IMPACT OF HAWTHORNE STUDIES AND COUNSELING

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UNIVERSITY OF WISCONSIN - MILWAUKEE
IMPACT OF HAWTHORNE STUDIES AND COUNSELING

INTRODUCTION AND SUMMARY

This report presents a comprehensive picture of the impact of the Hawthorne industrial relations studies in general and of counseling in particular on people outside the Western Electric Company. It is thought that such a picture will indicate the extent to which other people and organizations have made use of our work along these lines, and the excellent reputation which such work has earned the Company in so many fields of thought and endeavor and in so many parts of the world. In turn, such information should provide a better background for evaluating results as seen from within the Company when such questions as the following are raised: (1) Did anything worthwhile develop out of the Hawthorne studies? (2) Is counseling worth the cost?

Fortune Magazine in the February, 1949 issue carried an article entitled "The Management of Men". This article dealt with a number of approaches to the general field of industrial relations and especially with university activities in the fields of research and of training of executives. In a few sentences it pointed out several important facts: (1) that considerable time and effort is being invested today in research in the field of industrial relations; (2) that the Hawthorne-Harvard University industrial relations studies from 1927 to 1932 were both the pioneer efforts in this field and the ones that led to the most practical results; (3) that they inaugurated a new line of thinking on the subject; (4) that a comparative lack of knowledge in this area characterizes many businessmen; (5) that unexpected discoveries of the old interviewing program led up to non-directive counseling; and (6) that Western Electric's counseling endeavors have been uniquely successful.

With these points in mind the following sections in this folder deal with outside interest in the Hawthorne studies and the counseling program. It is hoped that they will supply a perspective needed in trying to answer questions internal to the Company.

Section 1 gives a series of typical comments on the importance and significance of the Company's studies and counseling program. As can be seen from the other sections a much longer collection of such comments could have been compiled. The aim, however, was to select a short typical group from sources having varying interests and points of view.

In Section 2, quotations are included which refer to Western's reputation for progressive personnel policies. All of these statements were made in connection with remarks about the Hawthorne studies or the counseling programs and apparently were considerably influenced by the author's opinions of these activities.

Section 3 is a lengthy one which aims to give a picture of the extent to which the studies and counseling have influenced a great number of fields of thought and endeavor. The individuals and books mentioned by no means comprise an all-inclusive list and without doubt a search of libraries and periodicals would make it possible to expand the length of this section greatly. Of particular interest are the comments of Prof. Maier who was the Michigan Bell's consultant in the preparation of the first version of the A. T. & T. Company course, "Human Relations in Management", of Dr. Leighton, a present consultant.
of the A. T. & T. Company in connection with Management Development, and of Drs. Rennie and Menninger, who have been speakers at the Bell System Executive Conference at Asbury Park.

Section 4 attempts to indicate some of the foreign interest in the Hawthorne Studies and counseling. Unfortunately this section is far from comprehensive. Foreign visitors to the Company have often stated that there is a considerable literature on Western's work in their native tongue, but practically none of this has been translated and it is, therefore, impossible to convey anything that could be called a reasonably full picture of Western's foreign influence.

Section 5 discusses the spread of counseling. No doubt, on the whole, counseling is not as widespread as its supporters would like it to be. However, the list of organizations which have consulted us and/or taken some steps is an indication of the broad appeal of counseling, even though there is as yet no long parade following our leadership.

The Company receives many requests for services which stem from outside interest in the Hawthorne Studies and counseling. It is not always possible to perform the services requested. However, personnel and counseling organizations have attempted to cooperate and it is felt that this cooperation has earned the Company considerable good will. Some of these services are mentioned in Section 6.

The Hawthorne, Kearny and Point Breeze counseling organizations have furnished material for this report and have made suggestions about its makeup. However, no complete search of files was requested or made. Moreover, in order not to lengthen further a report which would inevitably be quite long, some of the material offered by these organizations has been omitted.

March 29, 1955

A. P. KIRKWOOD
1. What do people outside the Company say about the importance of the Hawthorne studies and of counseling and other things which grew out of them?

In order to be as brief as possible, below are given, without comment, a selection of typical statements:


"They (the Western Electric researchers) launched what was to become one of the great pioneer inquiries of the modern world - the famous Hawthorne investigations."

"There is no thought among the newest ideas on the social and personal character of the responsibilities of the executive that has not an echo or a reflection in the vast treasure house of the work at Hawthorne."

(b) From "The Study of the Primary Group" by Edward A. Shils, Professor of Sociology, University of Chicago, in *The Policy Sciences*, a book in a series of studies conducted by the Hoover Institute and Library of War, Peace and Revolution, published by Stanford University:

"The Hawthorne studies are pioneering investigations which have had a profound effect on the study of human relations ... Their practical implications have become widely known and have affected the actual practice of industrial relations. They have been popularized in periodicals and books reaching the general public, and they have entered into the main current of sociological thought in the United States. They have led to the emergence of a new kind of social research called industrial sociology. Nonetheless, the Hawthorne studies, however monumental, must be regarded as no more than extremely impressive and suggestive beginnings."

The author then reviews and comments at length on the Hawthorne studies, on others participated in or conducted by Mayo, and on later studies by other individuals. In commenting on the latter, he frequently shows how they grew out of the Hawthorne studies or analyzes the researcher's indebtedness to Mayo, or Roethlisberger and Dickson, or Whitehead.

(c) From *Counseling and Psychotherapy*, by Carl R. Rogers, Professor of Psychology and Executive Secretary of the Counseling Center, University of Chicago:

"Until recently counseling had little part in personnel work in industry. Counseling in which there was a planned effort to use interviewing contacts to improve attitudes was most unheard of. Now, however, one of the most outstanding studies in industrial relations, made in the plants of the Western Electric Company, promises to change this situation. Out of this exhaustive research came one outstanding recommendation - the establish-
ment of a suitable counseling program to assist workers in solving their personal problems. Nothing else, the investigators felt, would do so much for industrial morale. Such a program has been organized and is proving the correctness of the study. Its significance is that it indicates for the industrial concern which desires maximum production, maximum harmony in industrial relationship, maximum development for the individual worker, counseling is a process of the utmost importance."

(d) From the book, *Why Men Work*, by Alexander Heron, Vice President of Crown-Zellerbach Corporation and war-time Colonel in the U. S. Army with the title, Chief of Civilian Personnel:

"Possibly the most important research into the question of why men work has been that conducted at the Hawthorne Works of the Western Electric Company. No one in a position of responsibility for management can afford to neglect the processes, the results, and the implications of that project. It is important because of its fundamental approach, its continuity over a long period, and the care with which it has been interpreted."

(e) In a review of *Management and The Worker*, by Charles S. Slocombe, director of the Personnel Research Federation and editor of the *Personnel Journal*:

"This is unquestionably the most outstanding book on industrial relations that has yet been published anywhere, anytime. We do not see how any personnel man can expect to meet the critical problems of the immediate future without having read it, and without applying to his own situation the principles set forth in it."

(f) In a review of *Management and The Worker*, by Ordway Tead, Chairman of the Board of Higher Education, New York City, lecturer at Columbia University, editor, author of books on personnel, leadership, administration and other topics, published in *Advanced Management*, the Quarterly Journal of the Society for the Advancement of Management:

"The major importance of such a prolonged inquiry, centered upon such basic and urgent issues; needs hardly be pointed out. This book is truly an encyclopedic source of facts and ideas thrown up and drawn out of a vast study unique in management annals."

(g) From a statement by W. H. Cowley, President of Hamilton College, in the Dartmouth Alumni Bulletin:

"Management and The Worker is must reading for all executives who are interested in industrial relations. Despite the fact that it is a difficult book, it is the most stimulating book I
have read in many a month. The authors describe the interviewing and counseling programs that have been evolved by the Western Electric Company at Hawthorne. The techniques of interviewing and counseling which have evolved and the generalizations growing therefrom have implications which personnel people will be developing for many years to come."

(h) From the book, Handbook of Personnel Management, by George D. Halsey, Personnel Officer for the Farm Credit Administration and formerly associated with several different industrial concerns:

"Perhaps we can best summarize both the purpose and the method of modern personnel management with the statement that it endeavors to increase individual effectiveness primarily by trying to do those things which will enable each worker to derive an increased sense of personal satisfaction from his work, and his work environment. That doing these things does increase effectiveness of the worker is one of the most fundamental and important facts in the science of management.

"Many studies have demonstrated the truth of this statement. The best known of these studies and probably the most extensive ever carried out was started in 1924 by the Western Electric Company in its Hawthorne Plant near Chicago .... Management and The Worker tells the story of one of the most interesting and extensive studies ever made of the methods of dealing with employees."

(i) From the book, Principles of Industrial Management by L. P. Alford, late Prof. of Administrative Engineering, New York University, and H. R. Beatty, Prof. of Administrative Engineering, Pratt Institute:

"The Harvard-Western Electric Hawthorne Experiment is an example of personnel research at its best."

(j) In an article in Readers Digest, by Stuart Chase, popularizer of scientific and economic subjects:

"The most exciting and important study of factory workers ever made has been going on for 16 years in the Western Electric Company's Hawthorne Plant near Chicago. If managers of other factories, large and small the country over, were aware of things which this huge experiment in industrial relations has found out, American industry could be made over."

"Western Electric now has a permanent system of personnel counseling .... There is an idea here so big that it leaves one gasping!"
"Only rarely does a book appear which transcends significantly the limits of the field in which it was written and illumines fields ordinarily regarded as foreign to it. Management and The Worker is such a volume. Although its title would tend to attract interest only of the industrial psychologist, the fact is that the social psychologist, the clinical psychologist, the economist, and the sociologist will be richly repaid for the time they spend in studying its 600 pages of original material."

