterization of these problems would require a more thorough exploratory investigation than time permitted. However, my belief is that research aimed at providing management with the information it needs in order to do an effective job of managing people would, in the long run, have the greatest significance for the telephone company and for industry in general. It would lead to a whole series of interrelated studies which could profit from
and stimulate basic research. However, its payoff would not—in all likelihood—be so immediate nor so dramatic as research which is directed at a limited, specific problem, i.e., the high turnover rate of commercial service representatives.