"This is no general treatise on management. It is not a rehash of classical economics and atomistic industrial psychology. It is an honest, clearheaded, and precise account of a series of detailed, firsthand investigations into the social psychology of an industrial plant extending over a decade."
2. **What is Western Electric's reputation in the minds of those who write about the Hawthorne Studies or the counseling programs?**

It is impossible to determine exactly how Western would be regarded if the Hawthorne Studies had never been made and the counseling program never started. The following quotations, however, give the opinions of several who have written about either the studies or counseling:

(a) From Urwick and Brech's volume, *The Hawthorne Investigations*, already mentioned in Section I:

"Something over 200 years since a great English writer made the observation that 'the proper study of mankind is man', it fell to a great American Company, the Western Electric, to carry the principle into practice in a way hitherto unparalleled in industry - if not indeed in any other branch of human endeavor."

"The tribute which is owing must be paid to all the men and women who participated in the experiments. It is they collectively that have earned their honorable place among the Pioneers of Scientific Management. What their contribution means many managers in industry do not yet realize. Those alive today may see the knowledge that they have unfolded accepted as a commonplace of everyday practice. Or it may be left to writers of a later century to relate how this group initiative was translated from a series of books and reports into principles and methods adopted by all responsible for executive control and supervision in industry. For, whether general recognition and acceptance comes sooner or later, their work is securely founded on scientific method and will surely endure."

"It would be ungracious in this article not to pay a tribute to the attitude of the great industrial company which made the studies possible - its inspiring concern with the problems of its employees, the scientific interest of its executives, and their objective approach to the task of management. If leadership means anything, this attitude goes far to explain the spirit of cooperation from all ranks of employees covered."

"It may well be that the great industrial and technical achievements of the Western Electric Company will fade into the background of the past under the impact of a century which can see no bounds to the revolutions produced by the physical sciences. Should this happen, its place in industrial history will remain assured if only because of its pioneer contribution in making this full scale investigation into personnel management possible."

(b) From the book, *Handling Personality Adjustment in Industry*, by Robert N. McMurry, a management consultant, writing about counseling, says:

"Only a few of the most progressive organizations, such as Western Electric Company, have made a serious effort to encourage employee understanding and cooperation in the work."
(c) In a review of *Management and The Worker* for the Harvard Business School Alumni Bulletin, Prof. Philip Cabot recommended the reading of Mr. Stoll's Foreward and Dr. Mayo's Preface and then continued as follows:

"Quite often forewords and prefaces can be wisely skipped, but not these. The study covered a period of about twelve years. If it had been stopped in the middle, much (perhaps all) of the time and money that went into it would have been wasted, and the whole country would have been poorer in consequence. Without the approval of the top executives, the whole achievement would have failed. In this Mr. Stoll played an essential part .........

"(The parts of the book) indicate an experiment in evolving research which is very heartening. For it is rare that the managements of corporations will consent to the expenditure of so much time and money as such a piece of research involves, and it is to the immortal honor of these officials that they did so. They have set an example to others that may prove priceless."

(d) From Stuart Chase's article on the Hawthorne Studies and counseling in *Reader's Digest*:

"Western Electric makes the equipment for the Bell Telephone System. It is a progressive company with pensions, sickness benefits, safety councils, recreation clubs, thrift plans."

(e) From *Human Relations in Industry* by Burleigh Gardner and David G. Moore:

"Of all the work done in personnel counseling, that developed at the Hawthorne Plant of the Western Electric Company is by far the best known ......... The whole industrial relations program is well developed with a high degree of specialization. At the same time the Company has a wide variety of employee services and benefits; it provides for innumerable employee recreational and educational activities and generally attempts to cover all aspects of employee relations. Thus, its personnel counseling is one element in an extremely well developed industrial relations program."

(f) The Committee on Work in Industry of the National Research Council in the thirties studied several research programs in American industry. Among them were the Hawthorne studies. George C. Homans, as secretary of this committee, prepared its report which was later published under the title, *Fatigue of Workers*. In introducing his summary of the Hawthorne studies, Professor Homans wrote as follows:

"A word about Western Electric is a necessary introduction to what follows. This company is engaged in manufacturing equipment for the telephone industry. Besides doing this part of
its work, it has always shown concern for the welfare of its employees. In the matter of hours and wages, it has maintained a high standard. It has provided good physical conditions for its employees; and it has tried to make use of every established method of vocational guidance in the effort to suit the worker to his work. There is no reason to doubt that while these researches were being carried out the morale of the company was high and the employees, as a body, had confidence in the abilities and motives of the company management.

Soon after its publication approximately 60 copies of Management and The Worker were distributed to people outside the Company, such as Presidents of Associated Companies, Presidents or Vice Presidents of companies which were in some way associated with the studies, etc. The following are quotes from letters of thanks sent to Mr. C. G. Stoll, President, or Mr. G. A. Johnson, Personnel Director:

1. "I think the Western Electric Company is to be congratulated upon this piece of work."

2. "You have every right to be proud of what has been accomplished at Hawthorne and of the men who have carried it through."

3. "You and the Western Electric Company are to be congratulated on the broad vision which made this type of work possible and for your generosity in making the results of the work available."

4. "In my opinion this book covers one of the most fundamental jobs in industrial research which has been done in this country in recent years."

5. "The pre-eminent position of your investigation in the field of scientific research in the problem of the relationship of management and worker seems to make the book an essential part of an industrial relations library."
3. How widespread has been the influence of the Hawthorne Studies and the counseling program? Into what fields of thought have they penetrated?

The foregoing sections have given a hint of the widespread influence of the Hawthorne Studies and of counseling. This influence has reached into many fields of thought and is reflected in the work of many writers, scholars, and organizations. However, no single record is available of all who have been so influenced or who have written on the subject. Accordingly, the following is only a partial list of people and organizations who have shown an appreciable interest in either or both, the Hawthorne Studies and the counseling program.

(a) Industrial Management

Today most comprehensive books on this subject cover the Hawthorne Studies and counseling in greater or less detail. Alford and Beatty's *Principles of Industrial Management* is a typical example. In addition to what was already quoted in Section 1, these authors refer to "the now famous Hawthorne experiments" and describe them briefly. In their chapter on "Employee and Personnel Services", they speak of counseling as follows:

"The use of employee counseling to improve personnel relations has increased since the publication of the findings of the Harvard-Western Electric experiments at the Hawthorne Works. The purpose of the program now in use at Western Electric is to bring about adjustments and changes in employee attitudes through the interviewing method itself. Employees are encouraged to get things off their chests through private conversations with employee counselors who are skilled listeners. This opportunity to talk out problems has proven to be very beneficial."

Other works, essentially intended as textbooks, are: *Business Organization and Management* by Elmore Peterson, University of Colorado School of Business and E. G. Plowman, Vice President, U. S. Steel; *Industrial Organization and Management*, by L. L. Bethel, educator; F. S. Atwater, industrial engineer; G. H. E. Smith, lawyer and economist; and H. A. Stackman, Jr., personnel administrator and *Manufacturing Management*, by F. G. Moore, Professor of Industrial Management, Northwestern University. All of these include similar material on either the experiments or counseling.

One of the most prominent influences of the Hawthorne Studies on those who may be considered expert in the field of management was that exerted on Chester I. Barnard at the time he was President of the New Jersey Bell. This influence was not transmitted through Bell System organizational channels, but rather through Mr. Barnard's reading. Mr. Barnard reported to the Committee on Work in Industry of the National Research Council on February 28, 1939 how his study of organization grew out of his experience. Mr. Barnard said that until 1931 he had been an executive in the New Jersey Bell Telephone Company, but in that year he had undertaken an additional activity, the direction of the relief organization in his State. During the course of this activity he found certain strong similarities between the relief organization and the Telephone Company leading him to believe that there might be uniformities and principles applicable to all types of organizations and executives whether in business or other fields of management. Shortly after his experiences with
the relief organization, he read Mayo's *Human Problems of an Industrial Civilization* which included a preliminary report of the Western Electric studies. The picture of Western as described there gave him further reason to see that varying types of organizations have features and practices in common and led to the writing of his well-known book, *The Functions of the Executive*. This story of how he got interested in Western's studies and used them in his book is told in *Fatigue of Workers*, a report of the above-mentioned Committee.

Another example of the prominence of Western Electric Company in the management field is to be found in the book, *Creating an Industrial Civilization*, edited by Eugene Staley. The Corning Glass Works in 1951, wishing to celebrate the centennial of the company's establishment, sponsored a conference jointly with the American Council of Learned Societies on the place of values in an industrial civilization. Four papers were especially prepared for this conference and appear in the book together with discussions held on the same topics. The first paper, by William Foote Whyte, Professor of Industrial Relations at Cornell University, refers to the Hawthorne Studies and discusses in connection with them such matters as human relations, job satisfaction, what engineers often overlook, consulting workers and the like. The author concludes with a section on "What Needs to be Done" and lists training, case method, observation, and "the interviewing method developed in the Western Electric research program" as the tools which should be used by managements, unions, and research specialists.

Another writer on management is Professor Charles E. Redfield of the University of Chicago. In his book, *Communication in Management*, he has the following to say:

"The results of the Hawthorne interviews far exceeded the original plans. The interviewers learned much more about the Company than they anticipated they would and they discovered that the interviews had a therapeutic effect. The interviewers had unknowingly pioneered with a non-directive interviewing technique as opposed to the traditional question and answer type of interview, and, as if by chance, became the pioneers in the field of employee counseling . . . .

"At the same time that non-directive interviewing was being developed at Western Electric, almost identical techniques were being developed by Carl Rogers in the field of clinical psychology. The impact of these developments has been tremendous."

The final specialist to be cited in the field of industrial management is Schuyler D. Hoslett, director of the Executive Program in Business Administration of Columbia University. His writings for several years have stressed the importance of the Hawthorne experiments. In articles during the war for the Army and in various personnel magazines, he described counseling and discussed under what circumstances it was valuable. The present edition of his book, *Human Factors in Management*, includes a 32 page description of the Hawthorne studies and a 20 page article on counseling, with one half of the latter dealing exclusively with the Hawthorne program.
In addition to the foregoing books on management, the Hawthorne Studies and counseling have both been written up extensively in magazine articles and pamphlets published by the American Management Association, the Society for the Advancement of Management, the National Industrial Conference Board, and the Personnel Research Federation.

(b) Personnel Administration

Books on personnel administration in general devote even more space than those on industrial management to the subjects of the Hawthorne Studies and counseling.

An important book on personnel is *Personnel Administration*, written by Paul Pigors and Charles A. Myers, professors at M.I.T. An entire chapter is devoted to interviewing, and a large part of this chapter deals with counseling. References given for students to consult include *Management and the Worker*, two articles on interviewing and counseling issued by the A.T. & T. Company, and an article by W. J. Dickson. This book also contains an appendix describing the Western Electric Research Program. The following are the opening sentences of this appendix:

"The Western Electric Research Program was a study of human problems in industry, carried on jointly by representatives of the Western Electric Company in Chicago and members of the Harvard Business School. It is a milestone in the development of personnel administration. Anyone who is seriously interested in personnel work should be thoroughly familiar with the work of this group."

The above-quoted book is used widely as a textbook in colleges and universities. The authors have also issued a collection of readings to be used in college courses for supplementary reading in connection with their textbook. The latter, *Readings in Personnel Administration*, contains three articles under the heading of interviewing, all concerned to some extent with counseling, and the main one being "The Counseling Interview" by Dr. L. E. Himler of General Motors.

Other text and reference books on personnel which include information on the Hawthorne Studies and/or counseling are *Personnel Management* by Walter Dill Scott, President Emeritus of Northwestern, Robert C. Clothier, President Emeritus of Rutgers, and William R. Spriegel, Dean of the College of Business, University of Texas; *Personnel Management and Industrial Relations*, by Dale Yoder, Professor of Industrial Relations, University of Minnesota; *Personnel Management*, by Michael J. Jucius; *The Supervision of Personnel*, by John M. Pfiffner, Professor of Public Administration, University of Southern California; *Human Relations in Supervision* by Willard E. Parker and Robert E. Kleemeier; *The Foreman in Manpower Management*, by Lilian M. Gilbreth of scientific management fame and Professor of Management, Purdue University, and Alice Rice Cook of City College of New York; *Supervising People*, and *Handbook of Personnel Management* by George D. Halsey; and *Human Relations in Industry*, by Burleigh E. Gardner and David G. Moore.
Some of these authors are on the brief side, whereas several give fairly comprehensive coverage. The last mentioned book, for example, contains a 20-page chapter on counseling while the Hawthorne Studies are described in some detail and frequently referred to throughout the book. Other authors who devote a fair amount of space to Western Electric's work are Parker and Kleemeier who have a chapter of 30 pages on counseling and Pfiffner whose chapter on counseling covers 18 pages.

(c) Labor Relations

Closely related to personnel administration is the field of labor relations. Here the influence of the Hawthorne Studies and of counseling is somewhat mixed, with negative attitudes as well as positive creeping in. For example, take the case of Harold V. Ruttenberg.

Mr. Ruttenberg, several years ago, was Research Director of the Steel Workers Organizing Committee and is now in the steel consulting business after a period on management's side as Vice President of Portsmouth Steel. He early announced his opposition to counseling on the basis that it was inadequate to give employees "self-expression" and that the only adequate means of doing so was the union. His elaboration of this point of view was presented on January 15, 1940 in a statement to the Committee on Work in Industry of the National Research Committee. The secretary concluded his report on this topic as follows:

"In fairness to personnel counseling, two points should be made here. First, it has a number of functions besides that of providing employees with a means of self-expression ... Secondly, one of the most important statements which can be made about personnel counseling is that it has apparently worked well at the Hawthorne Plant."

Mr. Ruttenberg's statement, however, covered more than counseling and dealt with other aspects of the Hawthorne Studies. The secretary reported:

"Mr. Ruttenberg stated that he was in agreement with the understandings reached in the course of the Western Electric researches. In fact, he had reached the same understandings in the course of his experience in industry, although he was only partly conscious of some of them until he saw them set forth explicitly in the acount of the researches."

Another commentator on the Hawthorne Studies and counseling from a labor relations point of view is Alexander Heron, Vice President of Crown-Zellerbach Corporation. One statement from his book Why Men Work was included in Section 1. In another book, Beyond Collective Bargaining, he writes about the inadequacy of grievance channels as an outlet for employee feelings and continues as follows:

"In many large establishments this neglect of the need for natural outlets for worker tensions has gone far. It has frequently been necessary to inject into the organization
a person called the counselor. He has no line authority, no management responsibility. He is expected to supply a confidential confessional to the distressed employee. He helps the worried worker to put his worry or problem into words and thus identify it. He makes it possible for the employee to release his stresses, instead of nursing them until they explode in resentment or insubordination."

Another writer in the field of labor relations who has something to say about the Hawthorne Studies is Benjamin J. Selekman, Professor of Labor Relations, Harvard Business School. In his book Labor Relations and Human Relations, considerable use is made of the facts the Hawthorne investigators uncovered. The author concludes that "concrete evidence in study after study supports the Hawthorne Studies by demonstrating that satisfying interpersonal relationships are major determinants of employee efficiency." Counseling also has considerable significance for Professor Selekman. He says:

"Recent developments in the use of the interview, generally designated as counseling, suggest an emerging administrative tool of extended testing by the unions and management alike. For it represents an adaptation to industry of the psychotherapy directed to people under stress by practitioners in social work, mental hygiene, and clinical psychiatry. There is no need to review here the requirements of the interview, the many misconceptions that easily grow up about its potentialities, and the need for know-how in its use if it is to help the troubled, maladjusted, disaffected individual attain insight into the source of his negative feelings on the job. Qualifications are necessary because the interview procedure does not, of course, invariably heal the maladjustments toward which it is directed. But to the degree that individual tensions are relaxed and individual anxieties frankly faced, attitudes improve, self-direction supersedes drifting on the propulsive currents of hostility, and the atmosphere is cleared for positive cooperation."

(d) Psychology

Psychology is another field which has been strongly influenced by the Hawthorne Studies and by counseling. This is especially true of the branch ordinarily referred to as industrial psychology and practically every author in this branch feels it necessary today to deal at length with both the experiments and the counseling.

One of the leading psychologists dealing with business and industry is N.R.F. Maier of the University of Michigan, the author of the original version of the A.T.&T. Company "Human Relations in Management" course. In his book, Psychology in Industry, he describes the Hawthorne Studies, then says that because of the importance of attitude as shown by the Hawthorne Studies he is devoting three chapters to attitudes and the related subject of morale.
Professor Maier's later book, *The Principles of Human Relations*, leans on the Hawthorne Studies even more, referring to them and to *Management and The Worker* on many different occasions. This book is mostly concerned with supervisory training in human relations and uses the Hawthorne Studies and counseling as supports for many of its points, as in the following examples:

"The importance of attitudes is brought out (in his human relations courses) by a discussion of the investigations of the Hawthorne Plant." (p. 33). "The work of Roethlisberger and Dickson contains illustrations found useful to show the relationships between workers." (p. 36).

"The fact that industrial workers likewise are members of a social group was made strikingly clear by the Hawthorne study." (p. 56).

"The Hawthorne investigations clearly revealed that employees are willing to try out many changes, even those affecting productivity, when they are allowed to participate." (p. 377). "The Hawthorne study clearly demonstrated that a work situation is a social situation regardless of whether management wishes it to be so or not." (p. 379).

Professor Maier's final principal chapter of 44 pages is entitled "Non-Directive Counseling". His reference is to Hawthorne counseling. He covers the objectives of counseling, the requisites, the techniques, and for purposes of training supervisors gives cases to be discussed or role-played.

One of the best known of industrial psychologists is Morris S. Viteles, Professor of Psychology at the University of Pennsylvania, and Director of Personnel Research and Training of the Philadelphia Electric Company. His books, *Industrial Psychology* and *The Science of Work* have been standard works for over 20 years. His latest book, *Motivation and Morale in Industry*, deals with the special aspects of industrial psychology that were most involved in our Hawthorne Studies. It not only contains a full summary of the studies, but also numerous other references to them. In the index of this book, there are 77 references to the Hawthorne Studies, the Western Electric and the writings of Mayo, Whitehead, and Roethlisberger and Dickson which deal with Western's work.

Roger M. Bellows, a prominent personnel consultant, in his *Psychology of Personnel in Business and Industry* (1954 edition), says:

"We have attempted to show that an analytical point of view in personnel methods and management is desirable and have thus far developed this viewpoint through illustrative concepts and principles drawn from industrial sociology and social psychology. We may turn to a concrete situation in which the principles are illustrated. The classical socio-industrial situation for illustrating such principles is the Hawthorne Plant of Western Electric Company, the studies of which were described first by Roethlisberger and Dickson . . . . The important implications of worker sociology were first brought to light by these studies."
Mr. Bellows devotes a chapter of 25 pages to counseling. He reviews the origins of counseling in the Hawthorne Studies, gives a summary picture of its present status, notes the developments in other companies and outside industry, and summarizes certain studies which demonstrate the value of counseling.

Glen U. Cleeton, Dean of the Division of Humanistic and Social Studies, Carnegie Tech, in his book, Making Work Human, refers several times to counseling and specifically states that the introduction of facilities for advising and counseling workers, for "talking things over", are "movements in the right direction, because the closer the personal relationship between the worker and his work, the greater the satisfaction he gets from it."

Joseph Tiffin, Professor of Industrial Psychology, Purdue University, in Industrial Psychology (1947 edition) describes the essential features of Hawthorne's counseling and concludes as follows:

"Some type of individual study and treatment seems definitely to be necessary in the case of those employees who are handicapped by some emotional problems. Such treatment, while clearly of personal value to the employee, need not be looked upon by management as a sheerly paternalistic venture; on the contrary, it should be viewed primarily as a financial and business venture. The solution of the emotional problems of employees is a paying proposition in terms of reduced accidents and increased production."

Personnel and Industrial Psychology (1948 edition) by Edwin E. Ghiselli and Clarence W. Brown, Professors of Psychology, University of California, speaks of "the famous Hawthorne experiment", describes some of the studies and devotes a dozen pages to interviewing and counseling programs.

In Psychology of Industrial Relations, edited by C. H. Lawshe, Professor of Psychology, Purdue University, with 15 chapters written by seven different authors, every author except one finds occasion to refer to the Hawthorne Studies in some way or another. One entire chapter is devoted to counseling and traces its beginnings at Hawthorne and its spread to other Companies. Material is included on such topics as "What Management Gets Out of Counseling" ("Counseling has had to show substantial economic benefits to management") and "The Future Outlook for Employee Counseling" ("Employee counseling is here to stay").

Other books dealing with industrial psychology and discussing the Hawthorne Studies and/or counseling include Handling Personality Adjustment in Industry, by Robert N. McMurry, Principles of Industrial Psychology, by Professor Milton T. Blum of City College of New York, Psychology of Industrial Behavior, by Professor Henry Clay Smith of Michigan State College, and Human Behavior in Industry, by W. W. Finlay, Director of the Business Institute, Antioch College, A. Q. Sartain, Professor of Psychology, Southern Methodist University, and W. M. Tate, President of Southern Methodist University.

In the field of general psychology, Individual Behavior, by Donald Snygg, Professor of Psychology, Oswego State Teachers College and Arthur W. Combs, Professor of Clinical Psychology, Syracuse University, has several references
to the Hawthorne Studies and says of our counseling: "It is interesting
that Roethlisberger and Dickson have had splendid results with their coun­
selors at Western Electric under the most primitive conditions - no privacy
of counseling, no advantages of physical surroundings, etc."

In the field of social psychology, a book which deals at some length with
the Hawthorne Studies is Social Psychology at the Crossroads, edited by
John H. Rohrer, a former Hawthorne counselor and now Professor of Psychology
at Tulane, and Muzafer Sherif, Professor of Psychology at University of
Oklahoma. This book consists of a collection of articles on various aspects
of this subject. The two most interesting articles from Western's point of
view are those by Professor Conrad M. Arensberg of Columbia and by Professor
William F. Whyte of Cornell.

Professor Arensberg's article, "Behavior and Organization: Industrial Studies",
is a review and critique of the various studies research workers have made of
behavior in industrial organizations. He identifies three main currents of
thought in this area and states that the one inaugurated by Mayo "has made
industrial sociology" and "sets the tide into which other schools have been
swept." He also says the third main current of the three he lists has been
wrongly called the "Mayo school" because "Mayo was historically the first
person to make studies of individual behavior in which insights and methods
from the functional school of social anthropology were combined with those
of clinical psychology. Today the third main current has divided into three
main sub-schools. All of them take off from the book Management and The
Worker and the Hawthorne Studies, now so widely publicized."

Professor Whyte's article, "Small Groups and Large Organizations" describes
some of his own research and gives some idea of the importance that non-direc­
tive interviewing methods have assumed in research projects of social psychol­
ogists, sociologists, and anthropologists. He states:

"We follow, in general, the non-directive interviewing
 technique developed in the Western Electric research pro­
gram and in Carl Rogers counseling work, but we modify the
 technique so that it serves the needs of research than those
 of therapy."

An article of Professor Whyte's in the Summer 1953 issue of the Quarterly
Journal, Human Organization, amplifies his points and contrasts, step by
step, his use of non-directive techniques with "the rules for the non-direc­
tive or counseling interview as given by Roethlisberger and Dickson."

(e) Sociology

If Hawthorne Studies had to be classified as to the field they belong in,
presumably sociology would be the best fit. (Counseling presumably belongs
in the field of psychology). For this reason, the impact of the Studies is
perhaps greater in this field than anywhere else. In fact, so great is the
impact that some writers now place the Hawthorne Studies in a special sub-
field, called by some (e.g., Arensberg, above) as "industrial sociology" and by others (e.g., Moore, below) as "managerial sociology".

An outstanding book to indicate the part that the Hawthorne Studies plays in sociology today is Human Relations and The Social Order by Professor Wilbert E. Moore of Princeton. The latest edition of the book contains 60 references to the Hawthorne Studies, the Western Electric Company, and writings about the Studies. Professor Moore discusses the Hawthorne Studies at length and describes them as "the longest and most comprehensive single industrial research project attempting to discover the factors in rate of production, employee morale, and related problems."

Another sociologist who has written extensively about our Company's Studies is George C. Homans, Professor of Sociology, Harvard. Mr. Homans is the author of Fatigue of Workers, the report already quoted from, issued by the Committee on Work in Industry of the National Research Council. His most important sociological work is The Human Group. In this book which consists mostly of the study of six different groups in civilized and primitive society, he devotes 108 pages alone to describing and analyzing the activities in the Bank Wiring Observation Room. In introducing this discussion he comments on the importance of the Hawthorne researches and on how widely known they are to sociologists and businessmen. In his picture of a different study made by Conrad M. Arensberg and Douglas McGregor, he describes briefly their research techniques and says that in their interviews they approximated the non-directive interviews used at Hawthorne and by Carl Rogers.

A sociological investigation which partially stems from and was considerably influenced by the Hawthorne Studies is the so-called "Yankee City" research. This work was conducted by a group of researchers under the leadership of Professor W. Lloyd Warner of the University of Chicago. The results are to be found in six volumes commonly referred to as the "Yankee City Series".

Professor Warner starts out his first volume, The Social Life of a Modern Community, by referring to Mayo and The Hawthorne Studies. He calls the latter "the study of the employees of a great factory in Chicago" and comments on various angles. He then refers to his discussions with Professor Mayo about the desirability of other studies relating the factory to the larger community around it. However, he and Mayo agreed that Chicago was too large a community to investigate and that Cicero and other industrial sub-communities near Hawthorne seemed disorganized or in partial disintegration and hence not good material for further study. For this reason, Warner decided to go far afield and eventually chose Newburyport, Massachusetts, the "Yankee City" of this study.

In Chapter 3 of the first volume of the Yankee City Series, Warner devotes 8 pages to interviewing as he and his co-workers employed it, and says "the techniques to be used have been best stated by Roethlisberger and Dickson in Management and The Worker."
Robert Dubin, Professor of Sociology and of Management at the University of Illinois, leans on the Hawthorne Studies and the subsequent related work in his book *Human Relations in Administration*. This book consists of readings, text material by Professor Dubin, and cases for discussion. The readings include two selections by Mayo, six by Roethlisberger and one by Whitehead. In addition, there are 18 references to the major books about and deriving from the Hawthorne Studies.

Many other sociological works refer to the Hawthorne Studies. Robert Williams, Jr., Professor of Sociology and Anthropology at Cornell, in his *American Society* says: "One of the by-now classic illustrations of the emergence of informal organization within a formal structure is provided by the studies of Western Electric workers by Roethlisberger and Dickson", and speaks of "elaborate informal organizations and group solidarities within the plant as evidenced by the Hawthorne Studies." Paul Meadows, Professor of Sociology, University of Nebraska, in *The Culture of Industrial Man* refers to "the pilot efforts at the Hawthorne Works of the Western Electric Company" and goes on to emphasize the importance of communication in a social organization as evidenced by the interviewing and counseling programs. Robert Nisbet, Professor of Sociology at the University of California, in *The Quest for Community* refers to "the pioneering studies in the Western Electric plant". *Factory Folkways* by John S. Ellsworth, Professor of Sociology, Yale University, contains several references to the Hawthorne Studies. A leading German sociologist, Karl Mannheim, refers to the Hawthorne Studies both in *Man and Society in an Age of Reconstruction* and in *Freedom, Planning, and Power in a Democratic Society*.

Not strictly a sociologist, but an outstanding social philosopher is Lewis Mumford. His well-known *Technics and Civilization* refers to the Hawthorne Studies as giving proof of a point he develops. Unfortunately, the proof-readers slipped, for the text reads "an experiment in a Westinghouse plant described by Professor Elton Mayo." The bibliography, however, leaves no doubt that Western Electric Company is meant.

(f) **Anthropology**

Anthropology is a field that has both influenced the Hawthorne Studies and been influenced by them. Today standard anthropological texts often refer to the Hawthorne Studies. An example of a college text which does is *Principles of Anthropology* by E. D. Chapple and Carlton S. Coon, Professors of Anthropology at Harvard University. The authors include a summary of our experiments in their chapters on economic institutions.

Besides being directly mentioned in works on anthropology, our Hawthorne Studies, including our interviewing and counseling programs, have had another effect on this field because of the necessity of anthropologists' interview-
ing the people they are studying. An example of this is found in Alexander Leighton's *The Governing of Men*. Professor Leighton, a psychiatrist, and a consultant in the A.T.&T. Company Management Development Program, includes in his book an appendix written by him and Edward H. Spicer, an anthropologist. This appendix, "Applied Anthropology in a Dislocated Community" deals with research work done in a relocation camp where Pacific Coast residents of Japanese descent were held during part of World War II. The authors were supposed to gather data which might aid either (a) in the administration of the relocation camps or (b) in the administration of occupied areas captured from the enemy. They report as follows:

"In time both of us developed a circle of Japanese friends who liked to come and talk about community affairs, feeling apparently that we had some influence with the Administration, but that at the same time we were safe confidants. It was an opportunity for such persons to pour out their feelings to interested listeners without fear of consequences and we thus played a role analogous to the counselors in the Western Electric Company."

Another indication of the influence of the Hawthorne Studies on anthropology is found in the publications of *The Society for Applied Anthropology*. Many of their articles refer directly to the Relay Assembly Test Room or the Bank Wiring Observation Room. In addition, interviewing receives considerable attention, with three recent issues of their quarterly magazine, *Human Organization*, including articles on interviewing in anthropological work. Two of the three directly refer to the Hawthorne interviewing and counseling procedures.

(g) **Psychiatry and Medicine**

Psychiatry has taken note of the Hawthorne Studies and especially of the interviewing and counseling programs. In some respects, the effect has been negative; that is, a number of psychiatrists have opposed the idea that laymen should be permitted to help disturbed or worried people. Such opposition has in part been a jurisdictional dispute, and it even went so far that a group of psychiatrists attempted in the 1954 session of the New York State legislature to place legal barriers against laymen treating or "counseling" troubled and disturbed people.

On the other hand, many psychiatrists have had very different feelings on the matter and have supported efforts of psychologists and other non-medical people to help troubled people and to aid in mental hygiene. One of these is Dr. Thomas Rennie, who talks to the Bell System Executive Conference at Asbury Park. Dr. Rennie, who is Chief Psychiatrist at Payne Whitney Clinic, New York Hospital, and Professor of Psychiatry, Cornell University, says in his book, *Mental Health in Modern Society* (written jointly with Dr. Luther E. Woodward):
health of workers was improved and production increased when employees were provided with opportunity to discuss with trained interviewers their worries and problems on the job and off."

Both in this book and their previous book, *Jobs and the Man*, Doctors Rennie and Woodward, describe counseling ideas and techniques at length, give credit to Western for their development in industry and recommend their continuation and expansion provided proper training is given to counselors. They also stress the point that supervisors and others who have frequent contacts with employees can be trained in interviewing and counseling techniques so that those contacts will be more effective. It is understood that Doctor Rennie has made the same point at Asbury Park.

Doctor William Menninger, psychiatrist, Brigadier General during the war in charge of Army psychiatric services, and also one of the speakers at the Asbury Park Conferences is, if anything, more positive in his approval of counseling. In his 1943 book, *Psychiatry in a Troubled World*, he states:

"At Hawthorne it was shown, without question, that if an opportunity was provided for the employee to have a sympathetic listener who was neither censorious nor critical nor even advisory, the efficiency of the worker increased noticeably."

Both Doctor Menninger and his brother Karl, another outstanding psychiatrist, have corresponded with Hawthorne, expressing considerable interest in what they read of the experimental work at Hawthorne and asking for additional information on the counseling program.

While it would not be possible to trace a strong direct influence of counseling on the interviewing methods of doctors and psychiatrists, it could be safely stated that both counseling and medical interviewing methods had common roots and that they grew side by side with cross influences.

An example where a direct influence can be traced comes from *The Patient as a Person* by Doctor G. Canby Robinson, Professor of Medicine, Johns Hopkins University. In this book, Doctor Robinson describes a study he and his associates made and writes about his interviewing methods as follows:

"The first step in conducting the interview was to place the patient at ease, to let him feel that there was no hurry and to establish an intimate patient-doctor relationship ... In the conduct of the interview, the function of being a receptive and encouraging listener must be cultivated .... It is important to let the patient understand that acts and sentiments are not to be judged from a moral or ethical standpoint, but are to be considered as facts throwing light upon the problem with which he has to deal .... The interviewer must give his undivided attention to the patient, learn to listen rather than talk, and never interrupt with arguments. Attention must be directed to what the patient does not want to tell and what he is not able to tell, as well as to what he says."
Each one of these statements could be paralleled with one from Management and The Worker— for example, compare Doctor Robinson's last sentence with the following:

"The interviewer should listen not only to what a person wants to say but also for what he does not want to say or cannot say without help."

It would seem obvious, from the very similar wording, that one of these statements must have been derived from the other or both from a common source. Yet Doctor Robinson gives no clue or credit in his book. The clue becomes obvious, however, when we find that Doctor Robinson was a member of the Committee on Work in Industry of the National Research Council and that as a member of that committee on March 9 and April 23, 1938, he heard H. A. Wright and M. L. Putnam of the Western and Professors Mayo and Roethlisberger of Harvard describe the Hawthorne Studies and the interviewing program and methods. No doubt Doctor Robinson profited considerably from this and incorporated the usable ideas in his practice and in the studies he later made.

A broader and earlier approach to this general topic was that of Doctor Lawrence J. Henderson, Professor of Biological Chemistry at Harvard University. He was concerned not only with interviewing but also with the whole relationship between doctor and patient. His address "Physician and Patient as a Social System", first given at the Harvard Medical School Colloquium in 1934 and later published as an article in The New England Journal of Medicine, alludes to the work of his colleagues at Hawthorne and bases some of his statements on the facts found in our studies. Mayo himself later developed some of Henderson's thoughts about effective action on the part of the doctor and published it as an article entitled "Frightened People" in the Harvard Medical Alumni Bulletin.

Somewhat later, Doctor C. C. Burlingame, in an article entitled, "Psychiatry in Industry" from the annual Review of Psychiatric Progress - 1946, brings Western Electric Company into his brief review of the history of psychiatry as applied in industry:

"One important piece of research was done at the Hawthorne Plant of the Western Electric Company from 1929 to 1933 furnishing additional data on the relation of job attitudes to productive output. It demonstrated moreover the value of interviewing and counseling as an outlet for employees' feelings and stressed the influence of social relationships inherent in the job situation upon productivity."

In addition to the writings on the subject, several doctors have contacted the Company either at Hawthorne or at Headquarters.

At the request of Dr. Raymond Hussey, Scientific Director, Council on Industrial Health of the American Medical Association, Hawthorne presented a program...
for that group on January 22, 1953, by members of the Personnel Counseling Department. The program involved a demonstration counseling interview based on an actual case from the experience of a counselor at Hawthorne, followed by a discussion of the case by members of a panel and members of the audience. It was the expressed wish of this group to learn something from the experience of the Hawthorne counselors that would be applicable to the doctor-patient role.

In 1949, the Hawthorne Counseling Organization was asked to provide a speaker to address the Industrial Nursing Section of the National Safety Congress, meeting in Chicago. This talk was on the subject, "Employee Counseling: Why, When, and How."

Colonel Frederick H. Gibbs, of Brooke Army Medical Center, Fort Sam Houston, Texas, wrote to Hawthorne in April 1953 requesting information on personnel counseling for use in his instructional program.

Dr. Edwin J. Grace of the Grace Clinic, Brooklyn, contacted the Headquarters Counseling Organization in 1952. In the course of handling medical arrangements for a large bank in New York City, he and his colleagues had arrived at conclusions which in his mind gave medical support to the findings of Management and the Worker. He said that he had been tremendously interested in our work and sought information about medical verification of the concepts underlying it.

(h) Political Science and Law

It might seem that the Hawthorne Studies would be unlikely to touch the field of political science. This, however, is not the case and political scientists have been interested in several aspects of the Hawthorne Studies.

One outstanding political scientist who has made considerable use of them is Harold D. Lasswell, formerly Professor of Political Science at the University of Chicago, now Professor of Law at Yale University. Professor Lasswell showed an early interest in interviewing techniques and in his Psychopathology and Politics, published in 1930, he advocated prolonged interviews both for research purposes and for therapeutic reasons. Several years later, in The Analysis of Political Behavior he recommended "depth interviews" and referred to the Hawthorne interviewing and counseling methods as desirable ones for political scientists to employ.

Concerning other aspects of the Hawthorne Studies, Professor Lasswell, in the same book, points to the value of an experimental approach in political, social, and economic matters and cites the Hawthorne experiments as an outstanding example to prove his point. In addition, in Power and Personality, he discusses leadership principles at length and uses our studies to reinforce his points. He analyzes the Hawthorne research and comments on the reaction of employees, especially those in the Relay Assembly Test Room. From these studies he draws conclusions about the necessary and desirable characteristics of leaders and about the best methods of dealing with situations so as to realize the potentialities of individuals.
Today Iasswell is Professor of Law at Yale University. His wide understanding of the meaning of the Hawthorne Studies has caused him to see ways in which lawyers could profit from a knowledge of what went on in our experiments. He and Myres S. McDougal, also a Professor of Law at Yale, wrote a lengthy article (approximately 100 pages) on "Legal Education and Public Policy". It was first published in the Yale Law Journal of March 1943 and is a thorough exposition of what the authors consider desirable training in the legal profession. The authors indicate that budding lawyers may well study the Hawthorne experiments for information about: (a) interviewing philosophies and techniques, (b) tactics of businessmen and administrators, (c) the study and understanding of men, and (d) the maintenance of equilibrium of social processes.

Another prominent political scientist who was influenced by the Hawthorne Studies was Charles A. Merriam, Professor of Political Science at the University of Chicago, until his death a year or two ago. In his book, *Systematic Politics*, he discusses at length the principles of administration and management and finds that these principles are much the same in business and government, citing the works of Mayo, Roethlisberger, Dickson, and Whitehead as support for various points he wishes to make.

R. M. MacIver, Professor of Political Science at Columbia, found a somewhat different reason for referring to the Hawthorne Studies. In his book, *The Web of Government* he explains the relation of society to the state. To give his reader background information on different types and varieties of social institutions and organizations, he cites several books, including *Management and The Worker*.

Another political scientist, Sebastian DeGrazia, formerly of the University of Chicago, in his book, *The Political Community*, refers to "the now famous experiments at the Hawthorne Works in Chicago", and, after describing them briefly, concludes, "Almost invariably, it was discovered, output per man increased whenever the workers felt that they were being given considerate attention". Interviewing and counseling are named as examples of "considerate attention".

Herbert A. Simon, Professor of Political Science at Illinois Institute of Technology is the author of *Administrative Behavior*, an important book on the principles of administration with special attention to the administration of government. He, too, derives some of his material from the Hawthorne Studies, although his proofreaders overlook one erroneous reference to "The Westinghouse Experiments". His footnote and the rest of the book made it clear that he is talking about Western Electric.

A kindred book to Professor Simon's is *The Executive in Action*, by Professor Edward Dimock. Professor Dimock has taught at UCLA, University of Chicago, New York University, and Northwestern University, and he has held several important government positions including Assistant U. S. Secretary of War. He similarly derives some of his principles of administration in part from the Hawthorne Studies. In a second book, *Free Enterprise and the Administrative State*, Professor Dimock again cites the Hawthorne Studies and says:
"Ever since Elton Mayo, if not before, it has been widely realized that an important element of efficiency is giving the worker greater satisfaction on his job. The modern idea is to give the employee a sense of importance and of 'belonging' to the enterprise of which he is a part. Only in the last few years has this area been much studied and written about and it is not too much to expect that some of the largest gains in industrial and social efficiency will emerge from this fertile field."

The final political scientist to be mentioned is George B. deHuszar of the University of Chicago, whose Practical Applications of Democracy refers in several instances to the Hawthorne Studies. The author says: "The most extensive study of the psychological aspects of management-employee relations in an industrial concern was at the Hawthorne Plant of the Western Electric Company."

(1) Education

The influence on the educational field of the Hawthorne Studies and of counseling has been considerable. Naturally it depends on the type and purpose of a particular course what use is made of Western's experiences.

It would be very difficult, however, in any large college or university today to complete a course in business management, personnel administration, labor relations, human relations, industrial psychology or industrial sociology without studying our experiments thoroughly. The same is true of counseling in courses dealing with vocational guidance, education, and clinical psychology. It is also quite likely that our studies or counseling will be referred to at greater or lesser length in courses on general psychology, social psychology, general sociology, anthropology and psychiatry.

This training reaches the student in many different ways. Usually it is through one of the books we have already mentioned, such book being used as a textbook for a particular course. Sometimes Management and The Worker will be used as a text. More often it will be used as collateral reading to supplement a main text.

To date, approximately 25,000 copies of Management and The Worker have been sold, mostly to students, teachers and libraries, a very large total for a book of its nature. This will seem the more remarkable when it is realized that Harvard University Press and the Western Electric Company agreed in 1939 that there would be sufficient interest to justify a first printing of only 1000 copies. Accordingly, the first three printings were each of approximately 1000 copies, although sales have gradually increased over the years as more and more individuals and organizations have come to realize the importance of the researches described.
It would be difficult to say without a survey in which schools *Management* and *The Worker* is required reading in one or more courses. Considering also the other important works covering the Hawthorne Studies - those of Mayo, Roethlisberger and Whitehead - such a task would become impossible. The best indication comes from contacts with educational institutions and their representatives. Records at Hawthorne, Kearny, Point Breeze, and Headquarters (which are not complete) indicate that the following schools have used this material in one or more courses.

- Boston University
- Buffalo University
- California Institute of Technology
- Carnegie Tech
- City College of New York
- Clemson College
- Cornell University
- Duke University
- Emory University
- Fordham University
- Grinnell College
- Harvard University
- Illinois Institute of Technology
- Knox College
- Massachusetts Institute of Technology
- Michigan State University
- New York University
- North Park College
- Northwestern University
- Penn State College
- Princeton University
- Reed College
- Rutgers University
- Texas A. & M. College
- University of Chicago
- University of Illinois
- University of Iowa
- University of Maryland
- University of Melbourne
- University of Michigan
- University of Minnesota
- University of Pennsylvania
- University of Texas
- University of Tokyo
- University of Washington
- University of Wisconsin
- Wheaton College

Company files contain copies of outlines for two college courses which draw heavily on the literature in connection with the Hawthorne Studies. They are Professor Lombard's "Notes on Reading Assignments for Human Relations 1A and 1B" for use in the famous Human Relations Course at Harvard and an outline for a course on "Counseling in Industry" by Louis Cole Keller of Texas A. & M. College. Professor Lombard's notes were eventually replaced by a two-volume textbook, *Human Relations: Concepts and Cases in Concrete Social Science*, edited by Hugh Cabot and Joseph A. Kahl. This book uses the Hawthorne Studies in several parts and leans heavily on ways of thinking developed by Mayo, Roethlisberger and others at Harvard in connection with the Hawthorne Studies. *The Administrator*, the text for the well-known Human Relations and Administration Course in the Harvard Graduate School of Business also includes several excerpts from the writings of Mayo and Roethlisberger and Dickson as well as a sample counseling interview. This counseling interview came from the Hawthorne files.

A good many requests are received by the various counseling organizations to address classes in personnel management, industrial psychology, and related subjects at local schools. In addition, the Company receives each year requests from educational institutions to reprint material from *Management* and *The Worker* and other publications dealing with the Hawthorne Studies, requests to reprint talks on counseling, requests for information on the studies, and a considerable variety and volume of correspondence on the subject.
(j) Vocational Guidance

The field of vocational guidance has been one of the main outside fields where actual practices have been directly influenced by the developments of Western Electric counseling. A good indication of this is the fact that in 1946, 1947, 1948 and 1950, Professor Carl Horn, Director of Vocational Education for the State of Michigan brought groups of teachers and educators to Hawthorne to acquaint them with our personnel counseling. These groups were composed principally of principals and superintendents of secondary schools who were concerned with the development of student counseling programs. These groups averaged about 20 members.

Among the other visitors who have come to Hawthorne with an interest in Personnel Counseling, the following groups have come from the field of vocational guidance:

- Group of teachers from Northwestern Guidance Workshop Class, under the sponsorship of State of Illinois Board of Vocational Education - August 1952.

- Group of 25 superintendents of schools, under the sponsorship of American Association of School Administrators - February 1948.

- Grace A. Kelly of the Placement Department of Milwaukee Vocational School visited Hawthorne in June 1944 to obtain information about counseling.

Mrs. Blanche B. Paulson of the Chicago Board of Education wrote to the Personnel Counseling Department at Hawthorne in November 1952 asking for an article on personnel counseling. This article was furnished and was published in the November 25, 1952 issue of the Chicago Guidance Newsletter, published by the Chicago Public Schools. The entire issue was devoted to "Applying Counseling Techniques in Business, Industry, and Social Agencies."

The Personnel Counseling Organization at Hawthorne was asked to present a program on non-directive counseling before a meeting of the Chicago Guidance and Personnel Association in December 1952.


The Vocational Guidance Magazine published in its May 1940 issue an article by Harold G. Wright, entitled "Personal Adjustment in Industry." This article describes the personnel counseling program at Hawthorne and is one of a number of such articles which have appeared from time to time in vocational guidance publications.
These examples give only a limited portion of the effect of Western's counseling on the vocational guidance field and it no doubt would be possible to dig up many other references in the books and journals devoted to this subject.

(k) Social Service

Miss Mary Palevsky, Field Secretary of the Family Welfare Association of America, visited Hawthorne. She discussed personnel counseling with counselors and later incorporated a discussion of the Western Electric program in a pamphlet entitled "Counseling Services for Industrial Workers", published by the Family Welfare Association of America, in 1945. The following is quoted from this pamphlet:

"Pioneer experiments in the application of psychiatric techniques to problems of industrial efficiency and unrest had been undertaken by the Metropolitan Life Insurance Company and R. H. Macy in New York City among others during the 1920's. A full-time psychiatrist has been employed by the Metropolitan Life Insurance Company as part of its medical program since 1922."

"By far the most significant of these experiments in terms of the interest it has aroused and the influence it has exerted was the elaborate research initiated in 1927 at the Hawthorne Works of the Western Electric Company, Chicago. The findings were published in book form in 1939 and have been widely used as source material for counseling programs. Begun as an inquiry into the physical factors that influenced productivity, the conclusions of the research confirmed the truth that man lives not indeed by bread alone. The study demonstrated the social nature of the human enterprise called a factory and the importance of the work experience as a medium for providing satisfactions over and beyond wages. The workers' feelings and attitudes were demonstrated to be quite ponderable factors in production. These and kindred observations led the management of the Western Electric Company to institute a program of employee interviewing for the purpose of improving attitudes and morals. The interviewing program subsequently evolved into a system of personnel counseling which has been in effect in the Hawthorne Works since 1936, and has recently been extended to other Western Electric Plants. The term 'personnel counseling', as we now define it, was first used in connection with this program."

"This 'non-directive' interviewing technique is of special interest to social case workers. For its own special needs and by its own independent method of research, the Western Electric Company has developed a technique for listening to people with problems which has striking resemblance to, as well as significant differences from, case work interviewing."

Social Service Organizations have, on several occasions, requested talks on Western Electric counseling. It has not always been possible to accept such requests, but talks were made at the National Conference of Social Work in 1944, and at the State Conference of the Maryland Children's Aid Society in 1950.
(1) Penology

Counseling a la Western Electric is even used in penal institutions. Readers Digest, May 1950, published a description of a group counseling experiment in the state prisons of New Jersey. In addition, a request for information on the Hawthorne Plan of Personnel Counseling was received by us in November 1951 from Eric Price, Consulting Psychologist at Auckland Prison, in Australia. Doctor Price stated that a counseling program was being started at the prison, and it was in this connection that he wished to learn more about counseling at the Hawthorne Plant.

(m) Religion

Several instances that have come to counselors' attention of counseling work being conducted in industry by ministers. One minister engaged in this kind of work is the Reverend Sidney W. Semple, of London, Ontario, Canada. In March 1950 he visited at Hawthorne and conferred with several members of the Personnel Counseling Organization, exchanging experiences and ideas about counseling in industry.

Another representative of the religious field who visited Hawthorne was A. Elwell Crissey, Publications Technician with the United Methodist Movement. He came to the Plant in June 1950. Later he wrote:

"Your program is boldly original; and - unlike many excellently intentioned employee welfare efforts - does not waste itself on the surface, but goes straight to the source of so much employee difficulty. Future possibilities for constructive personal work along your lines seem to me almost immeasurable. You and those associated with you in your remarkable work must feel deep satisfaction in knowing that you are pioneering in a field of great significance."

Reverend Fred Mann of the Redemptorist Fathers at Oconomowoc, Wisconsin, visited Hawthorne in May 1949 to confer with members of the Personnel Counseling Organization. While he was here, he discussed with some members of the Organization a forthcoming book in the field of counseling written by Father Charles A. Curran and asked them to read a mimeographed copy of the manuscript and comment upon it.

Ernest L. Chase visited Hawthorne in July 1945 with a group of five men who were in training at Wheaton College as industrial chaplains.

Pastoral counseling has received an increasing amount of attention in the last few years, and much of it follows closely along the lines of Western Electric non-directive counseling. In a number of informal contacts which members of the Hawthorne Personnel Counseling Organization have had outside the Plant with ministers, the latter have shown keen interest in our program. One counselor published an article entitled "Instruction in Counseling" in
the journal *Pastoral Psychology* in 1953. This article contrasted pastoral counseling with industrial and other varieties of counseling. A member of the Personnel Counseling supervisory staff has been invited on two occasions to talk to a class in pastoral counseling at the Evangelical Theological Seminary, Naperville, Illinois.

In 1949 the Federal Council of Churches inaugurated a study on "Christian Ethics and Economic Life" by a committee under the chairmanship of Charles P. Taft, brother of the late Senator Taft. The first of six books produced by this committee, *Social Responsibilities of the Businessman*, was written by Howard R. Bowen, Professor of Economics at Williams. Professor Bowen, in a chapter entitled "Other Ethical Issues Facing Businessmen" speaks of the "enormous literature" on human relations in industry and cites as outstanding contributions the four main books by Mayo, Roethlisberger, Dickson, and Whitehead dealing with the Hawthorne Studies.
4. To What Extent Have People in Foreign Countries Been Influenced by the Hawthorne Studies?

Perhaps the most remarkable thing about the Hawthorne studies is the influence they have exerted abroad. Probably this is due in part to Professor Mayo's various connections in England and elsewhere.

Particularly impressive has been the interest in England. Professor Mayo, in his Foreword to Urwick and Brech's volume (cited in Sections 1 and 2) says that Urwick, an Englishman, was "the first person to take public notice of the succession studies of human relations in industry undertaken by the Western Electric Company. He was at the time Director of the International Institute of Management at Geneva (Switzerland); and somewhere in the early 1930's he published a monograph on the Hawthorne experiments. At that time the enquiry was still in being and no books dealing officially with the tortuous course of the study had then been published." Eventually as can be seen by the quotations included in sections 1 and 2 of this paper, Urwick came to be a highly laudatory supporter of the studies and of the Company which made them.

British interest is also seen in the published account of an address delivered before the Royal Society of Arts on February 7, 1934 on the subject "The Human Element in Industry." The speaker, Mr. Hyde, spoke at some length about the Hawthorne studies referring to them as "the extraordinarily interesting experiment conducted by Mr. Elton Mayo at the Western Electric Co. in Chicago, one of the most enlightened in the world."

Another early commentator on the Hawthorne studies was a writer for The Lancet, an English medical journal. A copy of the December 15, 1934 issue, forwarded to Western Electric by Professor Mayo, contains an unsigned article on the Hawthorne studies with special references to the interviewing program.

Similar interest has been shown throughout England. A representative of a research group in Birmingham wrote the Company: "We, in England, are largely basing our management principles and practice upon the results of the Hawthorne investigations". Human Relations in Modern Industry by R. F. Tredgold, a prominent English psychiatrist, contains six references to counseling and the Hawthorne studies and the only American Company referred to is the Western Electric Company. The Social Psychology of Industry, by Dr. J. A. C. Brown, another English psychiatrist, refers throughout to the Hawthorne studies, devotes an entire chapter to the work of Professor Mayo, describes the Hawthorne studies in detail, quotes English and American writers at length about the studies, and says, "The work of Mayo and his associates, Roethlisberger and Dickson, forms a foundation on which all future researches must be based."

Other English authors of books who, to our knowledge, have commented at some length on the Hawthorne studies are Gordon Taylor in Are Workers Human, D. C. Miller and W. H. Form in Industrial Sociology and P. Sargent Florence in Labour. In addition lengthy articles have appeared in English magazines. Two noteworthy ones appeared during the war and the fact that in each case several issues of the magazine were devoted to them indicates how important some felt our studies were. We refer to a series of four articles reviewing
Management and the Worker in the monthly magazine Business in 1941 and to a series of five in Industry Illustrated in 1944 and 1945. The latter was by Urwick and Brech and was eventually used as the basis of the book already mentioned. (Mr. Brech consulted the Kearny counseling organization in the process of preparing the articles.)

Little has been translated into English from other countries and most of the evidence of influence comes from correspondence and visits. For example, a Swedish psychiatrist, Dr. Erland Mindus, Psychiatrist, State Rehabilitation Clinic and medical adviser to government boards and to the University of Stockholm, recently visited Headquarters. He spoke of the high reputation which the Western holds in Sweden and said that the underlying basis for Sweden's management theory and practice is undoubtedly the Hawthorne studies. Both management and labor, he states, are fully informed about our work and regard it as a bible.

France, too, has shown considerable interest. M. Georges P. Freidman, Professor of Labor History at the French National Conservatory of Arts and Sciences, visited Hawthorne in 1948 and ultimately reported on our studies to his fellow countrymen. His article was recently translated under the title "Outline for a Psycho-Sociology of Assembly Line Work" and published in the quarterly journal, Human Organization. In this article he discusses various American industrial studies including, as he put it, "the unusually important experiment in the Hawthorne plants of the Western Electric Company on the outskirts of Chicago."

Also in 1948, a representative of the French Embassy in Washington brought a group of 14 prominent French industrialists to Hawthorne to discuss counseling and related research.

In addition to the countries already mentioned, Hawthorne received visitors from the following foreign countries, the reason for their visit in each instance being their interest in the Hawthorne studies and/or counseling:

<table>
<thead>
<tr>
<th>Country</th>
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<tbody>
<tr>
<td>Argentina</td>
<td>Chile</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Australia</td>
<td>Germany</td>
<td>Scotland</td>
</tr>
<tr>
<td>Brazil</td>
<td>Hawaii</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Canada</td>
<td>Japan</td>
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</tbody>
</table>

A list of some of Hawthorne's visitors follows:

10/20/50 Miss Marja A. Almquist, Instructor, Lund School of Social Work, Lund, Sweden
4/17/51 Prof. Enjiro Awaji, President, Japan Personnel Mgmt. Ass'n., Japan
6/7/46 Miss Josephina Albana, Social Workers with Juvenile Court, Rio de Janiero, Brazil
7/12/49 Paul Brochier, Businessman, Nurnberg, Germany
7/12/49 Dr. Hans Voith, Businessman, Heidenheim, Germany
3.
8/13/48 H. P. Barooah } Hindu Students at Harvard
S. K. Mallik } Business School
T. Ravindranath
5/14/46 R. G. Baxter, Director, Dept. of Labor & Nat'l. Service,
Commonwealth of Australia
11/28/47 Jan H. Blomquist and Raynar Svensson,
Fellows of American Scandinavian Foundation,
Swedish Institute of Social Survey, Stockholm, Sweden
10/14/49 Mr. Chave, Personnel Director, Northern Electric Co.
Montreal, Canada
1/22-28/48 Calveley, C. E., British Post Office,
Staffordshire, England
10/6/50 d'Hauteville, Miss Genevieve, Director of Guidance,
French National Railway, Paris, France
5/10/45 Mr. Fletcher, Development Officer, and
Mr. Malan, Director, Imperial Chemical Industries,
London, England
10/15/48 John W. A. Fleury, Industrial Psychologist,
British Columbia Electric Railway Co., Ltd., Vancouver, B.C.
11/19/48 Dr. G. P. Freidman, University of Paris, Paris, France
8/22/49 Dennis S. Greensmith, Director of Education & Training,
Boots Pine Drug Co., Nottingham, England
8/8/46 Bo Herbon, Exchange Student, under auspices of Swedish-
American Foundation
Lidingo, Sweden
6/30/48 Dr. M. Herford, Director, Stough Industrial Health Service,
Stough, England
12/14/45 Dr. J. M. Harrold, Representative of Netherlands Gov't.
5/25/43 J. D. Howard, Personnel Manager, Bathurst Paper Company,
New Brunswick
2/9/43 H. B. Hanna, Works Manager
Noel Arthur, Supt. of Training
R. R. Buchanan, Supt. of Personnel
Small Arms Ammunition Dept. of Defense Industries, Ltd.
Verdun, Quebec
4.

9/22/52  Ivar Ivre, Cultural Editor, Stockholm Evening News, Sweden
8/11/47  William D. Jones, Director of Training, Castle & Cooke Ltd.
         Honolulu, Hawaii
4/26/46  Prof. R. E. Kristenson, Royal Technical University,
         Stockholm, Sweden
6/2/48   Dr. Jacob Koekelker, Institute of Preventive Medicine
         Noordwijk, Netherlands
9/16/49  Kolkmeijer, Miss Harmana C., Student, University of Chicago,
         Amsterdam, Netherlands
4/19/46  Y.C. Lu and Tang Tsou, Chinese Students, University of Chicago
8/2/48   A. S. Laing, Kings College, University of Durham, Newcastle,
         England
6/13/49  Bert H. Lindstrom, Research Director, Federation of Swedish
         Wholesale Merchants and Importers, Stockholm, Sweden
9/28/50  Dr. C. Maitland, Director, Ass'n. of Dutch Employers,
         The Hague, Netherlands
4/17/53  John F. Murphy, Castle & Cook, Ltd., Hawaii
6/7/46   Miss Maria Mendez, Child Labor & Women's Dept.,
         Chilean Government, Santiago, Chile
3/26/48  Per-Ake Norkrans, Personnel Manager, Associated Woolen
         Factories, Ltd., Norrkoping, Sweden
3/31/50  Kunio Okaka, Associate Professor of Sociology,
         Dept. of Sociology, Tokyo University, Tokyo, Japan
7/11/47  Mr. Proctor, Swift & Co. International,
         Buenos Aires, Argentina
10/13/48 Prof. John Stoetezel, University of Bordeaux, France
3/16/50  Rev. Sidney W. Semple, Chaplain in Industry,
         London, Ontario, Canada
4/5/50   Mr. Smith, Industrial Engineering Manager, Jos. Lucas Co.,
         Birmingham, England
8/15/47  C. R. Thomas, Australian Paper Mfrs. Ltd.,
         Melbourne, Australia
6/30/39  Vredeboogd, Lawrence E., Netherlands
7/8/48
Kenneth F. Walker, Controller of Personnel Practice
Australian Department of Labor
26 Andover Court, Cambridge, Mass.

1948
A partial list of industrialists from foreign countries with whom Hawthorne has had correspondence follows:

Mr. P. Bonin, Dusseldorf, Germany
Mr. H. Engelhardt, Speyer am Rhein, Germany
Mr. Derek Williams, Lancashire, England
Mr. J. M. Browne, Child Welfare Off.,
The United Steel Companies, Ltd.,
Sheffield, Great Britain
Mr. Seiko Mishida, Chief of Investg. Section,
Public Welfare, Osaka Municipal office
Osaka, Japan
Mr. Harold C. Luth, Charlton, Vic., Australia
Mr. J. E. Reed, Personnel Mgr., British Columbia Forest Products, Ltd.,
Vancouver, British Columbia

5. What Organizations or Institutions Have Inaugurated Counseling?

There is no up-to-date source of information on this subject. The files of the various counseling organizations contain a good many letters and articles indicating that certain business and industrial concerns at one time had some activity which they called counseling. In many instances, however, there is a real question whether this activity is now in existence and, if it is, whether it differs in appreciable degree from what we know as counseling.

The companies known to have had something called counseling are as follows:

List of Companies

Abbott Laboratories
AC Spark Plug Division, General Motors Corporation
Arma Company
American Enka Corporation
American Air Lines
Bell Aircraft Corporation
Bell Telephone Company of Canada
Boeing Airplane Corporation
Briggs Manufacturing Company
Carborundum Company
Caterpillar Tractor Company
J. I. Case Manufacturing Company
Colt Patent Fire Arms Manufacturing Company
Curtiss-Wright Corporation, Airplane Division
Demon Douglas Company
Douglas Aircraft Company
Eastern Aircraft Division, General Motors Corporation
Eastman Kodak Company
International Harvester Company
LeTourneau Corporation
Lockheed Aircraft Corporation
Metropolitan Life Insurance Company
National Union Radio Corporation
New York Life Insurance Company
North American Aviation, Inc.
Northrop Aircraft, Inc.
Ohio Bell Telephone Company
Oregon Shipbuilding Company
Prudential Life Insurance Company
Republic Aviation Corporation
Republic Drill & Tool Company
R. J. Reynolds Tobacco Company
Servel, Inc.
Southern Pacific Company
Sperry Gyroscope Co., Inc.
Spiegel & Company
Standard Oil Company of New Jersey
Twin Cities Ordnance Plant
U. S. Steel, Commercial Dept.
Vickers, Inc.
Victory Aircraft Ltd., Toronto
Warner & Swasey Co.
Western Union Telegraph Company
White-Rodgers Electric Company
Wright Aeronautical Company
Young Corporation

Western Electric Counseling organizations gave assistance in one form or another to representatives of several of the above companies. These include the Bell Telephone Company of Canada to whom a counselor was loaned for six months, the Damon Douglas Company, the Ohio Bell Telephone Company, Abbott Laboratories, American Air Lines, Prudential Life Insurance, National Union Radio and Spiegel and Company.

Representatives of literally hundreds of other companies have sought information from the various counseling and personnel organizations about the Hawthorne studies and/or about counseling. Some of these representatives have said they planned to or were considering instituting counseling. Others apparently had no other purpose than to obtain information on our activities. The following taken from Hawthorne's visitors' book and from some of the Kearny files is a very incomplete list of such companies:

UNIVERSITY OF WISCONSIN - MILWAUKEE
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Company Name</th>
</tr>
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<tbody>
<tr>
<td>Anaconda Wire and Cable Company</td>
<td>International Business Machines</td>
</tr>
<tr>
<td>American Cabinet Hardware Co.</td>
<td>International Smelting &amp; Refining Co.</td>
</tr>
<tr>
<td>Allied Paper Mills</td>
<td>Jantzen Knitting Mills</td>
</tr>
<tr>
<td>Aircraft Industry Relations Comm.</td>
<td>Kimberly-Clark Corporation</td>
</tr>
<tr>
<td>A and P Food Stores</td>
<td>Knoxville Stove Co.</td>
</tr>
<tr>
<td>American Can Company</td>
<td>Montgomery Ward &amp; Co.</td>
</tr>
<tr>
<td>Bell Aircraft Company</td>
<td>Minneapolis Moline Power</td>
</tr>
<tr>
<td>Benge Associates</td>
<td>Implement Co.</td>
</tr>
<tr>
<td>Boeing Aircraft Company</td>
<td>Minneapolis-Honeywell Regulator Co.</td>
</tr>
<tr>
<td>Bruce Payne Associates</td>
<td>McDonnell Aircraft Corp.</td>
</tr>
<tr>
<td>Clinton Engineering Works</td>
<td>Ohio Glass Company</td>
</tr>
<tr>
<td>Carnegie Illinois Steel Co.</td>
<td>Old Dominion Box Co.</td>
</tr>
<tr>
<td>Chicago Manufacturing Corp.</td>
<td>Owens Corning Fibre Glass Co.</td>
</tr>
<tr>
<td>Denver and Rio Grande Western R.R.</td>
<td>Pittsburgh Plate Glass</td>
</tr>
<tr>
<td>Eastern Aircraft Manufacturers</td>
<td>Paint &amp; Varnish Div.</td>
</tr>
<tr>
<td>Ecuesto Paper Corp.</td>
<td>Perfect Circle Company</td>
</tr>
<tr>
<td>Eli Lilly</td>
<td>Peoples Gas Light &amp; Coke Co.</td>
</tr>
<tr>
<td>Esso Standard Oil Company</td>
<td>Ready Foods Company</td>
</tr>
<tr>
<td>Electro-Motive Corporation</td>
<td>RCA Manufacturing Co.</td>
</tr>
<tr>
<td>Eversharp Corporation</td>
<td>Shell Oil Co.</td>
</tr>
<tr>
<td>Federal Reserve Bank of Chicago</td>
<td>Shepard, H. H.</td>
</tr>
<tr>
<td>Ford Motor Company</td>
<td>Sears Roebuck &amp; Co.</td>
</tr>
<tr>
<td>Galvin Manufacturing Co.</td>
<td>Shell Oil Company</td>
</tr>
<tr>
<td>General Electric Company</td>
<td>Servel, Incorporated</td>
</tr>
<tr>
<td>General Motors Corporation</td>
<td>United Air Lines</td>
</tr>
<tr>
<td>Gilchrist Company</td>
<td>U. S. Rubber Company</td>
</tr>
<tr>
<td>General Mills Mfg. Co.</td>
<td>United Automatic Register Company</td>
</tr>
<tr>
<td>Holley Carburetor Co.</td>
<td>Williams Brownell, Inc.</td>
</tr>
</tbody>
</table>

Government representatives and administrators, especially during the war, showed a special interest in various forms of counseling and set it up in a large number of organizations. The Visitors Book at Hawthorne shows that representatives from the following branches of the Federal Government visited Hawthorne to discuss either counseling or the Hawthorne studies:

- Army Service Forces -
  - Office of Quartermaster
  - Army Signal Corps
- Department of Agriculture
- Chicago Chemical Warfare Proc. Dist.
- Civil Aeronautics Board
- Civilian Personnel Division -
  - Quartermaster General's Office
- Federal Security Agency
- Headquarters - 6th Service Command
  - Ordnance Division
- Office of Chief of Engineers
- Office of Civilian Personnel
- Office of Secretary of War
- Puget Sound Naval Shipyard

*In the case of these agencies, either a counseling program was set up or the agency issued a report on counseling intended as a guide for other agencies or for industry. Presumably the visits to Hawthorne gave some substantial help in such activity.*
6. What Information and Services are Requested from Western as a Result of the Hawthorne Studies and the Counseling Program?

Because of the Hawthorne studies and the counseling program, the Company receives many requests for information or assistance. Most of these requests are directed to Hawthorne, but some also come to Headquarters, to other locations where counseling programs are in operation, and even to some other organizations such as Distributing Houses.

The nature of some requests has been indicated in other sections of this paper. Also worth mentioning are the requests made for talks on counseling or related research topics. During the several years since counseling was inaugurated, Mr. Dickson has delivered a number of these under the auspices of various organizations and a few have been made by others.

A noteworthy occasion was Mr. Dickson’s talk on counseling and industrial relations for the New York State School of Industrial and Labor Relations at Cornell University. This school in 1948 with the support of a grant from Edward L. Bernays, the well-known public relations counsel, sponsored a series of five lectures on various phases of industrial relations. The five speakers were a Professor of Economics from Columbia, a Professor of Philosophy from Syracuse, a Professor of Labor Relations from Harvard, the impartial arbitrator for the U. S. Steel Corp. and the United Steel Workers, and Mr. Dickson.

Other talks have been given by Mr. Dickson before the annual meeting of the American Management Association, to the American Orthopsychiatric Association, before the Chicago Chamber of Commerce and many others. Mr. Boardman of Kearny talked on counseling in 1954 at Asheville, N. C., to Southeastern Conference of the Society for the Advancement of Management. Apparently as a result of this meeting he was asked also to talk on broader aspects of personnel administration before the Piedmont Industrial Relations Conference sponsored by the Winston-Salem, N. C., Chamber of Commerce.

In addition to these a number of talks have been given by various counselors and counseling supervisors. The following is a representative, but partial, list of organizations requesting talks, although in some instances it was necessary to decline the invitation:

California Tech.  Personnel Association of Maryland
City College of New York  Rutgers University
Columbia University  Safety Engineering Club of Baltimore
De Paul University  University of California
Drake University  University of Chicago
Executive Board of Baltimore  University of Houston
Harvard University  University of Illinois
Illinois Institute of Technology  University of Maryland
Loyola University  University of Michigan
Naval Intelligence Headquarters, N.Y.C.  University of Minnesota
Newark, N. J., Board of Education  University of Toronto
Northwestern University  Veterans’ Administration, Baltimore
Ohio State University  Yale University
In addition counseling organizations receive numerous requests from writers, students and researchers for information, instructions, forms and the like to be used in the preparation of articles, teaching outlines, lectures, theses and similar productions.